FORM S-1

General form of registration statement for all companies including face-amount certificate companies

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SIC: **2836** Biological products, (no disgnostic substances)

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As filed with the Securities and Exchange Commission on December 14, 2022

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

PEAK BIO, INC.
(Exact Name of Registrant as Specified in Its Charter)

Delaware	**85-2448157**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**

3350 W. Bayshore Rd., Suite 100
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(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

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Approximate date of commencement of proposed sale to the public:
From time to time after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, please check the following box. ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 under the Securities Exchange Act of 1934:

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. Neither we nor the selling securityholders may sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS **SUBJECT TO COMPLETION — DATED DECEMBER 14, 2022**

23,467,773 Shares of Common Stock

Up to 2,945,545 Shares of Common Stock Issuable Upon Exercise of the Warrants
Up to 2,945,545 Warrants

This prospectus relates to the offer and sale from time to time by the selling securityholders named in this prospectus (the "Selling Securityholders") of (i) up to 23,467,773 shares of our common stock, par value $0.0001 per share ("Common Stock"), including, up to 4,000,000 shares of Common Stock that may be resold by White Lion Capital, LLC, a Delaware limited liability company ("White Lion") following issuance by us to White Lion pursuant to a Common Stock Purchase Agreement, dated November 3, 2022 (the "White Lion Purchase Agreement"), and (ii) up to 2,945,545 warrants consisting of 2,500,000 private placement warrants (the "Private Placement Warrants") originally issued in a private placement in connection with the initial public offering (the "IPO") of Ignyte (as defined below) and 445,545 warrants (the "PIPE Warrants" and together with the Private Placement Warrants, the "Private Warrants") issued in connection with the PIPE Financing (as defined below). We will not receive any proceeds from the sale of shares of Common Stock by the Selling Securityholders pursuant to this prospectus, however, we will receive proceeds from our sale of shares to White Lion. A further description of the terms of the White Lion Purchase Agreement is set forth below under Background and under Plan of Distribution.

Our registration of the securities covered by this prospectus does not mean that the Selling Securityholders will offer or sell any of the shares. The Selling Securityholders may sell the shares of Common Stock covered by this prospectus in a number of different ways and at varying prices. We provide more information about how the Selling Securityholders may sell the shares in the section entitled "Plan of Distribution."

In addition, this prospectus relates to the issuance by us of up to an aggregate of 2,945,545 shares of our Common Stock which consists of (i) 2,500,000 shares of Common Stock that are issuable upon the exercise of the Private Placement Warrants and (ii) 445,545 shares of Common Stock that are issuable upon the exercise of the PIPE Warrants. We will receive the proceeds from any exercise of any Warrants (as defined below) for cash.

We are registering the securities for resale pursuant to the Selling Securityholders' registration rights under certain agreements between us and the Selling Securityholders. Our registration of the securities covered by this prospectus does not mean that the Selling Securityholders will offer or sell any of the shares of Common Stock or Warrants. The Selling Securityholders may offer, sell or distribute all or a portion of their shares of Common Stock or Warrants publicly or through private transactions at prevailing market prices or at negotiated prices. We will not receive any proceeds from the sale of shares of Common Stock or Warrants by the Selling Securityholders pursuant to this prospectus, however, we will receive proceeds from our sale of shares to White Lion. A further description of the terms of the White Lion Purchase Agreement is set forth below under Background and under Plan of Distribution. We provide more information about how the Selling Securityholders may sell the shares or Warrants in the section entitled "Plan of Distribution."

Our Common Stock and our public warrants (the "Public Warrants" and together with the Private Warrants, the "Warrants") are listed on the Nasdaq Capital Market ("Nasdaq"), under the symbols "PKBO" and "PKBOW," respectively. On December 13, 2022, the closing price of our Common Stock was $5.55 and the closing price for our Public Warrants was $0.25.

We are an "emerging growth company" under federal securities laws and are subject to reduced public company reporting requirements. Investing in our Common Stock involves a high degree of risks. See the section entitled "*Risk Factors*" beginning on page 11 of this prospectus to read about factors you should consider before buying our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2022.

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You should rely only on the information provided in this prospectus, as well as the information incorporated by reference into this prospectus and any applicable prospectus supplement. Neither we nor the Selling Securityholders have authorized anyone to provide you with different information. Neither we nor the Selling Securityholders are making an offer of these securities in any jurisdiction where the offer is not permitted. You should not assume that the information in this prospectus, any applicable prospectus supplement or any documents incorporated by reference is accurate as of any date other than the date of the applicable document. Since the respective dates of this prospectus and the documents incorporated by reference into this prospectus, our business, financial condition, results of operations and prospects may have changed.

Unless the context indicates otherwise, references in this prospectus to the "Company," "Peak Bio," "we," "us," "our" and similar terms refer to Peak Bio, Inc. (f/k/a Ignyte Acquisition Corp.), a Delaware corporation, and its consolidated subsidiaries. References to "Ignyte" refer to the Company prior to the consummation of the Business Combination (as defined herein).

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-1 that we filed with the Securities and Exchange Commission (the "SEC") using the "shelf" registration process. Under this shelf registration process, the Selling Securityholders may, from time to time, sell the securities offered by them described in this prospectus. We will not receive any proceeds from the sale by such Selling Securityholders of the securities offered by them described in this prospectus, however, we will receive proceeds from our sale of shares to White Lion. A further description of the terms of the White Lion Purchase Agreement is set forth below under "Prospectus Summary–Background" and under "Plan of Distribution." This prospectus also relates to the issuance by us of the shares of Common Stock issuable upon the exercise of any Warrants. We will receive proceeds from any exercise of the Warrants for cash.

Neither we nor the Selling Securityholders have authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus or any applicable prospectus supplement or any free writing prospectuses prepared by or on behalf of us or to which we have referred you. Neither we nor the Selling Securityholders take responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. Neither we nor the Selling Securityholders will make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted.

We may also provide a prospectus supplement or post-effective amendment to the registration statement to add information to, or update or change information contained in, this prospectus. You should read both this prospectus and any applicable prospectus supplement or post-effective amendment to the registration statement together with the additional information to which we refer you in the sections of this prospectus entitled "Where You Can Find More Information."

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any accompanying prospectus supplement and the documents incorporated by reference herein and therein may contain forward-looking statements as defined by the Private Securities Litigation Reform Act of 1995. These statements are based on the beliefs and assumptions of management. Although we believe that its plans, intentions and expectations reflected in or suggested by these forward-looking statements are reasonable, we cannot assure you that it will achieve or realize these plans, intentions or expectations. Forward-looking statements are inherently subject to risks, uncertainties and assumptions. Generally, statements that are not historical facts, including statements concerning our possible or assumed future actions, business strategies, events or results of operations, are forward-looking statements. These statements may be preceded by, followed by or include the words "believes," "estimates," "expects," "projects," "forecasts," "may," "will," "should," "seeks," "plans," "scheduled," "anticipates" or "intends" or similar expressions.

Forward-looking statements are not guarantees of performance. You should not put undue reliance on these statements which speak only as of the date hereof. You should understand that the following important factors, among others, could affect our future results and could cause those results or other outcomes to differ materially from those expressed or implied in our forward-looking statements:

- the inability to re-list our securities on Nasdaq;
- the ability to recognize the anticipated benefits of the Business Combination, which may be affected by, among other things, competition and the ability of the combined business to grow and manage growth profitably;
- the significant competition we face in our industry;
- our limited operating history;
- litigation, complaints, and/or adverse publicity;
- our limited operating history;
- our ability to protect our intellectual property;
- the heavy regulatory oversight in our industry;
- the inability to profitably expand in existing markets and into new markets;
- future exchange and interest rates;
- changes in applicable laws or regulations;
- the impact of changes in consumer spending patterns, consumer preferences, global economic conditions (including record inflation), crime, weather, demographic trends and employee availability;
- privacy and data protection laws, privacy or data breaches, or the loss of data; and
- the unpredictability of the effects of the COVID-19 pandemic and its effect on our business and financial conditions.

These and other factors that could cause actual results to differ from those implied by the forward-looking statements in this prospectus are more fully described in the "Risk Factors" section. The risks described in "Risk Factors" are not exhaustive. New risk factors emerge from time to time and it is not possible for us to predict all such risk factors, nor can we assess the impact of all such risk factors on its business or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statements. All forward- looking statements attributable to us or persons acting on its behalf are expressly qualified in their entirety by the foregoing cautionary statements. We undertake no obligations to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

PROSPECTUS SUMMARY

This summary highlights selected information appearing elsewhere in this prospectus or the documents incorporated by reference herein. Because it is a summary, it may not contain all of the information that may be important to you. To understand this offering fully, you should read this entire prospectus, the registration statement of which this prospectus is a part and the documents incorporated by reference herein carefully, including the information set forth under the heading "Risk Factors" and our financial statements.

The Company

We are a clinical-stage biopharmaceutical company focused on commercializing innovative therapeutics that aim to improve and address significant unmet medical need for patients with inflammatory, rare and specialty diseases and cancer. We are continuing to explore and partner with researchers, clinicians, patient advocacy groups, academic institutions, governmental agencies, and our investors to continue to expand treatment options and partnerships to meet those expectations. We aim to grow our clinical pipeline by executing on our clinical plans for our existing program, and ideally add new clinical assets through acquisitions, and through our internal oncology platform engine. To achieve this, we believe Peak Bio's management team, with more than a combined 50 plus years of industry experience in small molecule, antibodies, and antibody-drug-conjugates (ADC) drug development and having successfully led companies that created therapeutics in above categories during their tenures, are well suited to drive this strategic initiative.

Our lead product candidate, PHP-303 is a small molecule, 5th generation, phase 2 clinical-ready neutrophil elastase (NE) inhibitor (NEI). PHP- 303 is a potentially novel, oral, once daily, 0.65 nanomolar (nM; in vitro IC50 value for inhibition of human NE), selective, small molecule reversible inhibitor of NE designed to inhibit its bioactive form (von Nussbaum et al., 2015, Chem Med Chem 10:1163) that Peak Bio is developing for the treatment of alpha-1 antitrypsin (AAT) deficiency (AATD), a genetic disorder that may result in lung disease or liver disease and, potentially, acute respiratory distress syndrome (ARDS). Peak Bio has received a non-dilutive pre-clinical grant from the Department of Defense (DoD) to explore animal models of COVID-19-related ARDS. Currently, we are focusing our clinical efforts on developing PHP-303 for the treatment of the genetic disorder, AATD, a potentially life-threatening rare, genetic condition that results in severe debilitating diseases, including early-onset pulmonary emphysema. Scientific data indicate that the increased risk of lung tissue injury in AATD patients may be due to inadequately controlled NE caused by the insufficient amounts of AAT, the major antiprotease that inhibits NE, that these patients produce. We believe that by inhibiting NE, PHP-303 has the potential to reduce the destruction of lung tissue and stabilize clinical deterioration in AATD patients.

Our most advanced platform in oncology utilizes our toxin, PH-1 or Thailanstatin (a spliceosome modulator) to generate a pipeline of proprietary ADC product candidates that are differentiated from traditional ADC-based therapies so that we may address unmet need in cancer patients. Differentiation is the first, and necessary step, towards the development of therapies serving an unmet need in patients. For e.g., the tumor may already be resistant to an approved ADC with payload A but may still respond to an investigational ADC with payload B, as the mechanism of action (MoA) is different. In that regard, PH-1 is a novel ADC payload and targets the proper splicing of introns. These mis-spliced RNAs are subjected to mRNA decay depriving cancer cells of thousands of essential proteins vital to survival and proliferation. In addition, PH-1 creates mis-spliced proteins or neoepitopes which the immune cells can target well after the initial "chemotherapy" is delivered, in essence creating a second mechanism for cancer killing.

Our first product candidate is an ADC targeting Trop2, which is an antigen broadly expressed in solid tumors of epithelial origin. Our Trop2 ADC and other undisclosed discovery-stage product candidates are based on our proprietary PH-1 platform of toxin payloads targeting RNA splicing. We will continue to identify cancer

targets that are well suited to our technology. The goal over time and with the appropriate investment, Peak Bio desires to create a series of differentiated next generation cancer therapies targeting difficult to treat cancers and contribute to increase cancer survival to the benefit of patients, care givers, our potential future partners with the added benefit to our investors.

Even though Peak Bio's PH1 platform approach has been initiated, and our first nominated ADC targeting Trop2 has been nominated, we are still working on two additional toxins that are in early R&D to add to our armamentarium of novel toxins.

We believe that Peak Bio and the management team are well positioned to continue to work with our researchers, clinicians, patient advocacy groups, academic institutions, governmental agencies, and our investors to continue to address the significant unmet medical need for patients with AATD, ARDS and cancer with our approaches.

Background

On November 1, 2022 (the "Closing Date"), Peak Bio, Inc., a Delaware corporation (the "Company") (formerly known as Ignyte Acquisition Corp.) ("Ignyte") consummated the previously announced business combination (the "Closing") pursuant to that certain Business Combination Agreement, dated April 28, 2022 (the "Business Combination Agreement"), by and among Ignyte, Ignyte Korea Co., Ltd., a corporation organized under the laws of the Republic of Korea ("Korean Sub") and Peak Bio Co., Ltd., a corporation organized under the laws of the Republic of Korea ("Peak Bio Co., Ltd.").

Pursuant to the terms of the Business Combination Agreement, a business combination between Ignyte and Co., Ltd. was effected on November 1, 2022 in which the (i) stockholders of Peak Bio Co. transferred their respective shares of common stock of Peak Bio Co., Ltd., par value KRW 500 per share (the "Target Common Stock"), to Korean Sub in exchange for shares of Common Stock of the Company held by Korean Sub, and (ii) in the course of such share swap, Korean Sub distributed the shares of Target Common Stock to the Company in consideration of the Company's Common Stock (which was in-turn delivered to the stockholders of Peak Bio Co., Ltd. as described in (i) above ((i) and (ii), collectively, the "Share Swap", together with the other transactions contemplated by the Business Combination Agreement, the "Business Combination"). Upon consummation of the Share Swap, Peak Bio Co., Ltd. became a direct wholly-owned subsidiary of Ignyte. Upon consummation of the Business Combination, the Company was renamed Peak Bio, Inc. In connection with the consummation of the Business Combination and pursuant to the terms and conditions of the Business Combination Agreement, the Company issued 17,295,044 shares of Common Stock to stockholders of Peak Bio Co., Ltd. (the "Target Consideration Shares") as part of the Aggregate Closing Consideration (as defined in the "Business Combination Agreement").

On the Closing Date, a purchaser (the "Original Subscriber") purchased from the Company an aggregate of 50,000 shares of Ignyte Common Stock (the "Original PIPE Shares"), for a purchase price of $10.00 per share and an aggregate purchase price of $500,000, pursuant to a subscription agreement entered into effective as of April 28, 2020 (the "Original Subscription Agreement").

On the Closing Date, a number of additional purchasers (each, a "New Subscriber") purchased from the Company an aggregate of (i) 302,500 shares of Common Stock (the "New PIPE Shares") and (ii) 281,325 warrants (the "PIPE Financing Warrants") to purchase shares of Common Stock, at an exercise price of $0.01 per share, for a purchase price of $10.00 per share and an aggregate purchase price of $3,025,000, pursuant to separate subscription agreements entered into effective as of October 31, 2022 (each a "New Subscription Agreement"). The PIPE Financing Warrants are on terms substantially the same as the outstanding warrants that were included in the units issued in Ignyte's IPO, except that the new warrants are not redeemable, and the warrants shall be exercisable for one year.

On the Closing Date, a number of Peak Bio's lenders (each, a "Bridge Loan PIPE Subscriber" and together with the Original Subscriber and the New Subscribers, the "Subscribers") purchased from the Company an aggregate of (i) 176,579 shares of Common Stock (the "Bridge Loan PIPE Shares" and together with the Original PIPE Shares and the New PIPE Shares, the "PIPE Shares") and (ii) 164,220 warrants (the "Bridge Loan PIPE Financing Warrants" and together with the PIPE Financing Warrants, the "PIPE Warrants") to purchase shares of Common Stock, at an exercise price of $0.01 per share, in consideration for their agreement to cancel an aggregate principal amount of $1,750,000 and the interest accrued thereon in promissory notes evidencing the loans such lenders had extended to Peak Bio Co., Ltd. between July and September 2022, pursuant to separate subscription agreements entered into effective as of October 31, 2022 (each a "Bridge Loan PIPE Subscription Agreement" and together with the Original Subscription Agreement and the New Subscription Agreements, the "Subscription Agreements"). The Bridge Loan PIPE Financing Warrants are on terms substantially the same as the outstanding warrants that were included in the units issued in Ignyte's IPO, except that the new warrants are not redeemable, and the warrants shall be exercisable for one year.

Pursuant to the Subscription Agreements, the Company gave certain registration rights to the Subscribers with respect to the PIPE Shares and the PIPE Financing Warrants. The sale of the PIPE Shares and PIPE Financing Warrants is known herein as the "PIPE Financing" and was consummated concurrently with the Closing.

Our Common Stock and our Public Warrants are currently listed on the Nasdaq Capital Market ("Nasdaq") under the symbols "PKBO" and "PKBOW," respectively.

The rights of holders of our Common Stock and Warrants are governed by our second amended and restated certificate of incorporation (the "Amended and Restated Charter"), our amended and restated bylaws (the "Amended and Restated Bylaws") and the Delaware General Corporation Law (the "DGCL"), and in the case of the Warrants, the Amended and Restated Warrant Agreement dated as of October 31, 2022, duly executed and delivered by us to Continental Stock Transfer & Trust Company ("CST"), a New York corporation, as warrant agent. See the section entitled "Description of Securities."

White Lion Common Stock Purchase and Registration Rights Agreements

As noted above, on November 3, 2022, the Company and White Lion entered into the White Lion Purchase Agreement and concurrently with the White Lion Purchase Agreement, the Company and White Lion entered into a registration rights agreement (the "White Lion RRA"). Pursuant to the White Lion Purchase Agreement, the Company has the right, but not the obligation to require White Lion to purchase, from time to time, up to $100,000,000 in aggregate gross purchase price (the "Purchase Price") of newly issued shares of the Company's Common Stock, subject to certain limitations and conditions set forth in the White Lion Purchase Agreement. Capitalized terms used but not otherwise defined in this section shall have the meanings given to such terms by the White Lion Purchase Agreement and the White Lion RRA.

The Company is obligated under the White Lion Purchase Agreement and the White Lion RRA to file a registration statement with the SEC to register the Common Stock under the Securities Act of 1933, as amended (the "Securities Act"), for the resale by White Lion of shares of Common Stock that the Company may issue to White Lion under the White Lion Purchase Agreement.

Subject to the satisfaction of certain customary conditions including, without limitation, the effectiveness of the registration statement registering the shares issuable pursuant to the White Lion Purchase Agreement, the Company's right to sell shares to White Lion will commence on the effective date of the registration statement and extend until November 1, 2025. During such term, subject to the terms and conditions of the White Lion Purchase Agreement, the Company may notify White Lion when the Company exercises its right to sell shares (the effective date of such notice, a "Notice Date").

The number of shares sold pursuant to any such notice may not exceed (i) the lower of (a) the Purchase Notice Fixed Limit (described below) and (b) the product of (1) the Average Daily Trading Volume (as defined in the White Lion Purchase Agreement), and (2) the applicable Percentage Limit (as defined in the White Lion Purchase Agreement). The Purchase Notice Fixed Limit is $500,000 upon payment of the Initial Commitment Shares (as defined in the White Lion Purchase Agreement) and can be increased in two tranches: (A) to $1,000,000 following an aggregate purchase of $5,000,000 shares and issuance by the Company to White Lion of an additional $250,000 in Commitment Shares (as defined in the White Lion Purchase Agreement), and (B) to $2,000,000 following an aggregate purchase of $10,000,000 shares and issuance by the for payment of an additional $250,000 in Commitment Shares.

The applicable Percentage Limit is 40% or 150% depending on the price the Company agrees to sell shares to White Lion. At an applicable Percentage Limit of 40%, the Purchase Price to be paid by White Lion for any such Purchase Notice Shares will equal 97% of lowest daily volume-weighted average price of Common Stock during a period of two consecutive trading days (the "Trading Days") following the applicable Purchase Notice Date until an aggregate of $50,000,000 in Purchase Notice Shares have been purchased under White Lion Purchase Agreement, at which point the Purchase Price to be paid by White Lion will equal 98% of the lowest daily volume-weighted average price of Common Stock during a period of two consecutive Trading Days following the applicable Purchase Notice Date. At an applicable Percentage Limit of 150%, the Purchase Price to be paid by White Lion for any such Purchase Notice Shares will equal 94.5% of the lowest daily volume-weighted average price of Common Stock during a period of three consecutive Trading Days following the applicable Purchase Notice Date.

The Company will have the right to terminate the White Lion Purchase Agreement at any time after Commencement, at no cost or penalty, upon three (3) Trading Days' prior written notice. Additionally, White Lion will have the right to terminate the White Lion Purchase Agreement upon three (3) days' prior written notice to the Company if (i) there is a Fundamental Transaction, (ii) the Company is in breach or default in any material respect of the White Lion RRA, (iii) there is a lapse of the effectiveness, or unavailability of, the registration statement for a period of 45 consecutive Trading Days or for more than an aggregate of 90 Trading Days in any 365-day period, (iv) the suspension of trading of the Common Stock for a period of five (5) consecutive Trading Days, (v) the material breach of the White Lion Purchase Agreement by the Company, which breach is not cured within the applicable cure period or (vi) a Material Adverse Effect has occurred and is continuing. No termination of the White Lion Purchase Agreement will affect the registration rights provisions contained in the White Lion RRA.

In consideration for the commitments of White Lion, as described above, the Company has agreed that it will issue to White Lion shares of Common Stock having a value of $250,000 based upon the closing sale price of Common Stock (the "Closing Sale Price") two Trading Days prior to the filing of the Initial Registration Statement as Initial Commitment Shares. The Company may increase the number of shares it may sell to White Lion by issuing additional Commitment Shares in two additional tranches of $250,000 each. The Company issued Initial Commitment Shares of 50,200 shares of Common Stock to White Lion, based upon the Closing Sale Price of our Common Stock of $4.98 per share on November 30, 2022.

The White Lion Purchase Agreement and the White Lion RRA contain customary representations, warranties, conditions and indemnification obligations of the parties. The representations, warranties and covenants contained in such agreements were made only for purposes of such agreements and as of specific dates, were solely for the benefit of the parties to such agreements and may be subject to limitations agreed upon by the contracting parties.

Summary Risk Factors

- The potential ADC product candidates in our pipeline such as Trop2 PH1 ADC are in the preclinical and IND-enabling stages of development, with only PHP-303 having progressed to clinical stages of

development. Trop2 PH1 ADC has never been tested in human subjects. We may be unable to advance any current or future potential product candidates through the completion of clinical development, obtain regulatory approval and ultimately commercialize any of our product candidates, or experience significant delays in doing so.

- We may expend our limited resources and access to capital to pursue a particular product candidate; these decisions may prove to be wrong and may adversely impact our business. Because we have limited financial and managerial resources, we intend to focus our efforts on specific R&D programs, including our clinical development of product candidate(s) PHP-303, and Trop2 PH1 ADC, our lead oncology ADC candidate, and eventually advancing additional research programs progressing from our Peak Bio R&D Discovery Toxin and ADC Platform Engine.
- The effects of health epidemics, geopolitical instability including the ongoing COVID-19 pandemic, the conflict in Eastern Europe and in regions where we, or the third parties on which we rely, have business operations could adversely impact our business, including our preclinical studies, anticipated clinical trials, and contract manufacturing capabilities. The COVID-19 pandemic and/or the geopolitical instability in Eastern Europe could materially affect our operations, including at our offices and research facilities in Palo Alto, California, which has been affected by supply chain issues subject to foreign policy changes and/or executive orders, and at our future clinical trial sites, as well as the business or operations of our contract research organizations (“CROs”), contract and development manufacturing organizations(“CDMOs”), or other third parties with whom we conduct business and could be adversely impacted and cause significant disruptions and delays which could greatly impact our business and may continue to impact planned preclinical and clinical plans.
- We depend on enrollment of patients in our clinical trials for our product candidates. If we are unable to enroll patients in our clinical trials, or enrollment is slower than anticipated, in particular for our product candidates with rare disease indications, our research and development efforts could be adversely affected.
- Our business is subject to risks associated with conducting business internationally. We source research and development, manufacturing, consulting, and other services from companies based throughout the United States, the EU, and select Asian countries and we will be planning and conducting our clinical trials in the United States, Canada, certain European countries, in the near-term and in the future.
- Our product candidates are at an early stage of development, and we may not be able to successfully develop and commercialize them.
- Our ability to commercialize our product candidates depends on first receiving Food and Drug Administration (FDA) approval.
- Prior to our acquisition of PHP-303, we were not involved in its development and, as a result, we are dependent on Bayer having accurately reported the results and correctly collected and interpreted the data from all clinical trials conducted prior to our acquisition.
- We may choose to, or may be required to, suspend, repeat, or terminate our clinical trials if they are not conducted in accordance with regulatory requirements, the results are negative or inconclusive or the trials are not well designed.
- We rely, and expect to continue to rely, on third parties, including independent investigators and CROs, to conduct our clinical trials.
- Because manufacturing processes and those of our contractors are highly complex and are subject to a lengthy FDA approval process, alternative qualified production capacity may not be available on a timely basis or at all. Difficulties or delays in our or our contractors’ manufacturing and supply of existing or new products could increase our costs, cause us to lose revenue or market share, damage our reputation and could result in a material adverse effect on our product sales, financial condition, and results of operations.

- We rely on patents and other intellectual property rights to protect our product candidates, the obtainment, enforcement, defense, and maintenance of which may be challenging and costly. Failure to enforce or protect these rights adequately could harm our ability to compete and impair our business.
- We have no experience in commercializing products on our own.
- Our existing and future product candidates may not gain market acceptance, in which case our ability to generate product revenues will be compromised.
- Our business operations and current and future relationships with investigators, healthcare professionals, consultants, third-party payors, patient organizations, and customers will be subject to applicable healthcare regulatory laws, which could expose us to penalties.
- Although the clinical trial process is designed to identify and assess potential side effects, it is always possible that a drug, even after regulatory approval, may exhibit unforeseen side effects. If our product candidates were to cause adverse side effects during clinical trials or after approval, we may be exposed to substantial liabilities.
- We cannot assure you that an active public market for our common stock will develop or be sustained. The market price of our common stock could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control.
- Nasdaq may delist our securities from trading on its exchange, which could limit investors' ability to make transactions in its securities and subject us to additional trading restrictions.
- Our existing stockholders have significant control of our management and affairs, which they could exercise against your best interests.
- We incur increased costs and obligations as a result of being a public company.

Corporate Information

Ignyte was incorporated in the State of Delaware on August 6, 2020 as a special purpose acquisition company under the name Ignyte Acquisition Corp. On February 1, 2021, Ignyte completed its IPO. On the Closing Date, the Business Combination with Peak Bio Co., Ltd. was consummated, resulting in Peak Bio Co., Ltd. becoming a wholly-owned subsidiary of Ignyte, and Ignyte as the registrant changed its name to "Peak Bio, Inc." Peak Bio's headquarters is located at 3350 W Bayshore Rd., Palo Alto, CA 94303. Our telephone number is (650) 549-9103, and our website address is www.peak-bio.com. The information contained on, or that can be accessed through, our website is not incorporated by reference in this prospectus and does not form a part of this prospectus. The reference to our website address does not constitute incorporation by reference of the information contained at or available through our website, and you should not consider it to be a part of this registration statement.

THE OFFERING

Issuer	Peak Bio, Inc.
Shares of Common Stock offered by us	2,945,545 shares of Common Stock issuable upon exercise of the Private Warrants.
Shares of Common Stock offered by the Selling Securityholders	Up to 23,467,773 shares of Common Stock.
Warrants Offered by the Selling Securityholders	Up to 2,945,545 Private Warrants.
Shares of Common Stock outstanding prior to exercise of all Warrants	20,058,486 shares of Common Stock (as of November 21, 2022).
Shares of Common Stock outstanding assuming exercise of all Warrants	25,879,031 shares of Common Stock (based on total shares outstanding as of November 21, 2022). (Does not include 50,200 shares of Common Stock issued to White Lion as Initial Commitment Shares.)
Use of Proceeds	We will not receive any proceeds from the sale of shares of Common Stock by the Selling Securityholders, however, we will receive proceeds from our sale of shares of Common Stock to White Lion of up to an aggregate of approximately $19,079,903 (assuming the sale of 3,949,800 shares (4,000,000 shares less 50,200 Initial Commitment Shares) and a price equal to 97% times the share price of $4.98, which was the closing share price of our Common Stock on November 30, 2022). We will receive up to an aggregate of approximately $61.8 million from the exercise of the Warrants, assuming the exercise in full of all of the Warrants for cash. We expect to use the net proceeds from the sale of Common Stock to White Lion and the exercise of the Warrants for general corporate purposes. We believe the likelihood that Warrant holders will exercise their Warrants, and therefore the amount of cash proceeds that we would receive, is dependent upon the trading price of our Common Stock. If the trading price for our Common Stock is less than $11.50 per share, we believe holders of our Warrants will be unlikely to exercise their Warrants. See "*Use of Proceeds*."
Redemption	The Warrants are redeemable in certain circumstances. See "*Description of Securities — Redeemable Warrants*" for further discussion.
Market for Common Stock and Warrants	Our Common Stock and Public Warrants are currently traded on the Nasdaq under the symbols "PKBO" and "PKBOW," respectively.

Risk Factors	See "*Risk Factors*" and other information included in this prospectus for a discussion of factors you should consider before investing in our securities.

For additional information concerning the offering, see "*Plan of Distribution*."

RISK FACTORS

Investing in our securities involves risks. Before you make a decision to buy our securities, in addition to the risks and uncertainties discussed above under "Cautionary Note Regarding Forward-Looking Statements," you should carefully consider the specific risks set forth herein. If any of these risks actually occur, it may materially harm our business, financial condition, liquidity and results of operations. As a result, the market price of our securities could decline, and you could lose all or part of your investment. Additionally, the risks and uncertainties described in this prospectus, any prospectus supplement or in any document incorporated by reference herein or therein are not the only risks and uncertainties that we face. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may become material and adversely affect our business.

Risks Relating to Our Business and Programs

The potential ADC product candidates in our pipeline such as Trop2 PH1 ADC are in the preclinical and IND-enabling stages of development, with only PHP-303 having progressed to clinical stages of development. Trop2 PH1 ADC has never been tested in human subjects. We may be unable to advance any current or future potential product candidates through the completion of clinical development, obtain regulatory approval and ultimately commercialize any of our product candidates, or experience significant delays in doing so.

- We do not have the infrastructure necessary for manufacturing to support clinical studies or commercialization of a therapeutic drug product.
- Our ability to identify our product candidates and advance them into preclinical and clinical development and obtain future regulatory approvals and commercialization depends on successful contract manufacturing and/or collaboration.
- We would need to forge such a collaboration or build the infrastructure processes necessary for large scale manufacturing and/or commercialization. We would depend on this 'future partner' or contract manufacturer for timely manufacturing of therapeutics ahead of various clinical studies.
- For both our clinical program PHP-303 and our preclinical Oncology Toxin and ADC platform we will need to hire key additional staff to guide the preclinical, clinical and IND-enabling programs through FDA-approval. We may not be able to attract or hire the required personnel to guide and oversee our lead programs. The hiring process is competitive and may take time to identify, hire and retain staff.
- Our lead programs, PHP-303 (AATD and ARDS) and Trop2 PH1 ADC (Solid tumors) are in the clinical and IND-enabling stages of development, respectively. We have no other identified product candidates at this stage. We may never identify any future product candidates or advance past IND-enabling studies or clinical stage development.
- None of our potential future Oncology product candidates have ever been tested in humans. Before obtaining regulatory approval for the commercial distribution of any product candidates, we, either alone or through a collaboration, must conduct extensive preclinical studies, followed by clinical trials to demonstrate the safety and efficacy of our product candidates in humans.
- We cannot be certain of the timely completion or outcome of our research and development activities or our planned preclinical studies and cannot predict if the FDA or other regulatory authorities will accept our proposed clinical programs or if the outcome of our preclinical studies will ultimately support the further development of our future product candidates.
- We have not yet met with or discussed our product development plans with FDA or any other regulatory authorities for Trop2 PH1 ADC (Oncology IND Candidate). As a result, we cannot be sure that we will be able to submit INDs or similar applications for our current discovery programs on the timelines we expect, if at all, and we cannot be sure that submission of INDs or similar applications will result in the FDA or other regulatory authorities allowing clinical trials to begin.

- Our PHP-303 and Trop 2 PH1 ADC programs are in the clinical and IND-enabling stages respectively, and we are subject to the risks of failure inherent in the identification of potential product candidates and the research and development of those product candidates based on novel approaches, targets, and mechanisms of action.
- You should consider our prospects in light of the costs, uncertainties, delays and difficulties frequently encountered by preclinical stage biopharmaceutical companies such as ours. Although we expect to initiate a Phase 2 clinical trial for the PHP-303 product candidate in patients with AATD in 2023, there can be no guarantee that we will be able to do so, particularly considering the facts that clinical trial enrollment, could be impacted by known and new Covid-19 variants and the ability to recruit, conduct and gain trial results in a timely fashion. Additionally, the ongoing Geopolitical conflicts could impact clinical trial enrollment in both the US and with special considerations and impact from Europe. In addition, you should consider our prospects in the face of the unknown and Force Majeure, elements over which we have no control.
- There is no guarantee, that we can initiate a Phase 2 clinical trial in ARDS/Covid-19 in 2023 or in future years especially if the preclinical studies in ARDS that we are conducting with a non-dilutive preclinical study grant from the Department of Defense (DoD) do not result in favorable preclinical results or outcomes as they relate to ARDS.
- We may not have the financial resources to continue development of, or to enter into new collaborations for, the product candidates that may result from our PHP-303 and Trop2 PH1 ADC programs or any potential future product candidates involving PH1, PH5, PH6. This may be exacerbated if we experience any issues that delay or prevent regulatory approval of, or our ability to commercialize, any product candidate that we identify, such as:
    - negative or inconclusive results from our preclinical trials, leading to a decision to conduct additional preclinical studies or abandon a program;
    - negative or inconclusive results from our clinical trials or the clinical trials of others for product candidates similar to ours, leading to a decision or requirement to conduct additional preclinical studies or clinical trials or abandon a program;
    - our clinical safety data in humans do not match the industry-standard practice of conducting pre-clinical safety evaluation in non-human primates;
    - our strategy of deploying toxins PH1, PH5 and PH6 as an antibody-drug-conjugates (ADC) fails to mitigate known toxicities of those classes of small molecules delivered as systemic chemotherapies.
    - our clinical data do not match the preclinical data supporting antibody selectivity, linker stability, pharmacokinetics, anti-tumor efficacy, or any other key attributes.
    - product-related side effects experienced by participants in our clinical trials or by individuals using drugs or therapeutic antibodies similar to ours;
    - delays in submitting IND applications or comparable foreign applications, or delays or failure in obtaining the necessary approvals from regulators to commence a clinical trial, or a suspension or termination of a clinical trial once commenced;
    - conditions imposed by the FDA, or other regulatory authorities regarding the scope or design of our clinical trials;
    - delays in enrolling research subjects in clinical trials;
    - high drop-out rates and high failure rates of research subjects;
    - inadequate supply or quality of product candidate components or materials or other supplies necessary for the conduct of our clinical trials;

- greater-than-anticipated clinical trial costs;
- poor effectiveness of our product candidates during clinical trials;
- unfavorable FDA or other regulatory agency inspection and review of a clinical trial or manufacture site;
- failure of our third-party contractors or investigators to comply with regulatory requirements or otherwise meet their contractual obligations in a timely manner, or at all;
- delays and changes in regulatory requirements, policies and guidelines;
- the FDA or other regulatory agencies interpreting our data differently than we do;
- or adverse impacts caused by the ongoing COVID-19 pandemic, ongoing Geopolitical considerations in Europe and other countries which could heighten any of the foregoing risks.

- Further, we and any potential future partners may never receive approval to market and commercialize any product candidate or the regulatory approval may be for targets, disease indications or patient populations that are not as broad as we intended or desired or may require labeling that includes significant use or distribution restrictions, safety warnings or post marketing testing requirements.
- We may not be successful in our efforts to use and expand our Peak Bio Research and Discovery (R&D) Toxin and ADC Platform Engine to build a pipeline of product candidates with our current Toxins PH1, PH5, PH6 or any future identified opportunities either as new toxins or new nominated ADCs generated from our platform.
- Even if we are successful in identifying a pipeline of product candidates with our proprietary Peak Bio R&D Toxin and ADC Platform Engine, we may not have or be able to raise sufficient capital to pursue them due to our commitments to PHP-303 and/ or Trop2 PH1 ADC clinical development.
- A key element of our strategy is to use and expand our Peak Bio R&D and ADC Platform Engine to build a pipeline of product candidates and progress these product candidates through preclinical and clinical development for the treatment of various diseases.
- Although our research efforts to date suggests that our novel approach to toxin and ADC drug development has potentially created a novel toxin portfolio, whether that allows us to create a novel cadre of future clinical and eventually commercially viable ADC candidates depends upon its performance in future phase 1 and phase 2 clinical trials.
- Our concept is to create novel ADC drug candidates that:
  - Potentially enhance tumoricidal activity beyond cytotoxicity;
  - Potentially engage the Host Response (T and B cells) that can potentially co-evolve and can counter resistance mutations;
  - Potentially create ADC payloads that act as poor substrates for MDR Transporters; and
  - Potentially creating immune memory cells that may expand and re-engage upon patient relapse and/or tumor recurrence.
- We may not be able to adequately engage the immune response or reverse the effects of immune suppression in certain cancers with or without combination with checkpoint inhibitors.
- Conversely, we may elicit a heightened response from the human immune system resulting in mild or acute cytokine release syndrome which may result in reduction, discontinuation, or spreading a certain dose over time. This in turn may result in failure to achieve the preclinically recommended phase 2 dose for anti-tumor efficacy.
- The additional mechanism of action of engaging the human immune system may not be significant over and above the payload’s ability to kill cancer cells, restoring or activating the human immune

system with/ without checkpoint inhibitor combination may not have the desired anti-tumor effects, or be counter-productive from safety or any other perspective.

- While immune activation has been a successful clinical approach for various checkpoint blockade strategies, for e.g., PD-1 and PD-L1; not all PD-1 or PD-L1 inhibitors have been successful in the same indication. We may have to explore several combination strategies in phase 1 to determine potential pairing strategies.
- Even when a combination is proven safe by phase 1 clinical study, we may have combined with the immunotherapy that fails to contribute to the anti-tumor effect. Alternatively, our ADC may not significantly improve on the efficacy of the immunotherapy which may well be the standard-of-care for that kind of cancer. Additional attempts, new strategies and new clinical trials may be required for further development.
- We may incur greater costs related to additional manufacturing, new trials, develop new strategic partnerships and require additional fund-raising events to finally see the development candidate become a marketed product.

Our Peak Bio R&D Toxin and ADC Platform Engine is evolving and may not reach a state at which building a pipeline of product candidates is possible.

- Even if we are successful in building our Oncology pipeline of product candidates, the potential product candidates that we identify may not be suitable for clinical development or generate acceptable clinical data, including unacceptable toxicity or other characteristics that indicate that they are unlikely to be products that will receive marketing approval from the FDA or other regulatory authorities or achieve market acceptance, limited commercial success leading to inability to generate sufficient product revenues in the future.
- Our approach to developing and identifying our therapeutic product candidates using the Peak Bio R&D Toxin and ADC Platform Engine is novel and unproven and may not result in marketable products.
- We plan to develop a pipeline of product candidates using our Peak Bio R&D Toxin and ADC Platform Engine including those already generated from our PH1 and in the future our early-stage toxin programs PH5 and PH6. We believe that we may be able to overcome certain key limitations of the current oncology ADC based drug discovery and development paradigms by focusing on our ability to generate novel toxins, that are engineered to:
  - Potentially enhance tumoricidal activity beyond cytotoxicity;
  - Potentially engage the Host Response (T and B cells) and can potentially co-evolve and can counter resistance mutations;
  - Potentially creating ADC payloads that act as poor substrate for MDR Transporters (reduced resistance); and
  - Potentially creating immune memory cells that may expand and re-engage upon patient relapse and/or tumor recurrence.
- We may not be correct in our beliefs about the differentiated nature of the Peak Bio R&D Toxin and ADC Platform to competing technologies, our data may be relevant to a niche, and our platform may not prove to be superior in all settings. Additionally, clinical data may not support our preclinical findings, for e.g., if humans were to degrade PH1 differently, and this new catabolite is a substrate for MDR transporters. Alternatively, said PH1 ADC benefits may be neutralized, for e.g., patients were to develop resistance to PH1 independently by known or unknown mechanisms such as potential mutations in spliceosomes.

- If our Peak Bio R&D Toxin and ADC Platform is not able to develop approved ADC constructs that are effective at the necessary speed or scale, it could have a material and adverse effect on our business, financial condition, results of operations and prospects.
- In the future we may not be successful in our efforts to identify and acquire additional product candidates, novel new IP, or licenses from academic or industry sources and this may impact our ability to grow the company and improve our ability to develop and commercialize additional products.

We may expend our limited resources and access to capital to pursue a particular product candidate; these decisions may prove to be wrong and may adversely impact our business. Because we have limited financial and managerial resources, we intend to focus our efforts on specific R&D programs, including our clinical development of product candidate(s) PHP-303, and Trop2 PH1 ADC, our lead oncology ADC candidate, and eventually advancing additional research programs progressing from our Peak Bio R&D Discovery Toxin and ADC Platform Engine.

- As a result, we may forgo or delay pursuit of other opportunities, including with potential future product candidates that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities.
- Our spending on current and future R&D programs and product candidates for specific indications may not yield any commercially viable product candidates. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through partnership, licensing, or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

The effects of health epidemics, geopolitical instability including the ongoing COVID-19 pandemic, the conflict in Eastern Europe and in regions where we, or the third parties on which we rely, have business operations could adversely impact our business, including our preclinical studies, anticipated clinical trials, and contract manufacturing capabilities. The COVID-19 pandemic and/or the geopolitical instability in Eastern Europe could materially affect our operations, including at our offices and research facilities in Palo Alto, California, which has been affected by supply chain issues subject to foreign policy changes and/or executive orders, and at our future clinical trial sites, as well as the business or operations of our CROs, CDMOs, or other third parties with whom we conduct business and could be adversely impacted and cause significant disruptions and delays which could greatly impact our business and may continue to impact planned preclinical and clinical plans.

- Further, from time to time there have been declarations from the President of the United States, State Governors and Ex-US country leadership declaring that the COVID-19 pandemic a national, state or country emergency, on occasions where the spread and increased incidence of varying strains of COVID-19 both in severity and incidence have invoked restrictive measures that have, and could, in the future, impact our business as well as other businesses materially.
- Exceptions to facilitate authorized necessary activities to mitigate the impact of the COVID-19 pandemic have been instituted from time to time as needed or mandated.
- In response to these public health directives and orders, we implemented at various times work-from-home policies to support the community efforts to reduce the transmission of COVID-19 and protect employees, complying with guidance from federal, state/ provincial, or municipal government and health authorities.
- We implemented from time to time, several measures to ensure employee safety and business continuity.

- Employees who can work from home have been doing so, as directed from time to time, while those needing to work in laboratory facilities are divided into shifts to reduce the number of people gathered at one time.
- We have also taken measures to secure our research activities while work in laboratories has been organized to reduce risk of COVID-19 transmission.
- These measures from time to time have resulted in decreased productivity of our laboratory-based workforce and may continue to do so for as long as such measures from time to time remain in place.
- Additionally, business travel can be restricted from time to time, (though no longer currently suspended), and we have utilized online and teleconference technology to meet virtually rather than in person.
- While certain of the restrictions in Palo Alto, CA and other locations in which we have employees or independent contractors have recently been relaxed or lifted, these restrictions may be re-implemented or new restrictions imposed if rates or incidence of infection increase.
- The effects of the executive orders and our work-from-home policies may negatively impact productivity, disrupt our business and delay our programs and timelines (for example, our timeline for our anticipated Phase 2 clinical start for PHP-303 or progress with our IND-enabling studies and eventual IND filings related to our nominated Trop2 PH1 ADC program and other future clinical PHP-303 and ADC pre-clinical programs or nominations of any future ADC programs internally, or in any future partnerships with external collaborators could be delayed), the magnitude of which will depend, in part, on the length and severity of the restrictions and other limitations on our ability to conduct our business in the ordinary course. These and similar, and perhaps more severe disruptions in our operations could negatively impact our business, operating results, and financial condition.
- The global pandemic and ensuing outbreaks, quarantines, shelter-in-place and similar government orders, or the perception that such orders, shutdowns or other restrictions on the conduct of business operations could be imposed or re-instituted, related to COVID-19 or other infectious diseases could impact personnel at third-party facilities, including those from which we currently obtain tissue and blood samples, or on which we may in the future rely for manufacturing, in the United States and other countries, or the availability or cost of materials, which would disrupt our supply chain. Similarly, disruption in operations of our collaboration partner, pH Pharma, or any third-party facilities on which they are dependent may affect our collaboration and our ability to nominate an ADC candidate for further development and could create disruptions to resources, inability of workers to carry out their jobs effectively, disruptions to manufacturing, supply chains, inability to travel and increased pressure on health systems required to treat COVID-19.
- As a result of government and local regulation we have been required at times to introduce a work-from-home policy for the large majority of our work force and our facilities could remain open only for business-critical activities.
- The requirement by governments to stay at home or to “social distance” limits normal communications and may also increase cyber security risk or create data accessibility concerns.
- It also has at times significantly curtailed the numbers of individuals who can work in our offices or labs.

Our planned preclinical research and clinical trials may be affected by the ongoing COVID-19 pandemic, should the pandemic continue, a new health crisis emerge, or until such time at which we intend to initiate such trials, including the following.

- Patients that may not be able or willing to comply with clinical trial protocols if quarantines impede patient movement or due to limitations on travel imposed or recommended by federal, state/ provincial or municipal governments interrupt healthcare services. It may cause interruptions in our ability to

obtain meaningful data from clinical trials or increased rates of patients may withdraw from our clinical trials following enrollment as a result of contracting COVID-19, or being forced to quarantine or being unable to visit clinical trial locations or otherwise comply with clinical trial protocols.

- Healthcare resources may be diverted or prioritized away from the conduct of clinical trials and towards the ongoing COVID-19 pandemic, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials, and because, who, as healthcare providers, may have heightened exposure to COVID-19 and adversely impact our clinical trial operations. This may include limitations in hospital resources that would otherwise be focused on the conduct of our clinical trials, including because of sickness of employees, or their families, or the desire of employees to avoid contact with large groups of people. We may experience difficulties in retaining clinical site investigators and clinical site staff; delays in receiving the supplies, materials and services needed to conduct clinical trials (and preclinical research); interruption to key clinical trial activities including monitoring of clinical sites, patient visits, inability to follow patients after they have received treatment and patient assessments and patients dropping out from trials early reduce the numbers impacting efficacy analysis; delays in enrolling patients or having to discontinue enrolled patients on account of Covid-19 (or other health crises) impacting the readout of key trial endpoints. AATD patients, in particular, are at greater risk from COVID-19 given that the condition is a respiratory and lung condition.
- Together with the vulnerability of patients with severe AATD, it is likely that once initiated, clinical centers may have to suspend and/or divert resources away from clinical trials till a later time.

We depend on enrollment of patients in our clinical trials for our product candidates. If we are unable to enroll patients in our clinical trials, or enrollment is slower than anticipated, in particular for our product candidates with rare disease indications, our research and development efforts could be adversely affected.

- Successful and timely completion of clinical trials for our product candidates will require that we are able to enroll a sufficient number of patients.
- Trials may be subject to delays as a result of the limited number of patients with the diseases that these product candidates target, patient enrollment taking longer than anticipated or patient withdrawal.
- We will compete with other companies in enrolling the same limited population of patients, which may further challenge our ability to timely enroll patients in our clinical trials.
- Due to the small number of patients for any rare disease or tumor type, it may be difficult for us to enroll a sufficient number of patients in our clinical trials for our product candidates with indications in rare diseases or enrollment for these product candidates may take significantly longer than we anticipate.
- There are an estimated 50,000 and 60,000 persons in North America and Europe, respectively, with the genotypes that we intend to enroll in our clinical trials for AATD, the target indication for PHP-303.
- Patient enrollment depends on many factors, including the size and nature of the patient population, eligibility criteria for the trial, the proximity of patients to clinical sites, the design of the clinical protocol, the availability of competing clinical trials, the availability of new drugs or biologics approved for the indication the clinical trial is investigating, and clinicians' and patients' perceptions as to the potential advantages of the drug being studied in relation to other available therapies.
- These factors may make it difficult for us to enroll enough patients to complete our clinical trials in a timely and cost-effective manner. For example, our Phase 2 PHP-303 trial will recruit individuals with alpha-1 antitrypsin deficiency-related lung disease, who are potentially at greater risk from COVID-19 exposure.
- As a consequence of the COVID-19 pandemic, future recruitment into our Phase 2 alpha-1 antitrypsin deficiency study could be delayed.

- Delays in the completion of any clinical trial of our product candidates will increase our costs, slow down our development and approval of our product candidates, and delay or potentially jeopardize our ability to commence product sales and generate revenue.
- In addition, some of the factors that cause or lead to a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.
- We may become exposed to costly and damaging liability claims, either when testing our product candidates in the clinic or at the commercial stage, and our product liability insurance may not cover all damages from such claims.
- We may experience a delay in availability of drug product for PHP-303 due to lack of manufacturing capacity and/or raw materials at our third-party contract manufacturing organizations ("CMOs").
- We may experience a delay in our ability to close and negotiate third-party partnerships or collaborations, or to progress third-party collaborations already in place.
- We could face limitations on employee resources as a result of increased sickness, requirement for employees to care for family members or requirement for employees to self-isolate themselves; interruptions and delays in our development, translation and manufacturing activities, and missed milestones as a result of the government required "stay-at-home" guidelines; delay in responses from regulatory authorities in relation to approvals, amendments or other regulatory engagements required for our ongoing development activities; supply chain interruptions; or diversion of CDMO activities and raw materials to COVID-19 products, including restrictions imposed by various governments, causing delays to clinical trial supplies.

Our business is subject to risks associated with conducting business internationally. We source research and development, manufacturing, consulting, and other services from companies based throughout the United States, the EU, and select Asian countries and we will be planning and conducting our clinical trials in the United States, Canada, certain European countries, in the near-term and in the future.

- Accordingly, our future results could be harmed by a variety of factors, including: economic weakness, including inflation, or political instability in varying economies and markets; differing regulatory requirements for drug approvals in non-European Union (EU) countries; differing jurisdictions could present different issues for securing, maintaining, or obtaining freedom to operate for our intellectual property in such jurisdictions; such jurisdictions; potentially reduced protection for intellectual property rights; difficulties in compliance with non-US laws and regulations; changes in non-U.S. regulations and customs, tariffs, and trade barriers; changes in non-U.S. currency exchange rates of the USD and currency controls; changes in a specific country's or region's political or economic environment, trade protection measures, import or export licensing requirements or other restrictive actions by the USA or non-U.S. governments; differing reimbursement regimes and price controls in certain non-U.S. markets; negative consequences from changes in tax laws; compliance with tax, employment, immigration, and labor laws for employees living or traveling outside of the USA; business interruptions resulting from geo-political actions, including war and terrorism, health epidemics and other widespread outbreaks of contagious disease, or natural disasters, including earthquakes, typhoons, hurricanes, floods and fires; and business interruptions resulting from the COVID-19 pandemic or any other similar pandemic.
- The United Kingdom's (UK) withdrawal from the European Union (commonly referred to as Brexit) on January 3, 2020, may adversely impact our ability to obtain regulatory approvals of our product candidates and in particular PHP-303 in AATD in the European Union and may require us to incur additional expenses in order to develop, manufacture and commercialize our product candidates in the European Union.
- There is considerable uncertainty resulting from a lack of precedent and the complexity of the UK and EU's intertwined legal regimes as to how Brexit (following the Transition Period) will impact the life

sciences industry in Europe, including our Company, including with respect to ongoing or future clinical trials, among other aspects. Since a significant proportion of the clinical and regulatory framework for PHP-303 utilizes Irish investigators and the fact that the UK (Brexit) would be applicable to our business and our product candidate for AATD is derived from EU directives and

regulations, the withdrawal could materially impact the regulations with respect to the development, manufacture, importation, approval and commercialization of our product candidates in the UK or the EU.

- The impact will largely depend on the model and means by which Ireland and the UK's relationship with the EU is governed post-Brexit and the extent to which the UK chooses to diverge from the EU regulatory framework.
- As a result of Brexit, incentives related to an orphan designation granted in the EU are limited to the EU and Ireland but are not valid in UK.
- The UK competent authority, MHRA, will review applications for orphan designation at the time of a marketing authorization, and there is no pre-marketing authorization orphan designation.
- It is therefore possible that conditions that are currently designated as orphan conditions in the UK will no longer be and that conditions not currently designated as orphan conditions in the European Union will be designated as such in the UK.
- In the EU, similar political, economic and regulatory developments may affect our ability to profitably commercialize, or co-commercialize, our product candidates, if approved.
- In addition to continuing pressure on prices and cost containment measures, legislative developments at the EU or member state level may result in significant additional requirements or obstacles that may increase our operating costs.
- The delivery of healthcare in the EU, including the establishment and operation of health services and the pricing and reimbursement of medicines, is almost exclusively a matter for national, rather than EU, law and policy.
- National governments and health service providers have different priorities and approaches to the delivery of health care and the pricing and reimbursement of product candidates in that context.
- In general, however, the healthcare budgetary constraints in most EU member states have resulted in restrictions on the pricing and reimbursement of medicines by relevant health service providers. Coupled with ever-increasing EU and national regulatory burdens on those wishing to develop and market product candidates, this could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to commercialize, or co-commercialize, our product candidates, if approved.
- In markets outside of the United States, the EU and the UK, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific product candidates and therapies.
- We cannot predict the likelihood, nature, or extent of government regulation that may arise from future legislation or administrative action in the United States, the EU, the UK, or any other jurisdictions.
- If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.
- There have been, and likely will continue to be, additional legislative and regulatory proposals at the foreign, federal, and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. Such reforms could have an adverse effect on anticipated revenues

from product candidates that we may successfully develop and for which we may obtain marketing approval and may affect our overall financial condition and ability to develop product candidates.

If PHP-303, our clinical stage asset, or other future product candidates acquired or those derived or developed from our Peak Bio R&D Toxin and ADC Platform, continue in clinical trials, or are eventually initiated in clinical trials in human subjects, they may not demonstrate the combination of safety and efficacy necessary to become approvable or commercially viable.

- For example, we have not conducted testing in human subjects of our Trop2 PH1 ADC nominated program or any other future nominated product candidates. We may ultimately discover that our product candidates we develop do not possess certain properties that we believe will be helpful for therapeutic effectiveness and safety.
- Further, although our PH1 toxin program has exhibited encouraging results in preclinical research, it may not demonstrate similar results in further research or exhibit the same properties in humans and may interact with human biological systems in unforeseen, ineffective, or harmful ways. As a result, we may never succeed in developing a marketable product based on our PH1 based toxin programs or based on our overall Peak Bio R&D Toxin and ADC Platform, including our additional toxins PH5, PH6.
- If the product candidates resulting from our PH1 based toxin programs from our Peak Bio R&D Toxin and ADC Platform or any of our potential future product candidates prove to be ineffective, unsafe or commercially unviable, our entire pipeline could have little, if any, value, which could require us to change our focus and approach to R&D, which would have a material and adverse effect on our business, financial condition, results of operations and prospects.

Our product candidates are at an early stage of development, and we may not be able to successfully develop and commercialize them.

- Significant further research and development, financial resources and personnel will be required to develop commercially viable products and obtain regulatory approvals.
- Much of our efforts and expenditures over the next few years will be devoted to PHP-303, (Clinical) Trop2 PH1 ADC, (IND-enabling) and newly nominated ADC programs based on our PH1 toxin or any of our future toxins PH5, PH6.
- These are our only product candidates in preclinical development or clinical trials.
- We have no drugs that have received regulatory approval for commercial sale.
- We expect that none of our product candidates will be commercially available in the near term.

Our ability to commercialize our product candidates depends on first receiving Food and Drug Administration (FDA) approval.

- The future commercial success of these product candidates will depend upon their acceptance by physicians, patients, and other key decision-makers as therapeutic and cost-effective alternatives to currently available products.
- Because we have very limited data to date regarding our product candidates, we are unable to predict with any degree of certainty whether they will ever be approved by the FDA, the EMA, or comparable foreign authorities or if approved, will achieve market acceptance.
- If we fail to produce a commercially successful product, we may not be able to earn sufficient revenues to continue as a going concern.

- We may continue to need significant amounts of additional capital and we cannot be sure that additional capital will be available to us.
- We have consumed limited amounts of cash to date but expect capital outlays and operating expenditures to significantly increase over the next several years as we hire additional employees, expand our infrastructure, and accelerate our preclinical development and clinical trial activities.
- We believe that the net proceeds made available from the Business Combination, along with our existing cash and investment securities, milestone payments and research grants, will be sufficient to fund our operations for at least the next two years. However, changes in our business may occur that would consume available capital resources sooner than we expect.
- If adequate funds are not available to us, we may be required to delay, reduce the scope of, or eliminate one or more of our development programs.
- We do not know whether additional financing will be available when needed, or that, if available, we will obtain financing on terms favorable to our stockholders or us.
- To the extent that we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution.
- To the extent that we raise additional funds through collaboration and licensing arrangements, we may be required to relinquish some rights to our technologies or product candidates, or grant licenses on terms that are not favorable to us.
- Clinical trials for our product candidates are expensive and time-consuming and their outcome is uncertain.
- Before we can obtain regulatory approval for the commercial sale of any product candidate that we wish to develop, we will be required to complete preclinical development, manufacturing, and extensive clinical trials in humans to demonstrate its safety and efficacy.
- Each of these trials requires the investment of substantial expense and time.
- We are currently planning on conducting a phase 2/phase 3 adaptive design trial for our most advanced product candidate PHP-303 and expect to commence this trial in 2023. The target indication is Alpha-1 Antitrypsin Deficiency (AATD).
- We may commence additional clinical trials for our PHP-303 program if our Department of Defense (DoD) preclinical grant demonstrates potentially positive preclinical data. This may be our second clinical program to advance in Acute Respiratory Distress Syndrome (ARDS).
- There are numerous factors that could delay each of these clinical trials or prevent us from completing these trials successfully.
- The length of time required to submit an investigational new drug application (IND) and get the approval from FDA to initiate clinical trials varies significantly and may be difficult to predict. This is true for other regulatory authorities as well.
- Success in preclinical and early clinical trials does not ensure that large-scale trials will be successful, nor does it predict the final result.
- Acceptable results in early trials may not be repeated in later trials.
- It is not unknown for companies in the biotechnology/ pharmaceutical industry to have suffered setbacks in advanced clinical trials, even after having promising results in earlier trials.
- Negative or inconclusive results or treatment-related adverse events during a clinical trial could cause it to be redone or terminated.

- In addition, failure to construct appropriate clinical trial protocols could result in the test or control group experiencing a disproportionate number of adverse events and could cause a clinical trial to be redone or terminated. The length of time necessary to complete clinical trials and to submit a business license application (BLA) for marketing approval for a final decision by the FDA or another regulatory authority varies significantly and may be difficult to predict.
- To date, we have limited clinical data and have not seen any significant toxicity data however, trials in later stages may show or deem this program to not be safe or efficacious which would not allow us to

  obtain the requisite regulatory approvals for these product candidates or any other potential product candidates.
- Because our Trop2 PH1 ADC preclinical ADC program and PHP-303 clinical programs are our only product candidates in clinical trials or preclinical development at the present time, any delays, or difficulties we encounter may impact our ability to generate revenue and cause our stock price to decline significantly.

Risks Relating to Development, Clinical Testing, Manufacturing and Regulatory Approval

Prior to our acquisition of PHP-303, we were not involved in its development and, as a result, we are dependent on Bayer having accurately reported the results and correctly collected and interpreted the data from all clinical trials conducted prior to our acquisition.

- We had no involvement with or control over PHP-303 manufacturing or pre-clinical and clinical development prior to our acquisition of PHP-303.
- We are dependent on Bayer Healthcare ("Bayer") having conducted their R&D in accordance with the applicable protocols and legal, regulatory, and scientific standards; having accurately reported the results of all clinical trials conducted prior to our acquisition; and having correctly collected and interpreted the data from these trials.
- To the extent that Bayer has not done this, the clinical development, regulatory approval, or commercialization of our product and future indications associated with this product may be adversely affected.
- Interim "top-line" and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.
- From time to time, we may publish interim "top-line" or preliminary data from our clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available.
- Preliminary or "top-line" data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published.
- As a result, interim and preliminary data should be viewed with caution until the final data are available.
- Adverse differences between preliminary or interim data and final data could significantly harm our business prospects.
- Our product candidates may have serious adverse, undesirable, or unacceptable side effects which may delay or prevent marketing approval or lead to the withdrawal of approval after it has been granted.
- If such side effects are identified during the development of these product candidates or following approval, if any, we may need to abandon our development of these product candidates, the commercial profile of any approved label may be limited, or we may be subject to other significant negative consequences following marketing approval, if any.

- Undesirable side effects that may be caused by PHP-303 or our future named ADC candidates or toxins used internally, licensed out, acquired by third parties could cause us or regulatory authorities to interrupt, delay or halt clinical trials for us or for any of our future partners, collaborators or licensors and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA, the EMA, or other comparable regulatory or foreign authorities.

- PHP-303 has completed one or more clinical trials and in the trials conducted prior to our ownership and following our ownership, adverse events observed have included the following: for the two clinical trials conducted by pH Pharma, the most frequently documented treatment emergent adverse events occurred within the gastrointestinal disorders system organ class (14.0% of the 50 subjects dosed) with dyspepsia reported by 3 subjects (6.0% of 50 subjects dosed) and diarrhea, nausea, and vomiting reported by 2 subjects (4.0% each of the 50 randomized subjects). No serious adverse events or other significant adverse events were reported in the trials conducted by pH Pharma. Safety findings were consistent with the known safety profile of PHP-303, including gastrointestinal (GI) AEs which had been identified in the previous sponsor's studies.

We face risks associated with the clinical development for PHP-303 and for our future ADC nominated candidates that are currently in preclinical development.

- Results of our future clinical trials, or results from clinical trials for other similar product candidates could reveal a high and unacceptable severity and prevalence of adverse side effects.

- In such an event, our trials could be suspended or terminated and the FDA, EMA, or other comparable foreign regulatory authorities could order us to cease further development of or deny approval of our product candidates for any or all targeted indications.

- Drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete a trial or result in potential product liability claims. Additionally, if any of our product candidates receives marketing approval and we or others later identify undesirable or unacceptable side effects caused by these product candidates, a number of potentially significant negative consequences could result, including:

    - regulatory authorities may withdraw approvals of any such product and require removal from the market;

    - regulatory authorities may require the addition of labeling statements, specific warnings, a contraindication or field alerts to physicians and pharmacies, specialty pharmacies and other pharmacy related distribution networks (for example, oncology therapies do have inherent risks and labeling considerations that in many instances require additional regulatory labeling requirements);

    - regulatory authorities may require a medication guide outlining the risks of such side effects for distribution to patients, or that we implement a risk evaluation and mitigation strategy (a "REMS") plan to ensure that the benefits of the product outweigh its risks;

    - we may be required to change the way a product is administered, including changes in dosing regimens, frequency of dose, or reduction in dosing and may require us to conduct additional clinical trials or change the labeling of a product;

    - we may be subject to limitations on how we may promote the product leading to the potential for sales of the product may decrease significantly;

    - third-party private or government payors may not offer, or may offer inadequate, reimbursement coverage for our product candidates, or reimbursement payments may be delayed or impossible to recover; and

    - we may be subject to litigation or product liability claims; and our reputation may suffer.

- Any of these events could prevent us or any collaborators from achieving or maintaining market acceptance of our product candidates or could substantially increase commercialization costs and expenses, which in turn could delay or prevent us from generating significant revenue from the sale of our product candidates.
- Our preclinical nominated Trop2 PH1 ADC product candidate for which a target indication has yet to be determined may have known adverse effects of anti-Trop2 ADCs such as neutropenia and diarrhea exhibited by Trodelvy or stomatitis and interstitial lung disease seen for Datopotamab DXd, or may have entirely different or more severe toxicities due to a different payload. It is hard to predict how this may affect the future marketability of Trop2 PH1 ADC.

The success of our current product candidates will depend on many factors, including the following:

- we may not be able to demonstrate that any of our current product candidates is safe and effective as a treatment for the targeted indications to the satisfaction of the applicable regulatory authorities;
- the applicable regulatory authorities may require additional clinical trials of our current product candidates, which would increase our costs and prolong development;
- the results of clinical trials of our current product candidates may not meet the level of statistical or clinical significance required by the applicable regulatory authorities for marketing approval;
- the applicable regulatory authorities may disagree with the number, design, size, conduct, or implementation of our planned and future clinical trials for our current product candidates;
- the CROs that we retain to conduct clinical trials may take actions outside of our control that materially adversely impact clinical trials for our current product candidates;
- the applicable regulatory authorities may not find the data from clinical trials sufficient to demonstrate that the clinical and other benefits of our current product candidates outweigh their safety risks;
- the applicable regulatory authorities may disagree with our interpretation of data from our clinical trials or may require that we conduct additional trials;
- the applicable regulatory authorities may not accept data generated at our clinical trial sites;
- if we submit a BLA or NDA to the FDA, and it is reviewed by an advisory committee, the FDA may have difficulties scheduling an advisory committee meeting in a timely manner or the advisory committee may recommend against approval of our application or may recommend that the FDA require, as a condition of approval, additional pre-clinical studies or clinical trials, limitations on approved labeling, or distribution and use restrictions;
- the applicable regulatory authorities may require development of a risk evaluation and mitigation strategy (REMS) as a condition of approval;
- the applicable regulatory authorities may identify deficiencies in the product and process CMC development activities defining our manufacturing processes or facilities of our third-party manufacturers;
- the applicable regulatory authorities may change their approval policies or adopt new regulations;
- through our clinical trials, we may discover factors that limit the commercial viability of our current product candidates or make the commercialization of any of our current product candidates unfeasible; and
- if approved, acceptance of our current product candidates by patients, the medical community, and third-party payors; our ability to compete with other therapies to treat certain oncology indications, AATD, ARDS, NASH or other future indications of interest;
- continued acceptable safety profiles following approval of our current product candidates; and

- our ability to qualify for, maintain, enforce, and defend our intellectual property rights and claims.

We may choose to, or may be required to, suspend, repeat, or terminate our clinical trials if they are not conducted in accordance with regulatory requirements, the results are negative or inconclusive or the trials are not well designed.

- Clinical trials must be conducted in accordance with the FDA's Good Clinical Practices and are subject to oversight by the FDA and institutional review boards at the medical institutions where the clinical trials are conducted.
- In addition, clinical trials must be conducted with product candidates produced under the FDA's Good Manufacturing Practices, or GMP, and may require large numbers of test patients.
- Clinical trials may be suspended by the FDA at any time if the FDA finds deficiencies in the conduct of these trials or it is believed that these trials expose patients to unacceptable health risks.
- In addition, we or the FDA might delay or halt our clinical trials of a product candidate for various reasons, including:
  - the product candidate may have unforeseen adverse side effects;
  - the time required to determine whether the product candidate is effective may be longer than expected;
  - fatalities arising during a clinical trial due to medical problems that may not be related to clinical trial treatments;
  - the product candidate may not appear to be more effective than standard of care therapies;
  - insufficient statistical power due to significant patient dropout or crossover to other therapies;
  - insufficient patient enrollment in the clinical trials; or
  - we may not be able to produce sufficient quantities of the product candidate to complete the trials.
- Furthermore, the process of obtaining and maintaining regulatory approvals for new therapeutic products is lengthy, expensive, and uncertain.
- It can vary substantially, based on the type, complexity and novelty of the product involved.
- Accordingly, our current product candidates or any of our other future product candidates could take a significantly longer time to gain regulatory approval than we expect or may never gain approval, which would have a significant adverse impact on our business and results of operations.

We are subject to environmental and other risks

- We use certain hazardous materials in connection with our research and manufacturing activities. In the event such hazardous materials are stored, mishandled, incorrectly disposed, or accidentally released into the environment in violation of law or any permit, we could be subject to loss of our permits, government fines or penalties and/or other adverse governmental or private actions.
- The levy of a substantial fine or penalty, the payment of significant environmental remediation costs or the loss of a permit or other authorization to operate or engage in our ordinary course of business could materially adversely affect our business.
- We currently lease our Palo Alto Bay Area facilities built above an underground water table, that may be subject to continuing moisture and mold mitigation that may put sensitive and expensive lab equipment and facilities at risk and may reduce their operational lives, require frequent decontamination and recertification cycles to maintain operationality. Together with strict local environmental laws, we may be forced to shut down operations for significant periods of time. As we

grow, we may seek out other nearby facilities that are prone to similar and/or other environmental issues and resultant impact is unknown at this juncture but could pose future risks which may require

us to pay significant clean-up or other costs in order to maintain our operations on those properties. Such events include, but are not limited to, changes in environmental laws, discovery of new contamination, or unintended exacerbation of existing contamination. The occurrence of any such event could materially affect our ability to continue our business operations on those properties

Risks Relating to Our Dependence on Third Parties

We rely, and expect to continue to rely, on third parties, including independent investigators and CROs, to conduct our clinical trials.

- If these CROs do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates, or such approval or commercialization may be delayed, and our business could be substantially harmed.
- For PHP-303 in clinical trials, we rely on drug products that were produced and vialed by our contract manufacturers. For the foreseeable future, we will continue to rely on contract manufacturers to produce sufficient quantities of our product candidates for use in our clinical trials.
- Contract manufacturers have a limited number of facilities in which our product candidates can be produced.
- Contract manufacturers may not perform or may discontinue their business for the time required by us to successfully produce and market our product candidates.
- We have relied upon and plan to continue to rely upon independent clinical investigators and CROs to conduct our clinical trials and to monitor and manage data for our ongoing clinical programs.
- We rely on these parties for the execution of our clinical trials and control only certain aspects of these parties' activities.
- Nevertheless, we are responsible for ensuring that each of our studies and trials is conducted in accordance with the applicable protocol and legal, regulatory and scientific standards, and our reliance on these third parties does not relieve us of our regulatory responsibilities. Such standards may change, affecting the ability of contract manufacturers to produce our product candidates on the schedule we require for our clinical trials.
- Our contract manufacturers may be subject to existing and new environmental compliance related legislations that may adversely impact our expenses or our timelines.
- We and our independent investigators and CROs are required to comply with GxP requirements, which are regulations and guidelines enforced by the FDA, the Competent Authorities of the Member States of the European Economic Area, and comparable foreign regulatory authorities for all of our product candidates in clinical development. Regulatory authorities enforce these GxP requirements through periodic inspections of trial sponsors, principal investigators and trial sites. At any point in time, FDA may revoke or suspend the license of our contract manufacturer for failure to maintain standards resulting in business losses for us.
- If we fail to exercise adequate oversight over any of our independent investigators or CROs or if we or any of our independent investigators or CROs fail to comply with applicable GxP requirements, the clinical data generated in our clinical trials may be deemed unreliable and the FDA, the EMA, or foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon a regulatory inspection of us or our independent investigators or CROs, such regulatory authority will determine that any of our clinical trials complies with GxP requirements. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

- Further, these independent investigators and CROs are not our employees and we are not able to control, other than by contract, the amount of resources, including time, which they devote to our clinical trials.
- If our independent investigators or CROs fail to devote sufficient resources to the development of our product candidates, or if their performance is substandard, it may delay or compromise the prospects for approval and commercialization of our product candidates.
- In addition, the use of third-party service providers requires us to disclose our proprietary information to these parties, which could increase the risk that this information is misappropriated.
- If any of our relationships with our independent investigators or CROs terminate, we may not be able to enter into arrangements with alternative independent investigators or CROs or to do so on commercially reasonable terms.
- Switching or adding additional investigators or CROs involves additional cost and potential delays and requires our management's time and focus.
- In addition, there is a natural transition period when a new independent investigator or CRO commences work. As a result, delays could occur, which could materially impact our ability to meet our desired clinical development timelines.
- If our independent investigators or CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to a failure to adhere to our clinical protocols, regulatory requirements, or for other reasons, our clinical trials may be extended, delayed, or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates.
- As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenue could be delayed.

Manufacturing biotherapeutics is difficult and complex, and requires facilities specifically designed and validated for this purpose and we will use Contract Development Manufacturing Organizations (CDMOs) through various contract-manufacturing arrangements.

- We currently rely on third-party CDMOs for the production of clinical supply of our product candidates and intend to rely on CDMOs for the production of commercial supply of our product candidates, if approved. Our dependence on CDMOs may impair the development of our product candidates and may impair the commercialization of our product candidates, which would adversely impact our business and financial position.
- We have limited personnel with experience in manufacturing and CMC development requirements and we do not own facilities for manufacturing our product candidates.
- Instead, we rely on and expect to continue to rely on CDMOs for the supply of cGMP grade clinical trial materials, performance of process and product development activities to facilitate supply of commercial quantities of our product candidates.
- If approved, reliance on CDMOs may expose us to more risk than if we were to manufacture our product candidates ourselves. However, the shortage of, and diversion of, certain raw material supplies due to the COVID-19 pandemic response have demonstrated that both internal and external manufacturing activities have been subject to disruption and risk.
- Bayer previously provided clinical supplies for PHP-303 and certain transitional services.
- We have transitioned the clinical supply manufacture for these product candidates to CDMOs while demonstrating the manufactured product is equivalent to the Bayer form.

- The facilities used to manufacture our product candidates must be approved by the FDA, the EMA, and comparable foreign authorities pursuant to inspections.
- We will follow all relevant regulatory guidance's for the development and manufacture of our products.
- Given our preclinical oncology candidates are derived from mammalian cell culture, all requirements for prevention of adventitious agents are followed.
- While we provide oversight of manufacturing activities, we do not and will not control the execution of our manufacturing activities by, and are or will be essentially dependent on, our CDMOs for compliance with cGMP requirements for the manufacture of our product candidates.
- We aim to minimize this risk by entering into quality agreements, by auditing of the CDMOs and by ongoing review of all activities linked to product manufacture.
- Due to this dependence on CDMOs, we are potentially subject to the risk that our product candidates may have manufacturing defects that we have limited ability to prevent.
- If a CDMO cannot successfully manufacture material that conforms to our specifications and the regulatory requirements it may delay ongoing clinical studies as we will not be able to secure or maintain regulatory approval for the use of our investigational medicinal product candidates in clinical trials, or for commercial distribution of our product candidates, if approved.
- In addition, while we have limited direct control over the ability of our CDMOs to maintain adequate quality control, quality assurance and qualified personnel, we aim to maintain control through the use of quality agreements and manufacturing supply agreements.
- If the FDA, the EMA, or the comparable foreign regulatory authority does not approve these facilities for the manufacture of GMP certified products including our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would delay our development program and significantly impact our ability to develop, obtain regulatory approval for or commercialize our product candidates, if approved.
- In addition, any failure to achieve and maintain compliance with these laws, regulations and standards could subject us to the risk that we may have to suspend the manufacturing of our product candidates or that obtained approvals could be revoked.
- Furthermore, CDMOs may breach existing agreements they have with us because of factors beyond our control.
- They may also terminate or refuse to renew their agreement at a time that is costly or otherwise inconvenient for us.
- In addition, our preclinical oncology candidate(s) are biologics and the manufacture of biologics involves expensive and complex processes and worldwide capacity at CDMOs for the manufacture of biologics is currently limited.
- Chemical synthetic routes for toxins are complex multistep processes and CDMOs may find it difficult or be unable to reproduce our processes at larger scale. Yield loss at each step could result in wastage of expensive raw material intermediates and make it difficult to manufacture sufficient quantities of toxin.
- The number of CDMOs that can perform all ADC services- process development, manufacture an antibody, a linker-toxin, perform large-scale conjugations and perform necessary analytical quality control evaluations are few and heavily sought after.
- There are a designated number of manufacturing slots that a CDMO facility can support per year in between manufacturing and disinfecting cycles. Due to demand, these slots must be reserved months ahead of time, and if for any reason (e.g., supply chain issues) we cannot use our reserved slot, we may have to bear additional costs, in addition to lost time.

- The number of CDMOs that can fill-finish a toxic biologic with cytotoxic properties is limited.
- In addition, we may need to record period charges associated with manufacturing or inventory failures or other production-related costs that are not absorbed into inventory or incur costs to secure additional sources of capacity.
- Furthermore, there are inherent uncertainties associated with forecasting future demand, especially for newly introduced products of ours, and consequently we may over or underestimate our own demands resulting in losses.
- To maintain an adequate future supply to keep up with the potential for a growing demand for our future products, we will need to contract with CDMOs well in advance of any future product launch(s) and will need to maintain and ensure a state of regulatory compliance at all our CDMO production sites.
- If we for any reason fail to obtain future capacity enhancements on schedule, fail to operate at or near capacity, fail to maintain a state of regulatory compliance, or if actual demand significantly exceeds our future internal forecasts, we may be unable to maintain an adequate supply of our product to meet all demand.
- Furthermore, certain of our raw materials (Intermediates) and supplies required for the future production of our future products we make for ourselves, or future collaborators, may only be available only through sole source suppliers (the only recognized supplier available to us) or single source suppliers (the only approved supplier for us among other sources), and such raw materials cannot be obtained from other sources without significant delay or at all.
- If such sole source or single source suppliers were to limit or terminate production or otherwise fail to supply these materials for any reason, such failures could also have a material adverse impact on our products sales and our business.
- Any prolonged interruption in the operations of our contractors' manufacturing facilities could result in cancellations of shipments, loss of product in the process of being manufactured, or a shortfall or stock-out of available product for clinical trials or other research activities, any of which could have a material adverse impact on our business. A number of factors could cause prolonged interruptions, including:
    - the inability of a supplier to provide raw materials used for manufacture of our products;
    - equipment obsolescence, malfunctions or failures;
    - product contamination problems;
    - damage to a facility, labs, offices due to natural disasters (e.g., earthquakes can pose a particular risk to our Palo Alto facilities which are located in areas where earthquakes could occur);
    - changes in FDA regulatory requirements or standards that require modifications to our manufacturing processes;
    - action by the FDA or by us that results in the halting or slowdown of production of one or more of our products due to regulatory issues;
    - a contract manufacturer going out of business or failing to produce product as contractually required; and
    - other similar factors.

Because manufacturing processes and those of our contractors are highly complex and are subject to a lengthy FDA approval process, alternative qualified production capacity may not be available on a timely basis or at all. Difficulties or delays in our or our contractors' manufacturing and supply of existing or new

products could increase our costs, cause us to lose revenue or market share, damage our reputation and could result in a material adverse effect on our product sales, financial condition, and results of operations.

- This situation has been exacerbated due to the additional constraints caused by the priority given to the manufacture of COVID-19 therapeutics and vaccines, and the resultant decrease in available CDMO capacity.
- CDMO capacity in relation to the manufacture of clinical trial and commercial supplies is a key focus and most likely means additional CDMO capacity will be a future priority to secure sufficient supplies.
- If we or our partners were unable to find an acceptable CDMO within a reasonable timeframe, our clinical trials could be delayed or our commercial activities could be negatively impacted.
- We rely on and will continue to rely on CDMOs to purchase from third-party suppliers the raw materials meeting for our specifications that are necessary to produce our product candidates.
- We do not and will not have control over the process or timing of the acquisition of these raw materials by our CDMOs. Moreover, we currently do not have any agreements for the production of these raw materials. Supplies of raw material could be interrupted from time to time and we cannot be certain that alternative supplies could be obtained within a reasonable timeframe, at an acceptable cost, or at all.
- In addition, a disruption in the supply of raw materials could delay the commercial launch of our product candidates, if approved, or result in a shortage in supply, which would impair our ability to generate revenues from the sale of our product candidates.
- Growth in the costs and expenses of raw materials and intermediates may also impair our ability to cost effectively manufacture our product candidates. There are a limited number of suppliers for the raw materials that we may use to manufacture our product candidates and we may need to assess alternate suppliers to prevent a possible disruption of the manufacture of our product candidates.
- The recent restrictions imposed by various governments, including the United States, United Kingdom, and EU, among others, on use of certain raw materials required for the manufacture of therapeutics and vaccines in response to the current COVID-19 pandemic has demonstrated this vulnerability.
- This vulnerability, for not only our company but other companies large and small likely will continue in the coming months or years given the pandemic situation.
- We rely on our CDMOs to conduct all product and process development activities necessary to support regulatory submissions.
- These activities are critical to the meeting the regulatory expectations and if these studies are not considered adequate by FDA, the EMA or comparable foreign regulatory authority then significant delays could be encountered as a result.
- This risk is mitigated by following all relevant guidance’s and using staff knowledge and previous experience to guide the product and process development programs but is still a potential risk of regulatory non-compliance.
- Finding new CDMOs or third-party suppliers involves additional cost and requires our management’s time and focus.
- In addition, there is typically a transition period when a new CDMO commences work.
- Although we generally do not begin a clinical trial unless we believe we have on hand, or will be able to obtain, a sufficient supply of our product candidates to complete the clinical trial, any significant delay in the supply of our product candidates or the raw materials needed to produce our product candidates, could considerably delay conducting our clinical trials and potential regulatory approval of our product candidates.
- As part of their manufacture of our product candidates, our CDMOs and third-party suppliers are expected to comply with and respect the proprietary rights of others.

- If a CDMO or third-party supplier fails to acquire the proper licenses or otherwise infringes the proprietary rights of others in the course of providing services to us, we may have to find alternative CDMOs or third-party suppliers or defend against claims of infringement, either of which would significantly impact our ability to develop, obtain regulatory approval for or commercialize our product candidates, if approved.
- We intend to enter into strategic relationships with third parties, based on a product-by-product assessment, for the development of some of our product candidates.
- If we fail to enter into these arrangements, our business, development and commercialization prospects could be adversely affected.
- Our development program for our product candidates, particularly as we enter late-stage development for some of our product candidates, will require substantial additional funds.
- We may potentially enter into strategic relationships with pharmaceutical, biopharmaceutical or other partners for the continued development of our product candidates
- Alternatively, we may seek to sell or out-license one or more of our product candidates.
- The types of development arrangements referred to above are complex and time-consuming to negotiate and document, and we may not be able to enter into these arrangements on favorable terms or at all.
- In addition, we face significant competition from other companies in seeking out these types of development arrangements.
- If we are successful in entering into such an arrangement, we will be subject to other risks, including our inability to control the amount of time and resources the third party will dedicate to our product candidates, financial or other difficulties experienced by such third party, relinquishing important rights to such third party, and the arrangement failing to be profitable to us.
- If we are unable to enter into an appropriate arrangement for the development of our product candidates, we may have to reduce, delay, or terminate the development of such product candidates.
- We could also seek to sell or out-license one or more of our product candidates. If we, instead, decide to increase our expenditures to fund development activities on our own, we will need to obtain additional capital, which may not be available to us on acceptable terms or at all. As a result, our business may be substantially harmed.

In some circumstances we may rely on current and future collaborators to assist in our R&D activities. If any of our partners do not satisfy their obligations under our agreements with them, or if they terminate our licenses, partnerships, or collaborations with them, we may not be able to develop or commercialize our licensed or partnered product candidates as planned.

- Our existing relationship with Bayer for PHP-303 (formally BAY 85-8501) granted us assignment, license, development and commercialization rights that we entered into in 2017.
- We intend to continue to develop alliances with third party collaborators to develop and market our current and future product candidates.
- We may not be able to locate or attract third party collaborators to license to, develop, and market other product candidates and we may lack the capital and resources necessary to develop all our product candidates alone.
- If our collaborators do not prioritize and commit substantial resources to programs associated with our product candidates in timely fashion, we may be unable to commercialize our product candidates, which would limit our ability to generate revenue and become profitable.

- Currently we do not have any out-licensing or partnerships at the time however, we continue to pursue non-dilutive partnering funding for select projects and programs that are potentially beneficial to us.
- Our partner(s) might not fulfill all of their obligations under these agreements, and in certain circumstances including our licensing agreement with, they or we may terminate our partnerships with them.
- In either event, we may be unable to assume the development and commercialization responsibilities covered by these agreements or enter into alternative arrangements with a third-party to develop and commercialize product candidates.
- If a future partner elected to promote alternative products and product candidates such as its own products and product candidates in preference to those licensed with us, does not devote an adequate amount of time and resources to our product candidates or is otherwise unsuccessful in its efforts with respect to our product candidates, the development and commercialization of product candidates covered by the agreements could be delayed or terminated and our business and financial condition could be materially and adversely affected.
- Accordingly, our ability to receive any revenue from future product candidates' collaboration covered by these future agreements is dependent on the efforts of our future partners.
- If a future partner terminates or breaches its agreements with us, otherwise fails to complete its obligations in a timely manner or alleges that we have breached our contractual obligations under these agreements, the chances of successfully developing or commercializing product candidates under the collaboration could be materially and adversely affected.
- We could also become involved in disputes with a future or current partner, which could lead to delays in or termination of our development and commercialization programs and time-consuming and expensive litigation or arbitration. Furthermore, termination of an agreement by a partner could have an adverse effect on the share price.

Risks Relating to Intellectual Property

We rely on patents and other intellectual property rights to protect our product candidates, the obtainment, enforcement, defense, and maintenance of which may be challenging and costly. Failure to enforce or protect these rights adequately could harm our ability to compete and impair our business.

- Our commercial success depends in part on obtaining and maintaining patents and other forms of intellectual property protection, for example, for compositions-of-matter of our product candidates, formulations of our product candidates, analogs of our toxins, linkers or antibodies, methods used to manufacture our product candidates, methods for manufacturing of the final drug product candidates, and methods of using our product candidates for the treatment of the indications we are developing or plan to develop, or on in-licensing such rights.
- Our patent portfolio comprises patents and patent applications which cover our PHP-303 product candidate from which the licenses were exclusively purchased from Bayer and their respective assignments of those patents and patent applications which we acquired from Bayer have been registered with the relevant authorities in key territories.
- Our other patent portfolio includes a series of patents covering our intellectual property rights around our Toxin PH1 (US 2019/0233430 A1). Following acceptance of this SEC filing, Peak Bio will file composition of matter patents covering our Trop2 antibody, ADC, it's immunostimulatory properties, and ability to combine with checkpoint blockade.
- There is no assurance that our pending patent applications will result in issued patents, or if issued as patents, will include claims with sufficient scope of coverage to protect our product candidates, or that any pending patent applications will be issued as patents in a timely manner.

- Failure to obtain, maintain or extend adequate patent and other intellectual property rights could adversely affect our ability to develop and market our product candidates, resulting in harm to our business.
- Further, the patent prosecution process is expensive and time-consuming and we or our licensors may not be able to prepare, file and prosecute all necessary or desirable patent applications for a commercially reasonable cost or in a timely manner or in all jurisdictions.
- It is also possible that we or our licensors may fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection for them.
- Moreover, depending on the terms of any future in-licenses to which we may become a party, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology in-licensed from third parties. Therefore, these patents and patent applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

The issuance, scope, validity, enforceability, and commercial value of our and our current or future licensors' patent rights are highly uncertain.

- Our and our licensors' pending and future patent applications may not result in issued patents that protect our technology or product candidates, in whole or in part, or that effectively prevent others from commercializing competitive technologies and product candidates.
- The patent examination process may require us or our licensors to narrow the scope of the claims of our or our licensors' pending and future patent applications, which may limit the scope of patent protection that may be obtained, and we cannot assure that all of the potentially relevant prior art relating to our patents and patent applications has been found. If such prior art exists, it can invalidate a patent or prevent a patent application from being issued as a patent.
- Even if patent applications do successfully issue as patents and even if such patents cover our product candidates, third parties may initiate an opposition, interference, reexamination, post grant review, inter partes review, nullification or derivation action in courts or before patent offices, or similar proceedings challenging the validity, enforceability, or scope of such patents, which may result in the patent claims being narrowed or invalidated.
- Our and our licensors' patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent is issued from such patent applications, and then only to the extent the issued claims cover the technology. And because patent applications are confidential for a period of time after filing, and some remain so until issued, we cannot be certain that we or our licensors were the first to file any patent application related to our product candidates.
- Furthermore, in the United States, if third parties have filed such patent applications on or before March 15, 2013, the date on which the United States changed from a first to invent to a first to file patent system, an interference proceeding can be initiated by such third parties to determine who was the first to invent any of the subject matter covered by the patent claims of our applications.
- If third parties have filed such applications after March 15, 2013, a derivation proceeding can be initiated by such third parties to determine whether our invention was derived from such third parties' product candidates, and even where we have a valid and enforceable patent, we may not be able to exclude others from practicing our invention where the other party can show that they used the invention in commerce before our filing date or the other party benefits from a compulsory license.

With respect to certain patents, we enjoy only limited geographical protection, and as a consequence we may not be able to protect our intellectual property rights throughout the world.

- It would be prohibitively expensive to file and prosecute patent applications and maintain and defend patents covering our product candidates in all countries throughout the world and competitors may use our and our licensors' technologies in jurisdictions where we have not obtained patent protection to develop their competitor's own product candidates and, further, may export otherwise infringing product candidates to territories where we and our licensors have patent protection, but enforcement rights are not as strong as that in the United States or Europe.
- As a result, these product candidates may compete with our product candidates, and our and our licensors' patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.
- Further, may decide to abandon national and regional patent applications before grant. The examination of each national or regional patent application is an independent proceeding. As a result, patent applications in the same family may issue as patents in some jurisdictions, such as in the United States, but may issue as patents with claims of different scope or may even be refused in other jurisdictions, such as in China, which has different requirements for patentability and it is also quite common that depending on the country, the scope of patent protection may vary for the same product or technology.
- In addition, the laws of some jurisdictions do not protect intellectual property rights to the same extent as the laws or rules and regulations in the United States, The UK and Europe, and many companies have encountered significant difficulties in protecting and defending such rights in such jurisdictions.
- The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property protection, which could make it difficult for us to stop the infringement of our patents or marketing of competing product candidates in violation of our proprietary rights generally.
- Proceedings to enforce our patent rights in other jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing as patents, and could provoke third parties to assert claims against us. Should we seek legal redress, we may not prevail or if we do prevail, the damages or other remedies awarded may not be meaningful.
- As a result, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.
- While we intend to protect our intellectual property rights in our expected significant markets, we cannot ensure that we will be able to initiate or maintain similar efforts in all jurisdictions in which we may wish to market our product candidates.
- Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate, which may have an adverse effect on our ability to successfully commercialize our product candidates in all of our expected significant foreign markets.
- If we or our licensors encounter difficulties in protecting, or are otherwise precluded from effectively protecting, the intellectual property rights important for our business in such jurisdictions, the value of these rights may be diminished, and we may face additional competition from others in those jurisdictions.
- Another risk we face is that some countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties and some countries limit the enforceability of patents against government agencies or government contractors. As a result, in those countries, the patent owner may have limited remedies, which could materially diminish the value of such patents.

- If we or any of our licensors is forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position may be impaired.

Our intellectual property rights may not adequately protect our technologies and product candidates and may not necessarily address all potential threats to our competitive advantage.

- The degree of protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, or permit us to maintain our competitive advantage. For example:
  - others may be able to make compounds that are the same as or similar to our product candidates but that are not covered by the claims of the patents that we own or have exclusively licensed;
  - the patents of third parties may impair our ability to develop or commercialize our product candidates;
  - the patents of third parties may be extended beyond the expected patent term and thus may impair our ability to develop or commercialize our product candidates;
  - we or our licensors or any future strategic collaborators might not have been the first to conceive or reduce to practice the inventions covered by the issued patents or pending patent applications that we own or have exclusively licensed;
  - we or our licensors or any future strategic collaborators might not have been the first to file patent applications covering our inventions, our product candidates, or uses of the product candidates in the indications under our development or to be developed;
  - it is possible that the pending patent applications that we own or have exclusively licensed may not lead to issued patents;
  - issued patents that we own or have exclusively licensed may not provide us with any competitive advantage, or may be held invalid or unenforceable, as a result of legal challenges by our competitors;
  - issued patents that we own or have exclusively licensed may not provide coverage for all aspects of our product candidates in all countries, such as for uses of our product candidates in the indications under our development or to be developed;
  - others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
  - our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive product candidates for sale in our major commercial markets;
  - others performing manufacturing or testing for us using our product candidates or technologies could use the intellectual property of others without obtaining a proper license; or
  - our or our licensors' inventions or technologies may be found to be not patentable; and we may not develop additional technologies that are patentable.
- We may become subject to third parties' claims alleging infringement of third-party patents and proprietary rights, or we may be involved in lawsuits to protect or enforce our patents and other proprietary rights, which could be costly and time consuming, delay or prevent the development and commercialization of our product candidates, or put our patents and other proprietary rights at risk.

Our commercial success depends, in part, upon our ability to develop, manufacture, market, and sell our product candidates without alleged or actual infringement, misappropriation, or other violation of the patents and proprietary rights of third parties. Litigation relating to patents and other intellectual property rights in

the biopharmaceutical and pharmaceutical industries is common, including patent infringement lawsuits and interferences, oppositions, and reexamination proceedings before the U.S. Patent and Trademark Office (the "USPTO"), and foreign patent offices.

- The various markets in which we plan to operate are subject to frequent and extensive litigation regarding patents and other intellectual property rights. In addition, many companies in intellectual property-dependent industries, including in the biopharmaceutical and pharmaceutical industries, have employed intellectual property litigation as a means to gain an advantage over their competitors.
- Numerous U.S., European, and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing product candidates.
- Some claimants may have substantially greater resources than we have and may be able to sustain the costs of complex intellectual property litigation to a greater degree and for longer periods of time than we could.
- In addition, patent holding companies that focus solely on extracting royalties and settlements by enforcing patent rights may target us. As the biopharmaceutical and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may be subject to claims of infringement of the intellectual property rights of third parties.
- We may be subject to third-party claims including infringement, interference or derivation proceedings, post-grant review and inter partes review before the USPTO, or similar adversarial proceedings or litigation in the U.S. and other jurisdictions.
- Even if we believe such claims are without merit, a court of competent jurisdiction could hold that these third-party patents are valid, enforceable, and infringed, and the holders of any such patents may be able to block our ability to commercialize the applicable product unless we obtained a license under the applicable patents, or until such patents expire or are finally determined to be invalid or unenforceable.
- Similarly, if any third-party patents were held by a court of competent jurisdiction to cover aspects of our compositions, formulations, or methods of treatment, prevention, or use, the holders of any such patents may be able to block our ability to develop and commercialize the applicable product unless we obtained a license or until such patent expires or is finally determined to be invalid or unenforceable.
- In addition, defending such claims would cause us to incur substantial expenses and could cause us to pay substantial damages, if we are found to be infringing a third party's patent rights.
- These damages potentially include increased damages and attorneys' fees if we are found to have infringed such rights willfully.
- Any of our patents may be challenged, narrowed, circumvented, or invalidated by third parties.
- The issuance of a patent is not conclusive as to its inventorship, scope, validity, or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad.
- We may be subject to a third party pre-issuance submission of prior art to the USPTO or become involved in opposition, derivation, revocation, reexamination, post- grant and inter partes review, or interference proceedings challenging our patent rights or the patent rights of others.
- An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights.
- Moreover, we may have to participate in interference proceedings declared by the USPTO to determine priority of invention or in post-grant challenge proceedings, such as oppositions in a foreign patent office, that challenge priority of invention or other features of patentability.

- Such challenges may result in loss of patent rights, loss of exclusivity, or in patent claims being narrowed, invalidated, or held unenforceable, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and product candidates.
- Such proceedings also may result in substantial cost and require significant time from us, even if the eventual outcome is favorable to us.
- Further, if a patent infringement suit is brought against us or our third-party service providers, our development, manufacturing, or sales activities relating to the product or product that is the subject of the suit may be delayed or terminated.
- As a result of patent infringement claims, or in order to avoid potential infringement claims, we may choose to seek, or be required to seek, a license from the third party, which would be likely to include a requirement to pay license fees or royalties or both.
- These licenses may not be available on acceptable terms or at all. Even if a license can be obtained on acceptable terms, the rights may be nonexclusive, which would give our competitors access to the same intellectual property rights.
- If we are unable to enter into a license on acceptable terms, we could be prevented from commercializing one or more of our product candidates, or forced to modify such product candidates, or to cease some aspect of our business operations, which could harm our business significantly.
- We might, if possible, also be forced to redesign our product candidates so that we no longer infringe the third-party intellectual property rights, which may result in significant cost and delay to us, or which redesign could be technically infeasible.
- Any of these events, even if we were ultimately to prevail, could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business.
- If we were to initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that our patent is invalid or unenforceable. In patent litigation in the United States and in Europe, defendant counterclaims alleging invalidity or unenforceability are commonplace.
- Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, for example, lack of novelty, obviousness, or non-enablement. Third parties might allege unenforceability of our patents because someone connected with prosecution of the patent withheld relevant information, or made a misleading statement, during prosecution.
- The outcome of proceedings involving assertions of invalidity and unenforceability during patent litigation is unpredictable.
- With respect to the validity of patents, for example, we cannot be certain that there is no invalidating prior art of which we and the patent examiner were unaware during prosecution.
- There is a risk that in connection with such proceedings, a court will decide that a patent of ours is invalid or unenforceable, in whole or in part, and that we do not have the right to stop the other party from using the invention at issue.
- If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent's claims narrowly or decide that we do not have the right to stop the other party from using the invention at issue on the grounds that our patent claims do not cover the invention.
- Even if we establish infringement, the court may decide not to grant an injunction against further infringing activity and instead award only monetary damages, which may or may not be an adequate remedy.

- An adverse outcome in a litigation or proceeding involving one or more of our patents could limit our ability to assert those patents against those parties or other competitors, and, may curtail or preclude our ability to exclude third parties from making and selling similar or competing product candidates.
- In addition, if the breadth or strength of protection provided by our patents is threatened, it could dissuade companies from collaborating with us to license, develop, or commercialize our current or future product candidates.
- Furthermore, our patents and other intellectual property rights also will not protect our technology if competitors and other third parties design around our protected technology without infringing our patents or other intellectual property rights. For example, a third party may develop a competitive product that provides benefits similar to our product candidates but that uses a technology that falls outside the scope of our patent protection.
- Our competitors may also seek approval to market generic versions of any approved products and in connection with seeking such approval may claim that our patents are invalid, unenforceable, or not infringed. In these circumstances, we may need to defend or assert our patents, or both, including by filing lawsuits alleging patent infringement.
- In any of these types of proceedings, a court or other agency with jurisdiction may find our patents invalid or unenforceable, or that our competitors are competing in a non-infringing manner. Thus, even if we have valid and enforceable patents, these patents still may not provide protection against competing products or processes sufficient to achieve our business objectives.
- If the patent protection provided by the patents and patent applications we hold or pursue with respect to our product candidates is not sufficiently broad to impede such competition, our ability to successfully commercialize our product candidates could be negatively affected.
- Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.
- Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses and could distract our technical and management personnel from their normal responsibilities. Such litigation or proceedings could substantially increase our operating losses and reduce our resources available for development activities.
- We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings.
- Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their substantially greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have an adverse effect on our ability to compete in the marketplace.
- There could also be public announcements of the results of hearings, motions, or other interim proceedings or developments.
- If securities analysts or investors view these announcements in a negative light, the price of our stock could be adversely affected.
- We may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration of a third-party patent which might adversely affect our ability to develop, manufacture and market our product candidates.

We cannot guarantee that any of our, our licensors', or the previous owners' patent searches or analyses, including but not limited to the identification of relevant patents, the scope of patent claims, or the expiration

of relevant patent applications or patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and patent application in the United States, Europe and elsewhere that is relevant to or necessary for the commercialization of our product candidates in any jurisdiction.

- For example, in the United States, patent applications filed before November 29, 2000 and, upon request, certain patent applications filed after that date that will not be filed outside the United States, remain confidential until those patent applications issue as patents.
- Patent applications in the United States, EU, and elsewhere are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our product candidates could have been filed by others without our knowledge, including any such patent applications that may claim priority from patent applications for patents that we have determined will expire before we commercialize our product candidates.

Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our product candidates or the use of our product candidates.

- As we study our product candidates during development, we may learn new information regarding their structure, composition, properties, or functions that may render third-party patent applications or patents that we had not identified as being, or that we had not believed to be, relevant to our product candidates instead to be relevant to or necessary for the commercialization of our product candidates in a jurisdiction.
- The scope of a patent claim is determined by an interpretation of the law, the written disclosure in the patent, and the patent's prosecution history.
- Our interpretation of the relevance or the scope of a patent or a pending patent application may be incorrect.
- We may incorrectly determine that our product candidates are not covered by a third-party patent or may incorrectly predict whether a third party's pending patent application will issue with claims of relevant scope.
- Our determination of the expiration date or the possibility of an extension of patent term of any patent in the United States, Europe, or elsewhere that we consider relevant also may be incorrect.
- Any of the foregoing circumstances, failures, or errors may negatively impact our ability to develop and market our product candidates.
- If we fail to comply with our obligations under our existing and any future intellectual property licenses with third parties, we could lose license rights that are important to our business, and our business may be substantially harmed as a result.

If we or our licensors fail to maintain the patents and patent applications covering our product candidates or if we or our licensors otherwise allow our patents or patent applications to be abandoned or lapse, our competitors might be able to enter the market, which would hurt our competitive position and could impair our ability to successfully commercialize our product candidates in any indication for which they are approved.

- We are party to agreements with Bayer, under which we in-licensed, were assigned and acquired certain intellectual property certain patents and patent applications related to our business.
- We may enter into additional license agreements in the future.
- Future license agreements are likely to impose various diligence, milestone payment, royalty, insurance, and other obligations on us.

- Any uncured, material breach under these future license agreements could result in the loss of our rights to practice such in-licensed intellectual property and could compromise our development and commercialization efforts for any current or future product candidates.
- We may not be successful in maintaining necessary rights to our product candidates or obtaining patent or other intellectual property rights important to our business through acquisitions and in-licenses.
- We currently own and have in-licensed rights to intellectual property, including patents, patent applications and know-how, relating to our product candidates, and our success will likely depend on maintaining these rights.
- Because our programs may require the use of proprietary rights held by third parties, the growth of our business will likely depend in part on our ability to continue to acquire, in-license, maintain, or use these proprietary rights. Currently, we hold the research license for DNA constructs to produce antibodies at laboratory scale for in vitro and animal testing. We will need to obtain commercial licenses if we go into manufacturing, clinical trials, and finally commercialization. We may have to offer annual fees for rights-for-access for many years and royalties from our sales as part of obtaining commercial manufacturing license. We may have to seek other commercial licenses and offer significant part of our revenues.
- In addition, our product candidates may require specific formulations to work effectively and the rights to those formulations or methods of making those formulations may be held by others.
- We may be unable to acquire or in-license any compositions, methods of use, processes, or other third-party intellectual property rights that we identify as necessary for the development and commercialization of our product candidates.
- The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies also are pursuing strategies to license or acquire third-party intellectual property rights that we may consider attractive.
- These established companies may have a competitive advantage over us due to their size, cash resources, and greater clinical development and commercialization capabilities.
- In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We may also be unable to license or acquire third-party intellectual property rights on a timely basis, on terms that would allow us to make an appropriate return on our investment, or at all.
- Even if we are able to obtain a license to intellectual property of interest, we may not be able to secure exclusive rights, in which case others could use the same rights and compete with us.
- If we are unable to successfully obtain a license to third-party intellectual property rights necessary for the development of our product candidates or a development program on acceptable terms, we may have to abandon development of our product candidates or that development program.
- Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.
- Periodic maintenance and annuity fees on any issued patent are due to be paid to the USPTO and foreign patent agencies over the lifetime of a patent.
- In addition, the USPTO and other foreign patent agencies require compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process. While an inadvertent failure to make payment of such fees or to comply with such provisions can in many cases be cured by payment of a late fee or by other means in accordance with the

  applicable rules, there are situations in which such non-compliance will result in the abandonment or lapse of the patent or patent application, and the partial or complete loss of patent rights in the relevant jurisdiction.

- Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, and non-payment of fees and failure to properly legalize and submit formal documents within prescribed time limits.

We may be subject to claims challenging the inventorship of our patents and patent applications or ownership of our intellectual property.

- In particular, we may be subject to claims that former employees or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor.
- While it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own.
- For example, the assignment of intellectual property rights may not be self-executing or the assignment agreements may be breached, countries may have different assignment of intellectual property rights or we may have inventorship disputes arise from conflicting obligations of consultants or others who are involved in developing our product candidates.
- Litigation may be necessary to defend against these and other claims challenging inventorship.
- If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property.
- Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.
- Changes in patent laws or patent jurisprudence could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.
- As is the case with other biopharmaceutical and pharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents.
- Obtaining and enforcing patents in the biopharmaceutical and pharmaceutical industries involve both technological complexity and legal complexity.
- Therefore, obtaining and enforcing biopharmaceutical and pharmaceutical patents is costly, time-consuming and inherently uncertain.
- In addition, the America Invents Act (the "AIA"), which was passed in September, 2011, resulted in significant changes to the U.S. patent system.
- An important change introduced by the AIA is that, as of March 16, 2013, the United States transitioned to a "first-to-file" system for deciding which party should be granted a patent when two or more patent applications are filed by different parties claiming the same invention.
- A third party that files a patent application in the USPTO after that date but before us could therefore be awarded a patent covering an invention of ours even if we made the invention before it was made by the third party. This will require us to be cognizant going forward of the time from invention to filing of a patent application, but circumstances could prevent us from promptly filing patent applications on our inventions.
- Among some of the other changes introduced by the AIA are changes to the limitation where a patent may be challenged, thus providing opportunities for third parties to challenge any issued patent in the

  USPTO. This applies to all of our U.S. patents, even those issued before March 16, 2013. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in U.S. federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a

USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action.

- Accordingly, a third party may attempt to use the USPTO proceedings to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. It is not clear what, if any, impact the AIA will have on the operation of our business. However, the AIA and its implementation could increase the uncertainties and costs surrounding the prosecution of our or our licensors' patent applications and the enforcement or defense of our or our licensors' issued patents.
- Additionally, the U.S. Supreme Court has ruled on several patent cases in recent years either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations.
- In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.
- Similarly, the complexity and uncertainty of European patent laws have also increased in recent years. In addition, the European patent system is relatively stringent in the type of amendments that are allowed during prosecution. Complying with these laws and regulations could limit our ability to obtain new patents in the future that may be important for our business.

Depending upon the timing, duration, and conditions of FDA marketing approval of our product candidates, one or more of our U.S. patents may be eligible for patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the "Hatch-Waxman Amendments."

- If we do not obtain protection under the Hatch-Waxman Amendments and similar non-U.S. legislation for extending the term of patents covering our product candidates, our ability to compete effectively could be impaired.
- The Hatch-Waxman Amendments permit a patent term extension of up to five years for a patent covering an approved product or method of use as compensation for patent term lost during product development and the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval. Similar patent term extensions may be available in other jurisdictions.
- For example, a supplementary protection certificate in Europe may be applied for approval to recover some of the time lost between the patent application filing date and the date of first marketing authorization.
- However, we may not receive an extension if we fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents, or otherwise fail to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. If we are unable to obtain patent term extension or the term of any such extension is less than we request, the period during which we can enforce our patent rights for that product will be shortened and our competitors may obtain approval to market competing product candidates sooner.
- As a result, our revenue from applicable product candidates could be reduced, possibly materially.

If our trademarks and trade names are not adequately protected, we may not be able to build name recognition in our markets of interest and our competitive position may be adversely affected.

- We currently own registered trademarks. We may not be able to obtain trademark protection in territories that we consider of significant importance to us.

- In addition, any of our trademarks or trade names, whether registered or unregistered, may be challenged, opposed, infringed, cancelled, circumvented, or declared generic, or determined to be infringing on other marks, as applicable.
- We may not be able to maintain and protect our rights to these trademarks and trade names, which we will need to build name recognition by potential collaborators or customers in our markets of interest.
- Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively, and our business may be adversely affected.
- If we are unable to protect the confidentiality of our trade secrets and know-how, our business and competitive position would be harmed.
- We consider proprietary trade secrets and confidential know-how and unpatented know-how to be important to our business.
- In addition to seeking patents for some of our technology and product candidates, we also may rely on trade secrets or confidential know-how to protect our technology, especially where patent protection is believed to be of limited value. However, trade secrets and confidential know-how are difficult to maintain as confidential.
- To protect this type of information against disclosure or appropriation by competitors, our policy is to require our employees, consultants, contractors, and advisors to enter into confidentiality agreements with us.
- We also seek to preserve the integrity and confidentiality of our data, trade secrets, and know-how by maintaining physical security of our premises and physical and electronic security of our information technology systems.
- Monitoring unauthorized uses and disclosures is difficult, and we cannot know whether the steps we have taken to protect our proprietary technologies will be effective.
- In addition, current or former employees, consultants, contractors, and advisers may unintentionally or willfully disclose our confidential information to competitors, and confidentiality agreements may not provide an adequate remedy in the event of unauthorized disclosure of confidential information.
- We therefore cannot guarantee that our trade secrets and other proprietary and confidential information will not be disclosed or that competitors will not otherwise gain access to our trade secrets. Enforcing a claim that a third party obtained illegally and is using trade secrets or confidential know-how is expensive, time consuming, and unpredictable. The enforceability of confidentiality agreements may vary from jurisdiction to jurisdiction.
- Furthermore, if a competitor lawfully obtained or independently developed any of our trade secrets, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position.
- Additionally, if the steps taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating the trade secret.
- Failure to protect or maintain trade secrets and confidential know-how could adversely affect our business and our competitive position.
- Moreover, our competitors may independently develop substantially equivalent proprietary information and may even apply for patent protection in respect of the same.
- If successful in obtaining such patent protection, our competitors could limit our use of our own trade secrets or confidential know-how.

We may be subject to claims by third parties asserting that we or our employees have misappropriated third-party intellectual property, or claiming ownership of what we regard as our own intellectual property. These

claims may be costly to defend and if we do not successfully do so, we may be required to pay monetary damages and lose valuable intellectual property rights or personnel.

- Some of our employees, including our senior management, were previously employed at other biopharmaceutical or pharmaceutical companies, including our competitors or potential competitors. Some of these employees executed proprietary rights, non-disclosure and non-competition agreements in connection with such previous employment.
- Although we try to ensure that our employees do not use the know-how, trade secrets, or other proprietary information of others in their work for us, we may be subject to claims that we or these employees have used or disclosed confidential information or intellectual property, including know-how, trade secrets, or other proprietary information, of any such employee's former employer.
- Litigation may be necessary to defend against these claims.
- If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel.
- A loss of key research personnel or their work product could hamper or undermine our ability to develop and commercialize our product candidates, which would severely harm our business.
- In addition, if such intellectual property rights were to be awarded to a third party, we could be required to obtain a license from such third party to commercialize our technology or product candidates. Such a license may not be available on commercially reasonable terms or at all, which could hamper or undermine our ability to develop and commercialize our product candidates, which would severely harm our business.
- Even if we successfully prosecute or defend against such claims, litigation could result in substantial costs and distract management from the development and commercialization of our product candidates.
- Our proprietary information may be lost or we may suffer security breaches.
- In the ordinary course of our business, we collect and store sensitive data, including intellectual property, clinical trial data, proprietary business information, personal data and personally identifiable information of our clinical trial subjects and employees, in our data centers and on our networks. The secure processing, maintenance and transmission of this information is critical to our operations.
- Despite our security measures, our information technology and infrastructure and those of our CROs or other contractors or consultants may be vulnerable to attacks by hackers or breached due to employee error, malfeasance, or other disruptions.
- The loss of clinical trial data from completed, ongoing, or planned trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Although, to our knowledge, we have not experienced any such material security breach to date, any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost, or stolen.
- Any such access, disclosure, or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, and significant regulatory penalties; disrupt our operations; damage our reputation; and cause a loss of confidence in us and our ability to conduct clinical trials, which could adversely affect our reputation and delay our clinical development of our product candidates.
- In addition, in response to the ongoing COVID-19 pandemic, varying parts of our workforce including consultants are currently working remotely or have in the past on a part- or full-time basis.
- This could increase our cyber security risk, create data accessibility concerns, and make us more susceptible to communication disruptions.

- Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations or prospects.

Risks Relating to Competitive Employment for Key Personnel and other Matters related to Managing Company Growth

- Because of the specialized nature of our business, the termination of relationships with our key management and scientific personnel may prevent us from developing our technologies, conducting clinical trials, and obtaining financing.
- Further, the inability to recruit and retain additional personnel may have an adverse effect on our ability to successfully operate our business.
- Additionally, we have several scientific personnel with significant and unique expertise in mAbs and mAb-related technologies, on whom we depend for timely progress of these projects. The loss of these scientific personnel may cause a delay in program progress.
- Since our formation, Dr. Huh and other key team members have played a significant role in our research efforts. Dr. Huh is a director serving our board of directors and we are highly dependent on Dr. Huh and he has played a critical role in our research and development programs, raising financing, and conducting clinical trials.[2]
- The competition for qualified personnel in the biotechnology field is intense, and we rely heavily on our ability to attract and retain qualified scientific, technical, and managerial personnel.
- Our future success depends upon our ability to attract, retain, and motivate highly skilled employees and the loss of key managers and senior physicians or scientists could delay our acquisition and development activities.
- Our success depends upon the continued contributions of our key management, including all of our senior management team, and scientific and technical personnel, many of whom have been instrumental for us and have substantial experience with rare and non-rare diseases and the biopharmaceutical and pharmaceutical industries.
- If our recruitment and retention efforts in key scientific and management personnel are unsuccessful in the future, it may be difficult for us to achieve our development objectives, raise additional capital, and implement our business strategy.
- To manage our planned future growth, we must continue to implement and improve our managerial, operational, and financial systems, expand our facilities, or acquire new facilities, and continue to retain, recruit and train additional qualified personnel.
- The expansion of our operations may lead to significant costs and may divert our management and business development resources.
- Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

We face intense competition and rapid technological change.

- The biotechnology and pharmaceutical industries are highly competitive and subject to significant and rapid technological change. We are aware of several pharmaceutical and biotechnology companies that are actively engaged in R&D in areas related to ADC therapy.

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2 Dr. LaMond will serve as Interim Chief Executive Officer of Peak Bio while Dr. Huh is taking a leave of absence during the pendency of a personal legal proceeding.

- Some of these companies have commenced clinical trials of antibody products or have successfully commercialized antibody products.
- Many of these companies are developing products for the same disease indications as us. Some of these competitors have received regulatory approval or are developing or testing product candidates that do or may in the future compete directly with our product candidates.
- Other potential competitors include large, fully integrated pharmaceutical companies and more established biotechnology companies, which have significant resources and expertise in R&D, manufacturing, testing, obtaining regulatory approvals and marketing.
- Also, academic institutions, government agencies and other public and private research organizations conduct research, seek patent protection, and establish collaborative arrangements for research, development, manufacturing, and marketing. It is possible that these competitors will succeed in developing technologies that are more effective or sooner than those being developed by us or that would render our technology obsolete or noncompetitive.

Our competitors may have superior products, manufacturing capability or marketing expertise.

- Our business may fail because we face intense competition from major pharmaceutical companies and specialized biotechnology companies engaged in the development of other products directed in rare orphan disorders and cancer.
- Many of our competitors have greater financial and human resources and more experience. Our competitors may, among other things:
  - develop safer or more effective products;
  - implement more effective approaches to sales and marketing;
  - develop less costly products;
  - obtain quicker regulatory approval;
  - have access to more manufacturing capacity;
  - form more advantageous strategic alliances; or
  - establish superior proprietary positions.
- In addition, if we receive regulatory approvals, we may compete with well-established, FDA-approved therapies that have generated substantial sales over a number of years.
- We anticipate that we will face increased competition in the future as new companies enter our market and scientific developments surrounding other cancer therapies continue to accelerate.

We have no experience in commercializing products on our own.

- We do not have a sales and marketing force and cannot be certain that we would be able to develop this capacity. If we are unable to establish sales and marketing capabilities, we will need to enter into sales and marketing agreements to market our products in the United States.
- For sales outside the United States, we will likely enter third-party arrangements. In these foreign markets, if we are unable to establish successful distribution relationships with pharmaceutical companies, we may fail to realize the full sales potential of our product candidates.
- If we are unable to establish sales and marketing capabilities or enter into agreements with pharmaceutical companies to sell and market our therapeutics, we may experience difficulty generating revenues.

Risks Relating to Commercialization

- We operate in a highly competitive and rapidly changing industry, which may result in others acquiring, developing, or commercializing competing product candidates before or more successfully than we do.
- The biopharmaceutical and pharmaceutical industries are highly competitive and subject to significant and rapid technological change.
- Our success is highly dependent on our ability to acquire, develop, and obtain marketing approval for new product candidates on a cost-effective basis and to market them successfully.
- If PHP-303 or any of our preclinical assets in oncology become approved for any of the indications we are currently or in the future seek, we will face intense competition from a variety of businesses, including large, fully integrated pharmaceutical companies, non-rare pharmaceutical companies, and biopharmaceutical companies in the United States, Europe, and other jurisdictions.
- These organizations may have significantly greater resources than we have and conduct similar research; seek patent protection; and establish collaborative arrangements for research, development, manufacturing, and marketing of product candidates that may compete with our product candidates.

Market acceptance of our products is uncertain.

- Our product candidates may not gain market acceptance among physicians, patients, healthcare payors and the medical community. Our failure to successfully achieve significant market acceptance will affect our ability to generate revenues and impact our business and financial condition.
- In addition, we may not achieve market acceptance even if clinical trials demonstrate safety and efficacy, and the necessary regulatory and reimbursement approvals are obtained.
- The degree of market acceptance of approved product candidates will depend on a number of factors, including:
  - establishment and demonstration of clinical efficacy and safety;
  - cost-effectiveness of a product;
  - its perceived and proven advantage over alternative treatment methods;
  - competitor and/or insurance lobby for alternative treatments;
  - reimbursement policies of government, insurance companies, and third-party payors; and
  - marketing and distribution support for the product.
- Physicians will not recommend or utilize therapies using our products unless approved by the FDA, the EMA, and comparable foreign authorities.
- Even if the clinical safety and efficacy of our therapies is established, physicians may elect not to recommend the therapies for any number of other reasons, including whether the method of administration of our products is effective for certain indications or whether clinical data or other factors demonstrate better safety and efficacy of such procedures as compared to standard of care or whether mitigating circumstances and/or predispositions prevent the administration of our therapy or favor alternate therapies as opposed to ours.
- In addition, our product candidates, if successfully developed, may compete with a number of drugs and therapies manufactured and marketed by major pharmaceutical and other biotechnology companies that may have streamlined cost and outreach to patients.
- For these and other reasons, physicians, patients, third-party payors, and the medical community may not favor or utilize any product candidates that we develop even when FDA-approved for use.

Our existing and future product candidates may not gain market acceptance, in which case our ability to generate product revenues will be compromised.

- Even if the FDA, the EMA, or any other regulatory authority approves the marketing of our product candidates, whether developed on our own or with a collaborator, physicians, healthcare providers, patients, or the medical community may not accept or use our product candidates.
- If our product candidates do not achieve an adequate level of acceptance, we may not generate significant product revenue or any profits from operations.
- The degree of market acceptance of our product candidates will depend on a variety of factors, including:
  - the timing of market introduction;
  - the number and clinical profile of competing product candidates;
  - the clinical indications for which our product candidates are approved;
  - our ability to provide acceptable evidence of safety and efficacy;
  - the prevalence and severity of any side effects;
  - relative convenience and ease of administration;
  - cost-effectiveness;
  - marketing and distribution support;
  - availability of adequate coverage, reimbursement, and adequate payment from health maintenance organizations and other insurers, both public and private; and
  - other potential advantages over alternative treatment methods.
- If our product candidates fail to gain market acceptance, our ability to generate revenues will be adversely affected. Even if our product candidates achieve market acceptance, the market may prove not to be large enough to allow us to generate significant revenues.
- Any product candidates for which we intend to seek approval as biologic product candidates in the United States may face competition sooner than anticipated.
- In the United States, the Biologics Price Competition and Innovation Act of 2009 (the "BPCIA") created an abbreviated approval pathway for biological product candidates that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA.
- In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing the sponsor's own pre-clinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity, and potency of its product. The law is complex and is still being interpreted and implemented by the FDA and its ultimate impact, implementation, and meaning are subject to uncertainty.
- While it is uncertain when processes intended to implement the BPCIA may be fully adopted by the FDA, any such processes could adversely affect the future commercial prospects for any biological product candidates. We believe that if any product is approved as a biological product under a BLA, it should qualify for the 12-year period of exclusivity.
- However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our product candidates to be reference product candidates

for competing product candidates, potentially creating the opportunity for generic competition sooner than anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation.

- Moreover, the extent to which a biosimilar, once approved, will be substituted for a reference product in a way that is similar to traditional generic substitution for non-biological product candidates is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.
- In the EU, Marketing Authorization Applications ("MAAs") for product candidates that are biosimilar to an already authorized biological product, the so-called reference product, can rely on the safety and efficacy data contained in the dossier of the reference product. To qualify as a biosimilar product the marketing authorization applicant must demonstrate, through comprehensive comparability studies with the reference product, that its product is: (i) highly similar to the reference product notwithstanding the natural variability inherent to all biological medicines, and (ii) that there are no clinically meaningful differences between the biosimilar and the reference product in terms of safety, quality, and efficacy. Biosimilars can only be authorized for use after the period of exclusivity of the reference biological medicine has expired. In general, this means that the biological reference product must have been authorized for at least 10 years before a biosimilar can be made available by another company.

We expect to face competition.

- We consider PHP-303's current closest potential competitors for the treatment of AATD to be existing approved AATD augmentation therapies, (also called replacement therapies), as well as other therapies under development and listed below are:
- Augmentation therapies are alpha1-proteinase inhibitors that are administered intravenously in AAT augmentation therapy. Currently, there are four inhibitors on the market in the United States and the EU: Prolastin-C from Grifols, S.A. ("Grifols"), Aralast from Shire plc, now a subsidiary of Takeda Pharmaceutical Company Ltd ("Shire"), Zemaira from CSL Limited ("CSL"), and Glassia from Kamada Ltd. ("Kamada"). In this category products from InhibRx Inc, Apic Bio Inc., Vertex Pharmaceuticals Inc., Takeda, Centessa, Santhera Pharmaceuticals, Chiesi Farmaceutici, and Mereo/AstraZeneca may be considered competitors.
- We also anticipate that new companies will enter these markets in the future. If we successfully develop and commercialize our lead PHP-303, it will compete with existing therapies and new therapies that may become available in the future.
- With regard to our nominated Trop2 PH1 ADC program, we are aware of other Trop2 ADC agents, and other oncology and immune-oncology therapeutics currently approved as standard of care in their

  respective indications and other future agents that may gain approval before us. Some of these risks are highlighted below:
- As detailed in the business summary section, we are aware of the following companies having worked on Trop2-directed ADCs- Trodelvy from Immunomedics/ Gilead (also known as Sacituzumab govetican or IMMU-132), Datopotamab deruxtecan from Daiichi Sankyo/ AstraZeneca (also known as Dato-DXd, DS-1062 or DS-1062a), SKB264 from Klus Pharma, DAC-002 from DAC Biotech, LCB84 from Legochem, BAT-8003 from BioThera Solutions, and PF-06664178 from Pfizer. Of these, Trodelvy has been FDA-approved in Triple Negative Breast Cancer (TNBC) and Urothelial cancer indications and is currently under clinical trials for others. DS-1062 is being evaluated in Non-Small Cell Lung Cancer (NSCLC).
- In addition to the known Trop2 ADC programs under clinical trial, there may be other similar programs, unknown to us, under preclinical development buoyed by the approval of first-in-class

anti-Trop2 agents such as Trodelvy. For example, after approval of Kadcyla in Her2- positive breast and gastric cancers, Beacon Targeted therapies stats tracked 20+ Her2-ADC therapies in various stages of development.

- As a preclinical program, our ADC platform is untested in human clinical trial. We are yet to demonstrate tolerability and safety in phase 1 clinical trial. Even after we demonstrate safety and tolerability, if we are able to demonstrate such, in phase 2 studies we may also have to compete with and outperform proven standard of care immune-oncology therapeutics or demonstrate improved combination with approved or future immune checkpoint inhibitors (ICIs) directed against PD-1, anti-PD-L1, LAG3, CTLA-4 and others. Initially approved in second line setting, this class of immune-oncology therapeutics have been slowly moving to first line in many different cancers and raise the bar for many new therapeutics.
- Similarly, for each indication, we are aware of established or potential standard of care of therapies which may be ADCs against other targets or even other modalities such as antibodies, bispecifics, small molecules- targeted or chemotherapies. For e.g., the Trop2 ADC Trodelvy has been approved for therapy of recurrent urothelial (bladder) cancer where another ADC targeting Nectin-4 (Enfortumab vedotin or Padcev) is also approved.
- The highly competitive nature of and rapid technological changes in the biopharmaceutical and pharmaceutical industries could render our product candidates obsolete, less competitive, or uneconomical.
- Our potential future competitors may, among other things, have significantly greater name recognition, financial, manufacturing, marketing, drug development, technical, and human resources than we do, and future mergers and acquisitions in the biopharmaceutical and pharmaceutical industries may result in even more resources being concentrated in our competitors, which could enable them to:
    - develop and commercialize product candidates that are safer, more effective, less expensive, more convenient, or easier to administer, or have fewer or less severe effects, or in certain cases could be curative for the condition;
    - obtain quicker regulatory approval;
    - establish superior proprietary positions covering our product candidates and technologies;
    - implement more effective approaches to sales and marketing; or
    - form more advantageous strategic alliance
- Smaller and other early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.
- These third parties compete with us in recruiting and retaining qualified scientific and management personnel; establishing clinical trial sites and patient registration; and in acquiring technologies complementary to, or necessary for, our programs.
- Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize product candidates that are more effective, have fewer or less severe side effects, are more convenient or are less expensive than our product candidates.
- Our potential future competitors may also obtain FDA, EMA, or other regulatory approval for their product candidates more rapidly than we may obtain approval for our own product candidates, which could result in our competitors establishing a strong market position before we are able to enter the market.
- In addition, existing products approved for other indications could be used off-label and may compete with our products for which we would have limited control over.

- Under the Orphan Drug Act of 1983 (the "Orphan Drug Act"), the FDA may designate a product as an orphan drug if it is intended to treat a rare disease or condition, defined as one occurring in a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States.
- In the EU, the EMA's Committee for Orphan Medicinal Products ("COMP") recommends to the European Commission the granting of orphan designation to promote the development of medicinal products that are intended for the diagnosis, prevention, or treatment of a life-threatening or chronically debilitating condition affecting not more than five in 10,000 persons in the EU.
- Additionally, designation is granted for medicinal products intended for the diagnosis, prevention, or treatment of a life-threatening, seriously debilitating, or serious and chronic condition when, without incentives, it is unlikely that sales of the drug in the EU would be sufficient to justify the necessary investment in developing the drug or biological product or where there is no satisfactory method of diagnosis, prevention, or treatment, or, if such a method exists, where the medicine can demonstrate that it is of significant benefit to those affected by the condition.
- We have yet to obtain orphan drug designation for PHP-303 but will apply for this designation in the coming quarters for AATD but we cannot predict if orphan drug status will be granted in the US or EU at this juncture.
- Similarly, we may be unable to maintain the benefits associated with orphan drug designation, including the potential for orphan drug exclusivity, for PHP-303 or any other products for which we obtain orphan drug designation.
- The benefits or process to apply for Orphan Drug designation in the US or EU could change before we have the ability to apply, be accepted and commercialize our opportunities.
- In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax credits for qualified clinical testing, and user-fee waivers.
- In addition, if a product receives the first FDA approval of that drug for the indication for which it has orphan designation, the product is entitled to orphan drug exclusivity, which means the FDA may not approve any other application to market the same drug for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority over the product with orphan exclusivity or where the manufacturer is unable to assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the rare disease or condition.
- Under the FDA's regulations, the FDA will deny orphan drug exclusivity to a designated drug upon approval if the FDA has already approved another drug with the same active ingredient for the same indication, unless the drug is demonstrated to be clinically superior to the previously approved drug.
- In the EU, orphan designation entitles a party to financial incentives such as reduction of fees or fee waivers and ten years of market exclusivity following approval.
- This period can be extended by two years if studies in children are performed in accordance with a PIP. In addition, this period may be reduced to six years if the orphan drug designation criteria are no longer met, including where it is shown that the drug is sufficiently profitable not to justify maintenance of market exclusivity or where the manufacturer is unable to supply the treatment.
- In the EU, a marketing authorization for an orphan designated product will not be granted if a similar drug has been approved in the EU for the same therapeutic indication, unless the applicant can establish that its product is safer, more effective, or otherwise clinically superior.
- A similar drug is a product containing a similar active substance or substances as those contained in an already authorized product. Similar active substance is defined as an identical active substance, or an

active substance with the same principal molecular structural features (but not necessarily all of the same molecular features) and which acts via the same mechanism.

We plan to seek orphan drug designation for PHP-303 and future rare disease product candidates.

- Even with orphan drug designation, we may not be the first to obtain marketing approval for any particular orphan indication due to the uncertainties associated with developing pharmaceutical product candidates, which could prevent us from marketing our product candidates if another company is able to obtain orphan drug exclusivity before we do.
- In addition, exclusive marketing rights in the United States may be unavailable if we seek approval for an indication broader than the orphan-designated indication or the opportunity may be lost in the United States
- if the FDA later determines that the request for designation was materially defective or if we are unable to assure sufficient quantities of the drug to meet the needs of patients with the rare disease or condition following approval.
- Further, even if we obtain orphan drug exclusivity, that exclusivity may not effectively protect our product candidates from competition because different drugs with different active moieties can be approved for the same condition.
- In addition, the FDA and the EMA can subsequently approve product candidates with the same active moiety for the same condition if the FDA or the EMA concludes that the later drug is safer, more effective, or makes a major contribution to patient care. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process.
- In addition, while we intend to seek orphan drug designation for other existing and future product candidates, including PHP-303, we may never receive such designations.
    - There have been legal challenges to aspects of the FDA's regulations and policies concerning the exclusivity provisions of the Orphan Drug Act, and future challenges could lead to changes that affect the protections afforded to our product candidates in ways that are difficult to predict. In 2014, a U.S. district court invalidated the FDA's denial of orphan exclusivity to an orphan designated drug, which the FDA had based on its determination that the drug was not proven to be clinically superior to a previously approved "same drug."
    - In response to the decision, the FDA released a policy statement stating that the court's decision is limited to the facts of that particular case and that the FDA will continue to deny orphan drug exclusivity to a designated drug upon approval if the drug is the "same" as a previously approved drug, unless the drug is demonstrated to be clinically superior to that previously approved drug.
    - Since then, similar legal challenges have been initiated against the FDA for its denial of orphan drug exclusivity to other designated drugs, and in 2017, Congress amended the Orphan Drug Act to require a demonstration of clinical superiority upon approval as a condition of receiving orphan drug exclusivity when another "same drug" has already been approved for the same indication.
- In the future, there is the potential for additional legal challenges to the FDA's orphan drug regulations and policies, and it is uncertain how ongoing and future challenges might affect our business.
- If any of our future BLA in the United States for our preclinical stage assets are approved in an Orphan Disease, Peak Bio may be eligible to receive a priority review voucher from the FDA, which can be redeemed to obtain priority review for any subsequent marketing application and may be sold or transferred to other companies for their programs, as has been done by other voucher recipients.

We or any future collaboration partners may seek and fail to obtain breakthrough therapy designation by the FDA for PHP-303 or any future product candidates or access to the PRIME scheme by the EMA for PHP-303 or any future product candidates.

- Even if we obtain such designation or access, the designation or access may not lead to faster development or regulatory review or approval, and it does not increase the likelihood that our product candidates will receive marketing approval.
- In 2012, the FDA established a breakthrough therapy designation which is intended to expedite the development and review of product candidates that treat serious or life-threatening diseases where preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically-significant endpoints, such as substantial treatment effects observed early in clinical development.
- The designation of a product as a breakthrough therapy provides potential benefits that include but are not limited to more frequent meetings with the FDA to discuss the development plan for the product and ensure collection of appropriate data needed to support approval; more frequent written correspondence from the FDA about such things as the design of the proposed clinical trials and use of biomarkers; intensive guidance on an efficient drug development program, beginning as early as Phase 1; and organizational commitment involving senior managers; and eligibility for rolling review and priority review.
- Drugs and biologics designated as breakthrough therapies by the FDA are also eligible for accelerated approval.
- Similarly, the EMA has established the PRIME scheme to expedite the development and review of product candidates that show a potential to address to a significant extent an unmet medical need, based on early clinical data.
- Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if we believe one of our product candidates meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation.
- We cannot be sure that our evaluation of our product candidates as qualifying for breakthrough therapy designation will meet the FDA's expectations.
- In any event, the receipt of a breakthrough therapy designation for a product may not result in a faster development process, review, or approval compared to product candidates considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA.
- In addition, even if one or more of our product candidates qualify as breakthrough therapies, the FDA may later decide that such product candidates no longer meet the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.
- Similarly, access to the PRIME scheme is at the discretion of the EMA, and we cannot be sure that PHP-303 or any future product candidates will be granted access to the scheme; that participation in the scheme will result in expedited regulatory review or approval of our product candidates; or that access to the scheme, once granted, will not be revoked.

We likely will commercialize or co-commercialize our product candidates for rare diseases and potentially rare tumor types and to seek strategic relationships with third parties for the development and/or commercialization of our other product candidates.

- If we are unable to develop our own sales, marketing, and distribution capabilities or enter into business arrangements, we may not be successful in commercializing our product candidates.
- We have no marketing, sales, or distribution capabilities and we currently have no experience with marketing, selling or distributing pharmaceutical product candidates.

- We also currently have no strategic relationships in place for the commercialization of our product candidates.
- We may seek to partner PHP-303 or programs/products in our oncology platform portfolio following further preclinical, clinical development or regulatory approval.
- We currently will seek to enter into strategic relationships with pharmaceutical, biopharmaceutical or other partners for the continued development of our programs if this is in the best business interests of the company as determined at the discretion of the leadership and board of Peak Bio.
- These arrangements would also likely include the commercialization of a product.
- Alternatively, we may seek to sell or out-license one or more of our non-core disease product candidates in the future.
- As a result of the entering into any such planned partnerships or arrangements, our revenue from product sales may be lower than if we directly marketed or sold these product candidates on our own.
- In addition, any revenue we receive will depend upon the terms of such partnership or arrangement, which may not be as favorable to us as possible, and the efforts of the other party, which may not be adequate or successful and are likely to be beyond our control.
- We may not be successful in identifying a suitable partner or partners, and we may not be able to reach agreement with them at all.
- If we are unable to enter into these partnerships or arrangements on acceptable terms or at all, we may not be able to successfully commercialize these product candidates.
- These commercialization approaches are expensive and time consuming, and some or all of the costs associated with such efforts may be incurred in advance of any approval of our product candidates.
- If we are not successful in commercializing our product candidates, either on our own or through strategic relationships with third parties, our future product revenue will suffer and we may incur significant losses.
- The successful commercialization of our product candidates will depend in part on the extent to which governmental authorities and health insurers establish adequate coverage, reimbursement levels, and pricing policies. Failure to obtain or maintain coverage and adequate reimbursement for our product candidates, if approved, could limit our ability to market those product candidates and decrease our ability to generate revenue.
- The availability and adequacy of coverage and reimbursement by governmental healthcare programs such as Medicare and Medicaid, private health insurers, and other third-party payors are essential for most patients to be able to afford prescription medications such as our product candidates, assuming approval.
- Our ability to achieve acceptable levels of coverage and reimbursement for product candidates by governmental authorities, private health insurers, and other organizations will have an effect on our ability to successfully commercialize our product candidates.
- Assuming we obtain coverage for our product candidates by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high.
- Third-party payors may also elect to restrict coverage to a subset of patients that could potentially be treated with our products, if approved.
- We cannot be sure that coverage and reimbursement in the United States, the EU, or elsewhere will be available for our product candidates or any product that we may develop, and any reimbursement that may become available may be decreased or eliminated in the future.

- Third-party payors increasingly are challenging prices charged for pharmaceutical product candidates and services, and many third-party payors may refuse to provide coverage and reimbursement for particular drugs or biologics when an equivalent generic drug, biosimilar, or a less expensive therapy is available.
- It is possible that a third-party payor may consider our product candidates as substitutable and only offer to reimburse patients for the less-expensive product.
- Even if we show improved efficacy or improved convenience of administration with our product candidates, pricing of existing drugs may limit the amount we will be able to charge for our product candidates.
- These payors may deny or revoke the reimbursement status of a given product or establish prices for new or existing marketed product candidates at levels that are too low to enable us to realize an appropriate return on our investment in our product candidates.
- We may have to provide our life-saving therapies at highly discounted pricing to low-income countries. While Healthcare reform and restrictions on reimbursements globally may limit our financial returns on our products
- In many countries, the prices of medical product candidates are subject to varying price control, reimbursement schemes, technology assessments, regulatory, market, price trade-offs mechanisms as part of national health systems in many key countries and markets.
- Health technology assessments, including cost-effectiveness evaluations, Health economic evaluations all may require or conducted prior to country specific market entry in order to assess the medical value or added clinical benefit of a therapy and to gain pricing and reimbursement coverage.
- Additionally, there are many other statutory and country specific mechanisms for gaining price, reimbursement and we expect continued pressure on pricing and reimbursement mechanisms that likely could impact our future products whether we are commercializing ourselves or with partners. Many of these processes delay market entry and hence delay sales and ability to capture revenues.
- Furthermore, rules and regulations regarding reimbursement change frequently, in some cases at short notice, and we believe that changes in these rules and regulations are likely. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize our product candidates and may not be able to obtain a satisfactory financial return on our product candidates.

Risks Relating to Healthcare Laws and Other Legal Compliance Matters

- Enacted and future healthcare legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates and may affect the prices we may set.
- In the US, EU, the UK and other jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes and proposed changes to the healthcare system that could affect our future results of operations.
- In particular, there have been and continue to be a number of initiatives at the U.S. federal and state levels that seek to reduce healthcare costs and improve the quality of healthcare. For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (as so amended, the "ACA") was enacted, which substantially changed the way healthcare is financed by both governmental and private insurers.

- Among the provisions of the ACA, those of greatest importance to the pharmaceutical and biotechnology industries include the following:
  - an annual, non-deductible fee payable by any entity that manufactures or imports certain branded prescription drugs and biologic agents (other than those designated as orphan drugs), which is apportioned among these entities according to their market share in certain government healthcare programs;
  - a Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;
  - requirements to report certain financial arrangements with physicians and teaching hospitals, including reporting "transfers of value" made or distributed to prescribers and other healthcare providers and reporting investment interests held by physicians and their immediate family members;
  - an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13.0% of the average manufacturer price ("AMP") of branded and generic drugs, respectively, and capped the total rebate amount for innovator drugs at 100% of the AMP; a methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs and biologics, including our product candidates, that are inhaled, infused, instilled, implanted, or injected;
  - extension of a manufacturer's Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
  - expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability;
  - a Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
  - creation of the Independent Payment Advisory Board, which, once empaneled, would have the authority to recommend certain changes;
  - Medicare program that could result in reduced payments for prescription drugs and those recommendations could have the effect of law unless overruled by a supermajority vote of Congress. The Bipartisan Budget Act of 2018 repealed the creation of the Independent Payment Advisory Board before it could take effect;
  - establishment of a Center for Medicare Innovation at the Centers for Medicare & Medicaid Services ("CMS"), to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending;
  - expansion of the entities eligible for discounts under the Public Health Service program; and
  - a licensure framework for follow on biologic product candidates.
- Since its enactment, there have been judicial and congressional challenges to certain aspects of the ACA, as well as efforts by the last presidential administration to repeal or replace certain aspects of the

  ACA. A bipartisan bill to appropriate funds for cost-sharing reduction ("C-SR") payments has been introduced in the Senate, but the future of that bill is uncertain.
- In addition, CMS has proposed regulations that would give states greater flexibility in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of

relaxing the essential health benefits required under the ACA for plans sold through such marketplaces. Further, each chamber of Congress has put forth multiple bills designed to repeal or repeal and replace portions of the ACA. Although none of these measures have been enacted by Congress to date, Congress may consider other legislation to repeal and replace elements of the ACA. We continue to evaluate the effect that the ACA and its possible repeal and replacement has on our business. It is uncertain the extent to which any such changes may impact our business or financial condition.

- Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year.
- These reductions went into effect in April 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2025 unless additional action is taken by Congress. In January 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, further reduced Medicare payments to several types of providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.
- These new laws or any other similar laws introduced in the future may result in additional reductions in Medicare and other health care funding, which could negatively affect our future customers and accordingly, our financial operations.
- Additionally, there has been increasing legislative and enforcement interest in the United States with respect to non-rare drug pricing practices.
- Specifically, there have been several recent U.S. Congressional inquiries and proposed federal and state legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. Moreover, payment methodologies may be subject to changes in healthcare legislation and regulatory initiatives.
- We expect that additional U.S. federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that the U.S. federal government will pay for healthcare product candidates and services, which could result in reduced demand for our product candidates or additional pricing pressures.
- Individual states in the United States have also become increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.
- Legally-mandated price controls on payment amounts by third-party payors or other restrictions could harm our business, results of operations, financial condition, and prospects. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical product candidates and which suppliers will be included in their prescription drug and other healthcare programs. This could reduce the ultimate demand for our product candidates or put pressure on our product pricing.

We face product liability risks and may not be able to obtain adequate insurance.

- We currently have no products that are available for commercial sale.

- However, the current use of any of our product candidates in clinical trials, and the sale of any approved products in the future, may expose us to liability claims.
- These claims might be made directly by consumers and healthcare providers or indirectly by pharmaceutical companies, our corporate collaborators or others selling such products.
- We may experience financial losses in the future due to product liability claims.
- We have obtained limited product liability insurance coverage for our clinical trials.
- We intend to expand our insurance coverage to include the sale of commercial products if marketing approval is obtained for product candidates in development.
- However, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses.
- We are exposed to potential product liability and professional indemnity risks that are inherent in the development, manufacturing, marketing, and use of pharmaceutical product candidates.
- These claims might be made by patients that use the product, healthcare providers, pharmaceutical companies, our collaborators, or others selling these product candidates.
- Any claims against us, regardless of their merit, could be difficult and costly to defend and could adversely affect the market for our product candidates or any prospects for commercialization of our product candidates. In addition, regardless of the merits or eventual outcome, liability claims may result in:
    - decreased demand for our product candidates;
    - injury to our reputation;
    - withdrawal of clinical trial participants;
    - costs to defend related litigation;
    - diversion of management's time and our resources;
    - substantial monetary awards to trial participants or patients;
    - regulatory investigation, product recalls or withdrawals, or labeling, marketing or promotional restrictions; and
    - loss of revenue; and the inability to commercialize, co-commercialize or promote our product candidates.
- If a successful product liability claim or series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, our business, financial condition and results of operations may be materially and adversely affected.

Our business operations and current and future relationships with investigators, healthcare professionals, consultants, third-party payors, patient organizations, and customers will be subject to applicable healthcare regulatory laws, which could expose us to penalties.

- Our business operations and current and future arrangements with investigators, healthcare professionals, consultants, third-party payors, patient organizations, and customers, may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations.
- These laws may constrain the business or financial arrangements and relationships through which we conduct our operations, including how we research, market, sell, and distribute our product candidates, if approved.
- Such laws include the following:
    - The U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, offering, receiving, or providing any remuneration

(including any kickback, bribe, or certain rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, lease, order, or recommendation of, any good, facility, item, or service, for which payment may be made, in whole or in part, under U.S. federal and state healthcare programs such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. The U.S. federal Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers, and formulary managers on the other hand.

- The U.S. federal false claims and civil monetary penalties laws, including the civil False Claims Act ("FCA") which, among other things, impose criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the U.S. federal government, claims for payment or approval that are false or fraudulent, knowingly making, using or causing to be made or used, a false record or statement material to a false or fraudulent claim, or from knowingly making a false statement to avoid, decrease or conceal an obligation to pay money to the U.S. federal government.
- In addition, the government may assert that a claim including items and services resulting from a violation of the U.S. federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes "any request or demand" for money or property presented to the federal government.
- In addition, manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to "cause" the submission of false or fraudulent claims.
- The U.S. federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), which imposes criminal and civil liability for, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement, in connection with the delivery of, or payment for, healthcare benefits, items or services; similar to the U.S. federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 ("HITECH") and its respective implementing regulations, which impose, among other things, specified requirements relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization by covered entities subject to the rule, such as health plans, healthcare clearinghouses and healthcare providers as well as its business associates that perform certain services involving the use or disclosure of individually identifiable health information. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions; the U.S. federal Food, Drug and Cosmetic Act ("FDCA"),

  which prohibits, among other things, the adulteration or misbranding of drugs, biologics, and medical devices.
- The U.S. Public Health Service Act ("PHSA"), which prohibits, among other things, the introduction into interstate commerce of a biological product unless a biologics license is in effect for that product.

- The U.S. federal legislation commonly referred to as the "Physician Payments Sunshine Act," enacted as part of the ACA, and its implementing regulations, which requires certain manufacturers of drugs, devices, biologics, and medical supplies that are reimbursable under Medicare, Medicaid, or the Children's Health Insurance Program to report annually to the government information related to certain payments and other transfers of value to physicians and teaching hospitals, as well as ownership and investment interests held by the physicians described above and their immediate family members; analogous U.S. state laws and regulations, including, state anti-kickback and false claims laws, which may apply to our business practices, including but not limited to, research, distribution, sales, and marketing arrangements and claims involving healthcare items or services reimbursed by any third-party payor, including private insurers.
- State laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the U.S. federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources.
- State laws and regulations that require drug manufacturers to file reports relating to pricing and marketing information, which requires tracking gifts and other remuneration and items of value provided to healthcare professionals and entities.
- State laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.
- Similar healthcare laws and regulations in the EU, the UK and other jurisdictions, including reporting requirements detailing interactions with and payments to healthcare providers.

Our employees and independent contractors, including principal investigators, CROs, CMOs, consultants, vendors, and any other third parties we may engage in connection with the development and commercialization of our product candidates may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could adversely affect our business.

- Misconduct by our employees and independent contractors, including principal investigators, CROs, CMOs, consultants, vendors, and any other third parties we may engage in connection with the development and commercialization of our product candidates, could include intentional, reckless, or negligent conduct or unauthorized activities that violate: (i) the laws and regulations of the FDA, the EMA and other similar regulatory authorities, including those laws that require the reporting of true, complete and accurate information to such authorities; (ii) manufacturing standards; (iii) data privacy, security, fraud and abuse, and other healthcare laws and regulations; or (iv) laws that require the reporting of true, complete, and accurate financial information and data.
- Specifically, sales, marketing, and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing, and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs, and other business arrangements.
- Activities subject to these laws could also involve the improper use or misrepresentation of information obtained in the course of clinical trials, creation of fraudulent data in pre-clinical studies or clinical

  trials, or illegal misappropriation of drug product, which could result in regulatory sanctions and cause serious harm to our reputation.
- It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or

unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with such laws or regulations.

- Additionally, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, disgorgements, possible exclusion from participation in Medicare, Medicaid, other U.S. federal healthcare programs or healthcare programs in other jurisdictions, individual imprisonment, other sanctions, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations.

We are subject to governmental regulation and other legal obligations related to privacy, data protection and data security. Our actual or perceived failure to comply with such obligations could harm our business.

- We are subject to diverse laws and regulations relating to data privacy and security in the USA, EU, and other countries in which we may or will conduct business.
- New global privacy rules are being enacted and existing ones are being updated and strengthened. We are likely to be required to expend capital and other resources to ensure ongoing compliance with these laws and regulations.
- The General Data Protection Regulation (GDPR) applies extraterritorially and implements stringent operational requirements for controllers and processors of personal data. For example, the GDPR in both the EU and UK (i) requires detailed disclosures to data subjects; (ii) requires disclosure of the legal basis on which personal data is processed; (iii) makes it harder to obtain valid consent for processing; (iv) requires the appointment of a data protection officer where sensitive personal data (i.e. health data) is processed on a large scale; (v) provides more robust rights for data subjects; (vi) introduces data breach notification requirements with a very low threshold; (vii) imposes additional obligations when contracting with service providers; and (viii) requires an appropriate privacy governance framework to be implemented including policies, procedures, training and data audit.
- The EU GDPR permits member state derogations for certain issues and allows member states, in some instances, to impose additional requirements. Accordingly, we are also subject to EU national laws relating to the processing of certain data such as genetic data, biometric data and data concerning health. Complying with these numerous, complex, and often changing regulations is expensive and difficult. Failure by us, or our partners or service providers, to comply with the GDPR could result in regulatory investigations, enforcement notices and/or significant fines.
- In addition to the foregoing, any breach of privacy laws or data security laws, particularly those resulting in any security incident or breach involving the misappropriation, loss or other unauthorized use or disclosure of sensitive or confidential patient or consumer information, could have a material adverse effect on our business, reputation and financial condition.
- As a data controller, we are accountable for any third-party data service providers we engage to process personal data on our behalf.
- We attempt to address the associated risks by performing security assessments, detailed due diligence and regularly performing privacy and security reviews of our vendors and requiring all such third-party providers with data access to sign agreements, including business associate agreements, and where

  required under EU or country laws, obligating them to only process data according to our instructions and to take sufficient security measures to protect such data.
- There is no assurance that these contractual measures and our own privacy and security-related safeguards will protect us from the risks associated with the third-party processing, storage and

transmission of such information. Any violation of data or security laws by our third-party processors could have a material adverse effect on our business and result in the fines and penalties outlined above.

We are also subject to evolving European privacy laws on electronic marketing and cookies.

- The EU is in the process of replacing the e-Privacy Directive (2002/58/EC) (the "e-Privacy Directive") with a new set of rules taking the form of a regulation, which will be directly applicable to the laws of each EU member state, without need for further implementation. The draft e-Privacy Regulation (the "e-Privacy Regulation"), if enacted, is expected to maintain strict opt-in marketing rules with limited exceptions for business-to-business communications, maintain restrictive rules on the use of non-essential cookies, web beacons and similar technology and significantly increase fining powers to the same levels as the EU GDPR (i.e. the greater of 20 million euros or 4% of total global annual revenue). While the e-Privacy Regulation was originally intended to be adopted on May 25, 2018 (alongside the GDPR), it is still going through the European legislative process.
- Due to our planned international operations, we may be subject to anti-corruption laws, as well as export control laws, customs laws, sanctions laws and other laws governing our operations. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures and legal expenses.
- Our operations are subject to anti-corruption laws, including the U.S. Foreign Corrupt Practices Act (the "FCPA"); and other anti-corruption laws that apply in countries where we do business and may do business in the future. The FCPA, and these other laws generally prohibit us, our officers and our employees and intermediaries from bribing, being bribed by, or providing prohibited payments or anything else of value to government officials or other persons to obtain or retain business or gain some other business advantage.
- We may in the future operate in jurisdictions that pose a high risk of potential Bribery Act or FCPA violations, and we may participate in collaborations and relationships with third parties whose actions could potentially subject us to liability under the Bribery Act, the FCPA, or local anti-corruption laws.
- In addition, we cannot predict the nature, scope, or effect of future regulatory requirements to which any of our international operations might be subject or the manner in which existing laws might be administered or interpreted.
- We are also subject to other laws and regulations governing any international operations, including regulations administered by the governments of the United States, including applicable export control regulations, economic sanctions on countries and persons and customs requirements (collectively, the "Trade Control Laws").
- There is no assurance that we will be completely effective in ensuring our compliance with all applicable anti-corruption laws, including the FCPA, or other legal requirements, including Trade Control Laws. If we are not in compliance with the FCPA, and other anti-corruption laws or Trade Control Laws, we may be subject to criminal and civil penalties, disgorgement, and other sanctions and remedial measures and legal expenses.
- Any investigation of any potential violations of the FCPA, other anti-corruption laws, or Trade Control Laws by U.S., or other authorities, even if it is ultimately determined that we did not violate such laws, could be costly and time-consuming, require significant personnel resources, and harm our reputation.
- We will seek to build and continuously improve our systems of internal controls and to remedy any weaknesses identified.
- There can be no assurance, however, that the policies and procedures will be followed at all times or effectively detect and prevent violations of the applicable laws by one or more of our employees, consultants, agents, collaborators or other persons who performs services on our behalf and, as a result, we could be subject to fines, penalties, or prosecution.

Although the clinical trial process is designed to identify and assess potential side effects, it is always possible that a drug, even after regulatory approval, may exhibit unforeseen side effects. If our product candidates were to cause adverse side effects during clinical trials or after approval, we may be exposed to substantial liabilities.

- Physicians and patients may not comply with any warnings that identify known potential adverse effects and patients who should not use our product candidates.
- Although we maintain product liability insurance for our product candidates, it is possible that our liabilities could exceed our insurance coverage.
- We intend to expand our coverage to include the sale of commercial product candidates if we obtain marketing approval for any of our product candidates.
- However, we may not be able to maintain insurance coverage at a reasonable cost or obtain insurance coverage that will be adequate to satisfy any liability that may arise.
- If a successful product liability claim or series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, our assets may not be sufficient to cover such claims and our business operations could be impaired.
- If there are changes in the application of legislation or regulatory policies, or if problems are discovered with a product or the manufacture of a product, or if we or one of our distributors, licensees, or co-marketers fails to comply with regulatory requirements, the regulatory authorities could take various actions.
- These include imposing fines on us, imposing restrictions on our product or its manufacture, and requiring us to recall or remove a product from the market.
- The regulatory authorities could also suspend or withdraw our marketing authorizations, or require us to conduct additional clinical trials, change our product labeling, or submit additional MAAs.
- If any of these events occurs, our ability to sell our product may be impaired, and we may incur substantial additional expense to comply with regulatory requirements.

We may be exposed to future liabilities and/or obligations with respect to sales or out-licensing arrangements or partnerships.

- We may be required to set aside provisions for warranty claims or contingent liabilities in respect of such sales or out-licensing arrangements.
- We may be required to pay damages (including, but not limited to, litigation costs) to a purchaser or licensee to the extent that any representations or warranties that we had given to that purchaser or licensee prove to be inaccurate or to the extent that we have breached any of our covenants or obligations contained in the disposal documentation.
- In certain circumstances, it is possible that any incorrect representations and warranties could give rise to a right by the purchaser or licensee to unwind the contract in addition to receiving damages. Furthermore, we may become involved in disputes or litigation in connection with such product candidates.
- Certain obligations and liabilities associated with our prior management of the development of any current or disposed product candidate can also continue to exist notwithstanding any sale, such as liabilities arising from the infringement of intellectual property rights of others.
- As a result of the above, the total amount of costs and expenses that may be incurred with respect to liabilities associated with a sale or out-license may exceed our expectations, and we may experience other unanticipated adverse effects, all of which could adversely affect our business, financial condition, results of operations, and prospects.

- Our business is subject to economic, political, regulatory and other risks associated with international operations.

Additional Risks Relating to Ownership of Company Securities

Nasdaq may delist our securities from trading on its exchange, which could limit investors' ability to make transactions in its securities and subject us to additional trading restrictions.

Currently, our Common Stock and Public Warrants are publicly traded on the Nasdaq. We cannot assure you that our securities will continue to be listed on the Nasdaq. For example, as previously disclosed, on November 1, 2022, we received written notice from the Staff of the Listing Qualifications Department of Nasdaq (the "Staff") stating that the Staff has determined that the Company has not complied with the requirements of IM-5101-2 because (i) the Company has not demonstrated that its common stock complies with the minimum 1,000,000 unrestricted publicly held shares requirement in Listing Rule 5505(a)(2) (the "Unrestricted Publicly Held Shares Requirement") and (ii) the Company's warrants do not qualify for initial listing since the security underlying the warrant, the Company's common stock, does not qualify. The Company timely requested a hearing before the Nasdaq Hearings Panel (the "Panel") and such hearing has been conducted, which ultimately stayed the suspension of the Company's common stock and warrants and the filing by Nasdaq of a Form 25-NSE, pending the Panel's decision. In order to continue listing our securities on the Nasdaq, we will be required to maintain certain financial, distribution and stock price levels. Generally, we will be required to maintain a minimum amount in stockholders' equity (generally $2,500,000 for companies trading on the Nasdaq Capital Market) and a minimum number of holders of our securities (generally 300 public holders).

If Nasdaq delists our securities from trading on its exchange and we are not able to list its securities on another national securities exchange, we expect our securities could be quoted on an over-the-counter market. If this were to occur, we could face significant material adverse consequences, including:

- a limited availability of market quotations for our securities;
- reduced liquidity for our securities;
- a determination that our Common Stock is a "penny stock" which will require brokers trading in our Common Stock to adhere to more stringent rules and possibly result in a reduced level of trading activity in the secondary trading market for our securities;
- a limited amount of news and analyst coverage; and
- a decreased ability to issue additional securities or obtain additional financing in the future.

The National Securities Markets Improvement Act of 1996, which is a federal statute, prevents or preempts the states from regulating the sale of certain securities, which are referred to as "covered securities." Since our Common Stock and Public Warrants are listed on the Nasdaq, they are covered securities. Although the states are preempted from regulating the sale of its securities, the federal statute does allow the states to investigate companies if there is a suspicion of fraud, and, if there is a finding of fraudulent activity, then the states can regulate or bar the sale of covered securities in a particular case. If we are no longer listed on the Nasdaq, our securities would not be covered securities and it would be subject to regulation in each state in which it offers its securities, including in connection with the initial business combination.

We cannot assure you that an active public market for our common stock will develop or be sustained. The market price of our common stock could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control, including:

- The market price for our stock and the value of your investment could materially decline.
- The trading price of our stocks may fluctuate and is likely to continue to fluctuate, substantially. The stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies.

- The market price of our stock may fluctuate significantly in response to numerous factors, many of which are beyond our control, including:
  - positive or negative results from, or delays in, testing or clinical trials conducted by us or our competitors;
  - delays in entering into strategic relationships with respect to development or commercialization of our product candidates or entry into strategic relationships on terms that are not deemed to be favorable to us;
  - technological innovations or commercial product introductions by us or competitors;
  - changes in government regulations;
  - developments concerning proprietary rights, including patents and litigation matters;
  - the impact of public health epidemics, such as the ongoing COVID-19 pandemic, and government efforts to slow their spread;
  - economic, public health, financial or geopolitical events that affect us or the financial markets generally, including the duration and severity of the impact of the ongoing COVID-19 pandemic;
  - public concern relating to the commercial value or safety of our product candidates;
  - financing or other corporate transactions;
  - publication of research reports or comments by securities or industry analysts, and variances in our periodic results of operations from securities analysts' estimates;
  - general market conditions in the biopharmaceutical and pharmaceutical industries or in the economy as a whole;
  - the loss of any of our key scientific or senior management personnel;
  - sales of our stock by us, our senior management and board members, holders of our stock or our other security holders in the future;
  - actions by institutional shareholders;
  - speculation in the press or the investment community; or other events and factors, many of which are beyond our control;
  - fluctuations in the valuation of companies perceived by investors to be comparable to us;
  - performance of similar companies;
  - share price and volume fluctuations attributable to inconsistent trading volume levels of our shares; and
  - investors purposefully introducing volatility for short term gains.
- There have been high levels of volatility in the market prices of securities of biotechnology companies.
- These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, interest rate changes or international currency fluctuations, may negatively impact the market price of our common shares.
- These and other market and industry factors may cause the market price and demand for our stock to fluctuate substantially, regardless of our actual operating performance, which may limit or prevent investors from readily selling our stock and may otherwise negatively affect the liquidity of our stock.
- In addition, the stock market in general, and emerging companies in particular, have experienced significant price and volume fluctuations that often have been unrelated to the operating performance of the companies affected by these fluctuations.

- These broad market fluctuations may adversely affect the trading price of our stock, regardless of our operating performance.
- Furthermore, the trading prices for our stock as well as the ordinary shares of our competitors have been highly volatile as a result of the COVID-19 pandemic and the recent geopolitical issues taking place in Eastern Europe but impacting financial markets globally.
- In addition, a recession, depression, or other sustained adverse market event resulting from the spread of COVID-19 could materially and adversely affect our business and the market price of our stock.
- In the past in the United States, when the market price of a security has been volatile, holders of that security have often instituted securities class action litigation against the issuer of such securities.
- If any of the holders of shares in our company were to bring such a lawsuit against us, we could incur substantial costs defending the lawsuit and the attention of our senior management would be diverted from the operation of our business.
- Any adverse determination in litigation could also subject us to significant liabilities.
- If securities or industry analysts do not publish research or publish inaccurate research or unfavorable research about our business, the price and trading volume of our shares could decline.
- The trading market for our stock depends in part on the research and reports that securities or industry analysts publish about us or our business.
- If one or more of the analysts who covers us downgrades our stock price or publishes incorrect or unfavorable research about our business, the price of our shares would likely decline.
- If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, or downgrades our stock, demand for our stock could decrease, which could cause the price of our stock and/or ordinary shares and/or trading volume to decline.

Our existing stockholders have significant control of our management and affairs, which they could exercise against your best interests.

- Following the closing of the Business Combination, our executive officers and directors and greater than 5% stockholders, together with entities that may be deemed affiliates of or related to such persons or entities, beneficially owned in excess of 50% of our outstanding Common Stock (inclusive of the shares held by the Sponsor and the PIPE Shares).
- As a result, these stockholders, acting together, may be able to control our management and affairs and matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, such as mergers, consolidations, or the sale of substantially all our assets.
- Consequently, this concentration of ownership may have the effect of delaying, deferring, or preventing a change in control, including a merger, consolidation, takeover, or other business combination involving us or discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control, which might affect the market price of our common stock.

Risks Relating to future indebtedness if debt financing is needed

- In the future Peak Bio may require debt financing and this indebtedness could adversely affect our operations and financial results and prevent us from fulfilling our obligations under the notes.
- Future indebtedness could have important consequences to you. For example, it could:
  - increase our vulnerability to general adverse economic and industry conditions;
  - require us to dedicate a substantial portion of any of our potential future cash flow from operations to payments on our indebtedness, which would reduce the availability of our cash flow to fund working capital, capital expenditures, R&D, expansion efforts and other general corporate purposes;

- limit our future flexibility in planning for, or reacting to, changes in our business and the industry in which we operate; and
- place us at a competitive disadvantage compared to our competitors that have less debt.

To service any of our future indebtedness, we will require a significant amount of cash. Our ability to generate cash depends on many factors beyond our control.

- Our ability to make payments on indebtedness, and to fund planned capital expenditures, R&D, as well as required stock repurchases and expansion efforts will depend on our ability to generate cash in the future.
- This, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors that are and will remain beyond our control. Contractual provisions or laws, as well as any future subsidiaries' financial condition and operating requirements, may limit our ability to obtain cash from our subsidiaries.
- Until such time, if ever, as we can generate substantial product revenues, we may seek to finance our cash needs through securities offerings, debt financings, license and collaboration agreements, or other capital raising transactions.
- If we raise capital through securities offerings, your ownership interest will be diluted, and the terms of the securities we issue in such transactions may include liquidation or other preferences that adversely affect your rights as a holder of our shares.
- Debt financing, if available, could result in fixed payment obligations, and we may be required to agree to certain restrictive covenants, such as limitations on our ability to incur additional debt, to acquire, sell or license intellectual property rights, to make capital expenditures, to declare dividends, or other operating restrictions.
- In addition, we could also be required to seek funds through arrangements with collaborators or others at an earlier stage than otherwise would be desirable.
- Raising additional capital through any of these or other means could adversely affect our business and the holdings or rights of our security holders, and may cause the market price of our stock to decline.

Fluctuations in our operating results could affect the price of our common stock. Our operating results may vary from period to period for several reasons including:

- The overall competitive environment for our products as described in "We face competition" above.
- The amount and timing of future sales to customers in the U.S. For example, sales of a product may increase or decrease due to pricing changes, future mandated discounts, rebates, governmental price controls, formularies, health care plans acceptance of products, healthcare or insurance companies changing operations in a geographical area or fluctuations in future distributor buying patterns or future sales initiatives that we may undertake from time to time.
- The availability and extent of government and private third-party reimbursements for the cost of therapy.
- The future effectiveness and safety of our various products as determined both in clinical testing and by the accumulation of additional information on each product after the FDA approves it for sale.
- The future rate of adoption by physicians and use of our products for approved indications and additional indications. Among other things, the rate of adoption by physicians and use of our products may be affected by results of clinical studies reporting on the benefits or risks of a product.
- The potential introduction of new products and additional indications for existing products.

- The ability to successfully manufacture sufficient quantity of any future marketed product that we may bring to market or partner with collaborators versus the ability of our competitors to do the same with their products.
- To support scaling of preclinical and clinical activities, we will need to provide proportionate operational general and administrative support in areas of IT, HR, PR, Finance, Legal and Regulatory. We would need to hire these future staff and they will play a role in determining our operating results.
- Portions of our information technology infrastructure may experience interruptions, delays or cessations of service or produce errors.

We incur increased costs and obligations as a result of being a public company.

- As a public company, we are and will continue to be subject to the requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act") the listing standards of Nasdaq and other applicable securities rules and regulations.
- We expect that the requirements of these rules and regulations will continue to increase our legal, accounting, and financial compliance costs, make some activities more difficult, time-consuming and costly, and place significant strain on our personnel, systems, and resources.
- For example, the Exchange Act requires, among other things, that we file annual, quarterly, and current reports with respect to our business and results of operations.
- As a result of the complexity involved in complying with the rules and regulations applicable to public companies, our management's attention may be diverted from other business concerns, which could harm our business, financial condition, and results of operations, although we have already hired additional employees to assist us in complying with these requirements, we may need to hire more employees in the future or engage outside consultants, which will increase our operating expenses.

Because there are no current plans to pay cash dividends on our Common Stock for the foreseeable future, you may not receive any return on investment unless you sell your common stock for a price greater than that which you paid for it.

We intend to retain future earnings, if any, for future operations, expansion and debt repayment and there are no current plans to pay any cash dividends for the foreseeable future. The declaration, amount and payment of any future dividends on shares of our Common Stock will be at the sole discretion of our board of directors. Our board of directors may take into account general and economic conditions, our financial condition and results of operations, our available cash and current and anticipated cash needs, capital requirements, contractual, legal, tax, and regulatory restrictions, implications on the payment of dividends by us to our stockholders or by its subsidiaries to it and such other factors as our board of directors may deem relevant. In addition, our ability to pay dividends is limited by covenants of our existing and outstanding indebtedness and may be limited by covenants of any future indebtedness that we incur. As a result, you may not receive any return on an investment in our Common Stock unless you sell our Common Stock for a price greater than that which you paid for it.

If securities analysts do not publish research or reports about our business or if they downgrade our stock or our sector, our stock price and trading volume could decline.

The trading market for our Common Stock will rely in part on the research and reports that industry or financial analysts publish about us or our business. We will not control these analysts. In addition, some financial analysts may have limited expertise with our model and operations. Furthermore, if one or more of the analysts who do cover the downgrade of our stock or industry, or the stock of any of our competitors, or publish inaccurate or unfavorable research about our business, the price of our stock could decline. If one or more of these analysts ceases coverage of us or fails to publish reports on it regularly, we could lose visibility in the market, which in turn could cause its stock price or trading volume to decline.

Future sales, or the perception of future sales, by us or our stockholders in the public market could cause the market price for our Common Stock to decline.

The sale of shares of our Common Stock in the public market, or the perception that such sales could occur, could harm the prevailing market price of shares of our Common Stock. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that it deems appropriate.

Certain holders of our Common Stock have entered into lock-up agreements (the "Lock-Up Agreements") with us pursuant to which each such holder agreed, subject to certain exceptions, not to dispose of or hedge any of their common stock or securities convertible into or exchangeable for shares of our Common Stock during the period from the date of the closing of the Business Combination continuing through the date 180 days after the Closing Date.

Upon the expiration or waiver of the lock-ups described above, shares held by the stockholders party to the Lock-Up Agreements will be eligible for resale, subject to volume, manner of sale and other limitations under Rule 144.

As restrictions on resale end, the market price of shares of our Common Stock could drop significantly if the holders of these shares sell them or are perceived by the market as intending to sell them. These factors could also make it more difficult for us to raise additional funds through future offerings of our Common Stock or other securities.

In addition, Common Stock reserved for future issuance under our equity incentive plans will become eligible for sale in the public market once those shares are issued, subject to provisions relating to various vesting agreements, lock-up agreements and, in some cases, limitations on volume and manner of sale applicable to affiliates under Rule 144, as applicable. The aggregate number of shares of our Common Stock reserved for future issuance under our equity incentive plan is 3,756,816. We will file one or more registration statements on Form S-8 under the Securities Act of 1933, as amended (the "Securities Act") to register shares of Common Stock or securities convertible into or exchangeable for shares of Common Stock issued pursuant to our equity incentive plans. Any such Form S-8 registration statements will automatically become effective upon filing. Accordingly, shares registered under such registration statements will be available for sale in the open market.

Depending upon market liquidity at the time, sales of shares of our Common Stock under the White Lion Purchase Agreement may cause the trading price of our Common Stock to decline. After White Lion has acquired shares under the White Lion Purchase Agreement, it may sell all, some or none of those shares. Sales to White Lion by us pursuant to the White Lion Purchase Agreement may result in substantial dilution to the interests of other holders of our Common Stock. The sale of a substantial number of shares of our Common Stock to White Lion, or anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales. However, we have the right to control the timing and amount of any sales of our shares to White Lion, and the White Lion Purchase Agreement may be terminated by us at any time at our discretion without penalty.

The sale of substantial amounts of shares of our Common Stock or warrants being offered in this prospectus, or the perception that such sales could occur, could cause the prevailing market price of shares of our Common Stock and Warrants to decline significantly. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate. We believe the likelihood that warrant holders will exercise their Warrants is dependent upon the market price of our Common Stock.

In the future, we may also issue its securities in connection with investments or acquisitions. The amount of shares of Common Stock issued in connection with an investment or acquisition could constitute a material portion of our then-outstanding shares of Common Stock. Any issuance of additional securities in connection with investments or acquisitions may result in additional dilution to our stockholders.

Warrants will become exercisable for our Common Stock, which would increase the number of shares eligible for future resale in the public market and result in dilution to our existing stockholders.

Outstanding Warrants to purchase an aggregate of 5,375,000 shares of our Common Stock will become exercisable on the date which is 30 days after the completion of the Business Combination. Each Warrant entitles the holder thereof to purchase one (1) share of our Common Stock at a price of $11.50 per whole share for the Public Warrants and Private Placement Warrants and $0.01 per share for the PIPE Warrants, subject to adjustment. Warrants may be exercised only for a whole number of shares of Common Stock. To the extent such warrants are exercised, additional shares of our Common Stock will be issued, which will result in dilution to the then existing holders of our Common Stock and increase the number of shares eligible for resale in the public market. Sales of substantial numbers of such shares in the public market could adversely affect the market price of our Common Stock.

We cannot predict the actual number of shares we will sell under the White Lion Purchase Agreement to White Lion, or the actual gross proceeds resulting from those sales.

On November 3, 2022, we entered into the White Lion Purchase Agreement with White Lion, pursuant to which White Lion committed to purchase up to $100 million in shares of Common Stock, subject to certain limitations and conditions set forth in the White Lion Purchase Agreement. Our shares of Common Stock that may be issued under the White Lion Purchase Agreement may be sold by us to CF at our discretion from time to time until November 1, 2025 commencing on the date the registration statement that includes this prospectus becomes effective.

We generally have the right to control the timing and amount of any sales of our shares of Common Stock to White Lion under the White Lion Purchase Agreement. Sales of our shares of Common Stock, if any, to White Lion under the White Lion Purchase Agreement will depend upon market conditions and other factors to be determined by us. We may ultimately decide to sell to White Lion all, some or none of the shares of Common Stock that may be available for us to sell to White Lion pursuant to the White Lion Purchase Agreement.

Because the purchase price per share to be paid by White Lion for the shares of Common Stock that we may elect to sell to White Lion under the White Lion Purchase Agreement, if any, will fluctuate based on the market prices of our shares of Common Stock at the time we elect to sell shares to White Lion pursuant to the White Lion Purchase Agreement, if any, it is not possible for us to predict, as of the date of this prospectus and prior to any such sales, the number of shares of Common Stock that we will sell to White Lion under the White Lion Purchase Agreement, the purchase price per share that White Lion will pay for shares purchased from us under the White Lion Purchase Agreement, or the aggregate gross proceeds that we will receive from those purchases by White Lion under the White Lion Purchase Agreement.

The number of our shares of Common Stock ultimately offered for sale by White Lion is dependent upon the number of shares of Common Stock, if any, we ultimately elect to sell to White Lion under the White Lion Purchase Agreement. For more information, please see “Prospectus Summary–White Lion Common Stock Purchase and Registration Rights Agreements.”

Our management and auditors have expressed substantial doubt about our ability to continue as a going concern.

Our auditors’ report to our December 31, 2021 financial statements includes an explanatory paragraph that expressed substantial doubt about our ability to continue as a going concern. Our current cash level raises substantial doubt about our ability to continue as a going concern without immediate short-term financing required to get us through consummation of the Business Combination. Additionally, our management has independently determined that there is substantial doubt about Peak Bio’s ability to continue as a going concern because our cash flows generated from operations may not be sufficient to meet our current operating costs. In

addition, our future financial statements may include similar qualifications about our ability to continue as a going concern. Peak Bio's financial statements were prepared assuming that it will continue as a going concern and do not include any adjustments that may result from the outcome of this uncertainty. If Peak Bio is unable to meet its current operating costs, Peak Bio would need to seek or additional financing or modify or cease its operational plans. If Peak Bio seeks additional financing to fund its business activities in the future and there remains substantial doubt about its ability to continue as a going concern, investors or other financing sources may be unwilling to provide additional funding to Peak Bio on commercially reasonable terms or at all.

The JOBS Act permits "emerging growth companies" like us to take advantage of certain exemptions from various reporting requirements applicable to other public companies that are not emerging growth companies.

We qualify as an "emerging growth company" as defined in Section 2(a)(19) of the Securities Act, as modified by the Jumpstart Our Business Startups Act of 2012, which we refer to as the "JOBS Act." As such, we will take advantage of certain exemptions from various reporting requirements applicable to other public companies that are not emerging growth companies for as long as it continues to be an emerging growth company, including (i) the exemption from the auditor attestation requirements with respect to internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act, (ii) the exemptions from say-on-pay, say-on-frequency and say-on-golden parachute voting requirements and (iii) reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements. As a result, our stockholders may not have access to certain information they deem important. We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year (a) following February 1, 2026, the fifth anniversary of the closing of Ignyte's IPO, (b) in which we have total annual gross revenue of at least $1.07 billion or (c) in which we are deemed to be a large accelerated filer, which means the market value of our Common Stock that are held by non-affiliates exceeds $700 million as of the last business day of our prior second fiscal quarter, and (ii) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the exemption from complying with new or revised accounting standards provided in Section 7(a)(2)(B) of the Securities Act as long as Porch is an emerging growth company. An emerging growth company can therefore delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies, but any such election to opt out is irrevocable. We have elected not to opt out of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of our financial statements with another public company which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.

We cannot predict if investors will find our Common Stock less attractive because we will rely on these exemptions. If some investors find our Common Stock less attractive as a result, there may be a less active trading market for Common Stock and our stock price may be more volatile.

Anti-takeover provisions in our organizational documents could delay or prevent a change of control.

Certain provisions of our Amended and Restated Charter and Amended and Restated Bylaws have an anti-takeover effect and may delay, defer or prevent a merger, acquisition, tender offer, takeover attempt or other change of control transaction that a stockholder might consider in its best interest, including those attempts that might result in a premium over the market price for the shares held by our stockholders.

These provisions provide for, among other things:

- the ability of our board of directors to issue one or more series of preferred stock;

- advance notice for nominations of directors by stockholders and for stockholders to include matters to be considered at our annual meetings;
- certain limitations on convening special stockholder meetings;
- limiting the ability of stockholders to act by written consent; and
- our board of directors have the express authority to make, alter or repeal our Amended and Restated Bylaws.

These anti-takeover provisions could make it more difficult for a third party to acquire us, even if the third party's offer may be considered beneficial by many of our stockholders. As a result, our stockholders may be limited in their ability to obtain a premium for their shares. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing and to cause us to take other corporate actions you desire. See "*Description of* Securities."

Our Amended and Restated Charter designates the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or stockholders.

Our Amended and Restated Charter provides that, subject to limited exceptions, any (1) derivative action or proceeding brought on behalf of us, (2) action asserting a claim of breach of a fiduciary duty owed by any director, officer, stockholder or employee to us or our stockholders, (3) action asserting a claim arising pursuant to any provision of the DGCL or our Amended and Restated Charter or our Amended and Restated Bylaws, or (4) action asserting a claim governed by the internal affairs doctrine shall, to the fullest extent permitted by law, be exclusively brought in the Court of Chancery of the State of Delaware or, if such court does not have subject matter jurisdiction thereof, another state or federal court located within the State of Delaware. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our Amended and Restated Charter described above. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or its directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and employees. Alternatively, if a court were to find these provisions of our Amended and Restated Charter inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business and financial condition.

USE OF PROCEEDS

Except for our sale of shares of Common Stock to White Lion pursuant to the White Lion Purchase Agreement, all of the Common Stock and Warrants offered by the Selling Securityholders pursuant to this prospectus will be sold by the Selling Securityholders for their respective accounts. We will not receive any of the proceeds from these sales.

We will receive up to an aggregate of approximately $19,079,903 from a sale of Common Stock to White Lion based upon the sale of 3,949,800 shares of Common Stock (4,000,000 shares less 50,200 Initial Commitment Shares) and a price equal to 97% times a share price of $4.98, which was the closing share price of our Common Stock on November 30, 2022. We will receive up to an aggregate of approximately $61.8 million from the exercise of the Warrants, assuming the exercise in full of all of the Warrants for cash. We expect to use the net proceeds from sale of Common Stock to White Lion and the exercise of the Warrants for general corporate purposes, which may include temporary or permanent repayment of our outstanding indebtedness. We will have broad discretion over the use of proceeds from the sale of Common Stock to White Lion and the exercise of the Warrants. There is no assurance that we will sell Common Stock to White Lion nor that White Lion will elect to sell shares of Common Stock. There is no assurance that the holders of the Warrants will elect to exercise any or all of such Warrants.

The Selling Securityholders will pay any underwriting fees, discounts and selling commissions incurred by such Selling Securityholders in disposing of their Common Stock. Pursuant to (i) a registration rights agreement entered into by us, the Sponsor and certain of the stockholders in connection with the consummation of the Business Combination and (ii) the Subscription Agreements, we will bear all other costs, fees and expenses incurred in effecting the registration of the Common Stock covered by this prospectus, including, without limitation, all registration and filing fees, Nasdaq listing fees and fees and expenses of counsel and independent registered public accountants.

DETERMINATION OF OFFERING PRICE

The offering price of the shares of Common Stock underlying the Warrants offered hereby is determined by reference to the exercise price of the Warrants of $11.50 per share for the Public Warrants and Private Placement Warrants and $0.01 per share for the PIPE Warrants.

We cannot currently determine the price or prices at which shares of our Common Stock may be sold by the Selling Securityholders under this prospectus.

MARKET INFORMATION FOR COMMON STOCK AND DIVIDEND POLICY

Market Information and Holders

Our Common Stock and Public Warrants were historically quoted on the Nasdaq under the symbols "IGNY" and "IGNYW," respectively. On November 2, 2022, our Common Stock and Public Warrants were listed on the Nasdaq under the new trading symbols of "PKBO" and "PKBOW," respectively.

As of the Closing Date and following the completion of the Business Combination, the Company had approximately 20,058,486 shares of Common Stock issued and outstanding held of record by 130 holders, and approximately 5,820,545 Warrants outstanding held of record by 26 holders.

Dividends

We have not paid any cash dividends on the Common Stock to date. We may retain future earnings, if any, for future operations, expansion and debt repayment and has no current plans to pay cash dividends for the foreseeable future. Any decision to declare and pay dividends in the future will be made at the discretion of our board of directors and will depend on, among other things, our results of operations, financial condition, cash requirements, contractual restrictions and other factors that our board of directors may deem relevant. In addition, our ability to pay dividends may be limited by covenants of any existing and future outstanding indebtedness we or our subsidiaries incur. We do not anticipate declaring any cash dividends to holders of our Common Stock in the foreseeable future.

Securities Authorized for Issuance Under Equity Incentive Plan

At the special meeting of Ignyte's stockholders in lieu of our 2022 annual meeting held on October 25, 2022, our stockholders considered and approved the Peak Bio, Inc. 2022 Long-Term Incentive Plan (the "Incentive Plan"). The Incentive Plan was previously approved, subject to stockholder approval, by the Ignyte board of directors on April 27, 2022. The Incentive Plan became effective immediately upon the Closing. Pursuant to the Incentive Plan, 3,756,816 shares of Common Stock have been reserved for issuance under the Incentive Plan.

UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

Basis of Presentation and Background

The following unaudited pro forma condensed combined consolidated financial statements are based on the separate historical financial statements of Peak Bio Co., Ltd. and Ignyte and give effect to the Business Combination, including pro forma assumptions and adjustments related to the Business Combination, as described in the accompanying notes to the unaudited pro forma condensed combined consolidated financial statements. The unaudited pro forma condensed combined consolidated balance sheet as of September 30, 2022, is presented as if the Business Combination had occurred on September 30, 2022. The unaudited pro forma condensed combined statement of operations for the nine months ended September 30, 2022 and year ended December 31, 2021, gives effect to the Business Combination, as if it had been completed on January 1, 2021. The historical financial information has been adjusted on a pro forma basis to reflect factually supportable items that are directly attributable to the Business Combination and, with respect to the statement of operations only, expected to have a continuing impact on consolidated results of operations.

The Business Combination is expected to be accounted for as a reverse recapitalization in accordance with GAAP because Peak Bio Co., Ltd. has been determined to be the accounting acquirer under ASC 805. Under this method of accounting, Ignyte will be treated as the "acquired" company for financial reporting purposes. Peak Bio Co., Ltd. has preliminarily determined that it is the accounting acquirer based on an analysis of the criteria outlined in ASC 805 and the facts and circumstances specific to the Business Combination, including: (1) Peak Bio Co., Ltd. will own approximately 87.6% of the equity securities of the combined company on a fully-diluted basis immediately following the closing of the transaction; (2) The majority of the board of directors of the combined company will be composed of directors designated by Peak Bio Co., Ltd. under the terms of the Business Combination Agreement; and (3) existing members of Peak Bio Co., Ltd.'s management will be the management of the combined company.

Accordingly, the consolidated assets, liabilities and results of operations of Peak Bio Co., Ltd. will become the historical financial statements of Peak Bio, Inc., and Ignyte's assets, liabilities and results of operations will be consolidated with Peak Bio Co., Ltd. beginning on the acquisition date. For accounting purposes, the financial statements of Peak Bio, Inc. will represent a continuation of the financial statements of Peak Bio Co., Ltd. with the Business Combination being treated as the equivalent of Peak Bio Co., Ltd. issuing stock for the net assets of Ignyte accompanied by a recapitalization. The net assets of Ignyte will be stated at historical costs, with no goodwill or other intangible assets recorded. Operations prior to the Business Combination will be presented as those of Peak Bio Co., Ltd. in future reports of Peak Bio, Inc.

The unaudited pro forma condensed combined statement of operations does not include the effects of the costs associated with any integration or restructuring activities resulting from the Business Combination, as they are nonrecurring in nature. However, the unaudited pro forma condensed combined consolidated balance sheet includes a pro forma adjustment to reduce cash and shareholders' equity to reflect the payment of certain anticipated Business Combination costs.

The following unaudited pro forma condensed combined financial information presents the combination of the financial information of Ignyte and Peak Bio Co., Ltd., adjusted to give effect to the Business Combination and other events contemplated by the Business Combination Agreement. The following unaudited pro forma condensed combined financial information has been prepared in accordance with Article 11 of Regulation S-X as amended by the final rule, Release 33-10786 "Amendments to Financial Disclosures about Acquired and Disposed Businesses."

The unaudited pro forma condensed combined balance sheet as of September 30, 2022, combines the balance sheet of Ignyte with the historical condensed consolidated balance sheet of Peak Bio Co., Ltd. on a pro forma basis as if the Business Combination and the other events contemplated by the Business Combination Agreement, summarized below, had been consummated on September 30, 2022.

The unaudited pro forma condensed combined statement of operations for the nine months ended September 30, 2022, combines the historical unaudited statement of operations of Ignyte Acquisition Corp. for the nine months ended September 30, 2022 with the historical unaudited statement of operations of Peak Bio Co., Ltd. for the nine months ended September 30, 2022. The unaudited pro forma condensed combined statement of operations for the year ended December 31, 2021 combines the historical audited statement of operations of Ignyte for the year-ended December 31, 2021 with the historical audited carve-out combined statement of operations of Peak Bio Co., Ltd. for the year ended December 31, 2021, giving effect to the transaction as if the Business Combination and other events contemplated by the Business Combination Agreement had been consummated on January 1, 2021.

The unaudited pro forma condensed combined financial information was derived from and should be read in conjunction with the following historical financial statements and the accompanying notes, which are included elsewhere in this registration statement:

- the historical unaudited financial statements of Ignyte as of, and for the nine months ended September 30, 2022
- the historical unaudited carve-out financial statements of Peak Bio Co., Ltd. as of, and for the nine months ended September 30, 2022
- the historical audited financial statements of Ignyte Acquisition Corp. as of, and for the year-ended December 31, 2021
- the historical audited carve-out consolidated financial statements of Peak Bio Co., Ltd. as of, and for the year-ended December 31, 2021
- other information relating to Ignyte and Peak Bio Co., Ltd. included in this registration statement, including the Business Combination Agreement and the description of certain terms thereof set forth thereof and the financial statements of Ignyte and Peak Bio Co., Ltd. included herein.

Management has made significant estimates and assumptions in its determination of the pro forma adjustments. As the unaudited pro forma condensed combined financial information has been prepared based on these preliminary estimates, the final amounts recorded may differ materially from the information presented.

The pro forma adjustments reflecting the consummation of the Business Combination are based on certain currently available information and certain assumptions and methodologies that Ignyte believes are reasonable under the circumstances. The unaudited condensed combined pro forma adjustments, which are described in the accompanying notes, may be revised as additional information becomes available and is evaluated. Therefore, it is likely that the actual adjustments will differ from the pro forma adjustments, and it is possible the difference may be material. Ignyte believes that its assumptions and methodologies provide a reasonable basis for presenting all the significant effects of the Business Combination based on information available to management at this time and that the pro forma adjustments give appropriate effect to those assumptions and are properly applied in the unaudited pro forma condensed combined financial information.

The unaudited pro forma condensed combined financial information is not necessarily indicative of what the actual results of operations and financial position would have been had the Business Combination taken place on the dates indicated, nor are they indicative of the future consolidated results of operations or financial position of the Combined Company. The unaudited pro forma condensed combined financial information should be read in conjunction with the historical financial statements and notes thereto of Ignyte and Peak Bio Co., Ltd.

Pursuant to the Business Combination Agreement between Ignyte and Peak Bio Co., Ltd., the Business Combination was consummated on November 1, 2022. Upon closing of the Business combination, Ignyte merged with Peak Bio Co., Ltd., with Peak Bio Co., Ltd. as the surviving company of the Business Combination. Upon closing of the Business Combination, Ignyte changed its name to “Peak Bio, Inc.”. The Business Combination was accounted for as a reverse merger in which Peak Bio Co., Ltd. issued stock for the net assets of

Ignyte, accompanied by a recapitalization. The net assets of Ignyte are stated at historical cost, with no goodwill or other intangible assets recorded upon closing. Historical operations will be those of Peak Bio Co., Ltd.

The aggregate consideration paid to Peak Bio Co., Ltd. upon the closing of the Business Combination was 17,295,044 shares of New Peak Bio common stock. The unaudited pro forma condensed combined financial information contained herein incorporates the results of Ignyte's shareholders having elected to redeem 5,159,287 shares of their public shares for $51,978,834 in cash based upon actual redemptions.

UNAUDITED PRO FORMA CONDENSED COMBINED BALANCE SHEET
SEPTEMBER 30, 2022
(in thousands)

	As of September 30, 2022				As of September 30, 2022
	Peak Bio Co., Ltd. (Historical)	Ignyte Acquisition Corp. (Historical)	Transaction Accounting Adjustments		Pro Forma Combined
ASSETS					
Current assets:					
Cash and cash equivalents	$437	$76	$57,849	**A**	$ 5,541
			3,525	**B**	
			(4,367)	**C**	
			(51,979)	**E**	
Deferred offering costs	655	—	(655)	**C**	—
Prepaid expenses and other current assets	170	60			230
Total current assets	1,262	136	4,373		5,771
Non-current assets:					
Marketable securities held in Trust Account	—	57,849	(57,849)	**A**	—
Property and equipment, net	392	—	—		392
Restricted cash	237	—	—		237
Operating lease right-of-use asset	3,619	—	—		3,619
Non-current assets	2	—	—		2
Total non-current assets	4,250	57,849	(57,849)		4,250
TOTAL ASSETS	**5,512**	**57,985**	**(53,476)**		**10,021**
LIABILITIES, TEMPORARY EQUITY AND STOCKHOLDERS' DEFICIT					
Accounts payable and accrued expenses	3,031	1,486	(333)	**C**	4,184
Operating lease liabilities	695	—	—		695
Due to related party	1,923	202	(500)	**C**	1,625
Promissory note—related party	—	399	—		399
Total current liabilities	5,649	2,087	(833)		6,903
Non-current liabilities:					
Operating lease liabilities, noncurrent	3,439	—	—		3,439
Long-term convertible notes payable	1,337	—	—		1,337
Long-term related party loan	500	—	—		500
Deferred tax liability	18	—	—		18
Other noncurrent liabilities	28	—	—		28
Warrant liability	—	300	—		300
Total non-current liabilities	5,322	300	—		5,622
Total liabilities	10,971	2,387	(833)		12,525

	As of September 30, 2022				As of September 30, 2022
	Peak Bio Co., Ltd. (Historical)	Ignyte Acquisition Corp. (Historical)	Transaction Accounting Adjustments		Pro Forma Combined
Other noncurrent liabilities					
COMMITMENTS AND CONTINGENCIES					
Temporary equity:					
Common stock subject to possible redemption	—	57,529	(57,529)	**A**	—
Stockholders' equity (deficit):					
Series A Preferred stock	—	—	—		—
Series A-1 Preferred stock	—	—	—		—
Series A-2 Preferred stock	—	—	—		—
Series A-2A Preferred stock	—	—	—		—
Series B Preferred stock	—	—	—		—
Common stock	3,229	—	1	**A**	3,229
			—	**B**	
			(1)	**E**	
Net parent's investment in Peak Bio Co., Ltd.	—		—		—
Additional paid-in capital	1,452	—	57,528	**A**	7,397
			3,525	**B**	
			(1,931)	**D**	
			(51,978)	**E**	
			(1,199)	**C**	
Retained earnings (deficit)	(10,200)	(1,931)	1,931	**D**	(13,190)
			(2,990)	**C**	
Accumulated other comprehensive loss	60		—		60
Total stockholders' equity (deficit)	(5,459)	(1,931)	(52,643)		(2,504)
TOTAL LIABILITIES, TEMPORARY EQUITY AND STOCKHOLDERS' EQUITY (DEFICIT)	$5,512	$57,985	$(53,476)		$ 10,021

Adjustments to Unaudited Pro Forma Condensed Combined Balance Sheet

The pro forma adjustments included in the unaudited pro forma condensed combined balance sheet as of September 30, 2022, are as follows:

A) Reflects the reclassification of marketable securities held in the Trust Account to cash and the reclassification of common stock to permanent equity based on actual redemptions.

B) Reflects the issuance of 352,500 to the subscribed PIPE investors at a purchase price per share of $10.00 at the time of closing, net of issuance costs.

C) Reflects estimated transaction related expenses of both Peak Bio Co., Ltd. and Ignyte.

D) Reflects the elimination of Ignyte's historical equity.

E) Represents redemption of the 5,159,287 Ignyte shares based on the Redemption Rights in the Business Combination Agreement.

UNAUDITED PRO FORMA CONDENSED COMBINED STATEMENT OF OPERATIONS FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2022
(in thousands, except per share data)

	For the Nine Months Ended September 30, 2022				For the Nine Months Ended September 30, 2022
	Peak Bio Co, Ltd.	Ignyte Acquisition Corp.	Transaction Accounting Adjustments		Pro Forma Combined
Revenue:					
Grant revenue	$346	$ —	$ —		$ 346
Total revenue	346	—	—		346
Operating costs and expenses:					
Formation and operating costs	—	1,906	—		1,906
Research and development	3,443	—	—		3,443
General and administrative	3,543	—	—		3,543
Total operating costs and expenses	6,986	1,906	—		8,892
Loss from operations	(6,640)	(1,906)	—		(8,546)
Other income (expense):					
Change in fair value of warrants	—	1,675	—		1,675
Investment income from Trust Account	—	343	(343)	**AA**	—
Interest (expense) income	(3)	—	—		(3)
Fair value adjustment to convertible note	(87)	—	—		(87)
Other income	342	—	—		342
Gain on extinguishment of debt	—	—	—		—
Total other income (expense)	252	2,018	(343)		1,927
Net loss before income taxes	(6,388)	112	(343)		(6,619)
Income tax expense	51	(8)	—		43
Net loss	(6,337)	104	(343)		(6,576)
Other comprehensive loss:					
Foreign currency translation	(29)	—	—		(29)
Total comprehensive loss	$(6,366)	$ 104	$ (343)		$ (6,605)
Basic and diluted weighted average shares outstanding, common stock subject to possible redemption		5,750,000			—
Basic and diluted net loss per share		$ 0.01			$ —
Basic and diluted weighted average shares outstanding, common stock		1,537,500			19,775,757
Basic and diluted net loss per share		$ 0.01			$ (0.33)

Adjustments to Unaudited Pro Forma Condensed Combined Statements of Operations

The pro forma adjustments included in the unaudited pro forma condensed combined statement of operations for the nine months ended September 30, 2022, are as follows:

(AA) Represents the elimination of interest income earned on investments held in Trust Account

UNAUDITED PRO FORMA CONDENSED COMBINED STATEMENT OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2021
(in thousands, except per share data)

	For the Year Ended December 31, 2021				For the Year Ended December 31, 2021
	Peak Bio Co., Ltd.	Ignyte Acquisition Corp.	Transaction Accounting Adjustments		Pro Forma Combined
Revenue:					
Grant revenue	$529	$ —	$ —		$ 529
Total revenue	529	—	—		529
Operating costs and expenses:					
Formation and operating costs	—	969	—		969
Research and development	7,124	—	—		7,124
General and administrative	2,471	—	2,990	**BB**	5,461
Total operating costs and expenses	9,595	969	2,990		13,554
Loss from operations	(9,066)	(969)	(2,990)		(13,025)
Other income (expense):					
Change in fair value of warrants	—	475	—		475
Investment income from Trust Account	—	6	(6)	**AA**	—
Interest expense	(11)	—	—		(11)
(Loss) gain on investment	—	—	—		—
Gain on extinguishment of debt	866	—			866
Total other income (expense)	855	481	(6)		1,330
Net loss before income taxes	(8,211)	(488)	(2,996)		(11,695)
Income tax expense	(82)	—	—		(82)
Net loss	(8,293)	(488)	(2,996)		(11,777)
Other comprehensive loss:					
Foreign currency translation	522	—	—		522
Total comprehensive loss	$(7,771)	$ (488)	$ (2,996)		$ (11,255)
Basic and diluted weighted average shares outstanding, common stock subject to possible redemption		5,259,589			—
Basic and diluted net loss per share		$ (0.07)			$ —
Basic and diluted weighted average shares outstanding, common stock		1,537,500			19,775,757
Basic and diluted net loss per share		$ (0.07)			$ (0.60)

Adjustments to Unaudited Pro Forma Condensed Combined Statements of Operations

The pro forma adjustments included in the unaudited pro forma condensed combined statement of operations for the year ended December 31, 2021, are as follows:

(AA) Represents the elimination of interest income earned on investments held in Trust Account
(BB) Represents transaction related expenditures

NOTES TO UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS

1. Basis of Presentation and Accounting Policies

The Business Combination was accounted for as a reverse recapitalization in accordance with GAAP because Peak Bio Co., Ltd. has been determined to be the accounting acquirer under ASC 805. Under this method of accounting, Ignyte will be the "acquired" company for financial reporting purposes. Accordingly, the consolidated assets, liabilities and results of operations of Peak Bio Co., Ltd. will become the historical financial statements of Peak Bio, Inc., and Ignyte's assets, liabilities and results of operations will be consolidated with Peak Bio beginning on the acquisition date. For accounting purposes, the financial statements of Peak Bio, Inc. will represent a continuation of the financial statements of Peak Bio Co., Ltd. with the Business Combination being treated as the equivalent of Peak Bio Co., Ltd. issuing stock for the net assets of Ignyte, accompanied by a recapitalization. The net assets of Ignyte will be stated at historical costs, with no goodwill or other intangible assets recorded. Operations prior to the Business Combination will be presented as those of Peak Bio Co., Ltd. in future reports of Peak Bio, Inc.

The unaudited pro forma condensed combined financial information reflects all Ignyte's public shareholders that exercised redemption rights with respect to their public shares. A total of 5,159,287 shares were redeemed for an aggregate redemption value of approximately $52.0 million. The resulting redemptions provided Peak Bio with cash at closing of approximately $6.0 million.

The combined company will perform a comprehensive review of the two entities' accounting policies. As a result of the review, management may identify differences between the accounting policies of the two entities which, when conformed, could have a material impact on the financial statements of the combined company.

2. Adjustments to Unaudited Pro Forma Condensed Combined Financial Information

The unaudited pro forma condensed combined financial information has been prepared in accordance with Article 11 of Regulation S-X. The adjustments in the unaudited pro forma condensed combined financial information have been identified and presented to provide relevant information necessary for an illustrative understanding of Peak Bio, Inc. upon consummation of the Business Combination in accordance with GAAP. Assumptions and estimates underlying the unaudited pro forma adjustments set forth in the unaudited pro forma condensed combined financial information are described in the accompanying notes.

The unaudited pro forma condensed combined financial information has been presented for illustrative purposes only and is not necessarily indicative of the operating results and financial position that would have been achieved had the Business Combination occurred on the dates indicated, and does not reflect adjustments for any anticipated synergies, operating efficiencies, tax savings or cost savings. Any cash proceeds remaining after the consummation of the Business Combination and the other related events contemplated by the Business Combination Agreement are expected to be used for general corporate purposes. The unaudited pro forma condensed combined financial information does not purport to project the future operating results or financial position of Peak Bio, Inc. following the completion of the Business Combination. The unaudited pro forma adjustments represent management's estimates based on information available as of the date of these unaudited pro forma condensed combined financial information and are subject to change as additional information becomes available and analyses are performed. Ignyte and Peak Bio Co., Ltd. have not had any historical relationship prior to the transactions, therefore, no pro forma adjustments were required to eliminate activities between the companies.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of Peak Bio's financial condition and results of operations together with Peak Bio's unaudited carve-out condensed consolidated financial statements and audited carve-out consolidated financial statements and notes thereto included elsewhere in this registration statement. Certain of the information contained in this discussion and analysis or set forth elsewhere in this registration statement, including information with respect to plans and strategy for Peak Bio's business, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the section entitled "Risk Factors," Peak Bio's actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis. You should carefully read the section entitled "Risk Factors" to gain an understanding of the important factors that could cause actual results to differ materially from Peak Bio's forward-looking statements. Please also see the section entitled "Cautionary Note Regarding Forward-Looking Statements."

Unless otherwise indicated or the context otherwise requires, references in this Peak Bio's Management's Discussion and Analysis of Financial Condition and Results of Operations section to "Peak Bio," "we," "us," "our" and other similar terms refer to Peak Bio Co., Ltd. (excluding the Non-Peak Bio Assets transferred in the Spin-Off) prior to the Business Combination and to Peak Bio, Inc. and its consolidated subsidiaries after giving effect to the Business Combination.

Overview

Peak Bio is a clinical-stage biopharmaceutical company focused on developing therapeutics addressing significant unmet need in the areas of oncology and inflammation. Our management team has a combined 50 years of industry experience in the areas of small molecules, antibodies, and antibody-drug-conjugates (ADC).

Our lead product candidate, PHP-303 is a small molecule, 5th generation Phase 2 clinical-ready neutrophil elastase (NE) inhibitor (NEI). We are planning a Phase 2 clinical study in Alpha-1 anti-trypsin deficiency (AATD) patients. We have completed two Phase 1 trials of PHP-303 in healthy volunteers testing higher doses of PHP-303 by single-ascending dose (SAD) and multiple-ascending dose (MAD). PHP-303 demonstrated dose-dependent pharmacokinetics and the recommended Phase 2 dose was achieved in these trials. A maximum tolerated dose for PHP-303 was not achieved in these Phase 1 trials.

In addition, we have leveraged two decades of industry learning in the antibody-drug-conjugate (ADC) field to develop a platform of proprietary technologies that enable us to design ADCs to have improved efficacy, safety, and tolerability relative to existing antibody or ADC therapies. Our most advanced platform, PH-1 or Thailanstatin is being used to generate a pipeline of proprietary ADC product candidates to address patient populations with improved efficacy relative to traditional ADC-based therapies. Our second product candidate is an ADC targeting Trop2, an antigen broadly expressed in solid tumors. We expect our Trop2 ADC to enter clinical development by late 2024. Our Trop2 ADC and other undisclosed discovery-stage product candidates are based on our proprietary PH-1 platform of toxin payloads targeting RNA splicing.

Despite commercial success of the ADCs currently on the market, there continues to be a need for ADCs that not only deliver antibody-directed payloads selectively to their tumors, but to also release them safely via improved linker technology and avoid off- target toxicities. Secondly, we believe that adding an immunomodulatory effect to our toxin(s) that engages our immune systems to assist in the cancer killing would contribute to improved tumor killing.

We do not have any products available for commercial sale, and we have not generated any product revenue from our portfolio of product candidates or other sources. Our ability to generate revenue sufficient to achieve profitability, if ever, will depend on the successful development and eventual commercialization of our potential therapies, which we expect, if it ever occurs, will take a number of years. The research and development efforts

require significant amounts of additional capital and adequate personnel infrastructure. There can be no assurance that our research and development activities will be successfully completed, or that our potential therapies will be commercially viable.

We have incurred significant losses since the commencement of our operations. Our net loss was $6.3 for the nine months ended September 30, 2022 and $8.3 million and $13.3 million for the years ended December 31, 2021 and 2020, respectively. We expect to continue to incur significant expenses and operating losses for the foreseeable future as we continue our efforts to identify product candidates and seek regulatory approvals within our portfolio of product candidates. These losses have resulted primarily from costs incurred in connection with research and development activities and to a lesser extent from general and administrative costs associated with our operations. Our net losses may fluctuate significantly from period to period, depending on the timing of and expenditures on our research and development activities.

Recent Developments

Employment Agreements

In January 2022, we entered into an employment agreement with our founder and director. The effective date of the employment agreement was February 1, 2022 and was subject to the completion of the business combination with Ignyte. As part of the agreement, we agreed to repay our founder and director $1.5 million in forwent salary over a period of four years. In addition, as part of the agreement, we agreed to repay $0.5 million of the $1.5 million outstanding upon closing of the Ignyte transaction. The remaining $1.0 million plus accrued interest will be repaid pursuant to the discretion of our Board of Directors. Further, the employment agreement provides for the payment of success fees in connection with future business or corporate development transactions (licensing, product development and acquisitions).

In March 2022, we entered into an employment agreement with our chief operating officer which was subject to the completion of the business combination with Ignyte. The agreement provides for confirmation of Peak Bio's previously agreed upon success fee payment to Dr. LaMond upon consummation of the business combination with Ignyte in the amount of $250,000 and the payment of success fees in connection with future business or corporate development transactions (licensing, product development and acquisitions).

Spin-Off

Effective March 1, 2022, we spun off certain assets to a newly formed company in Korea ("SpinCo") that we refer to in the Business Combination Agreement as "Non-Peak Bio Assets" (the "Spin-Off"). Those Non-Peak Bio Assets include PH-2 (Spliceostatin) toxin licensed from a third-party, the PH-3 (Callyspongiolide) toxin licensed from a third party, PH-4 (PBD Hybrid), and PHP-201 (Sovesudil).

As a result, we will require additional financing to fund our ongoing activities. We may raise this additional funding through the sale of equity, debt financings or other capital sources, including potential collaborations with other companies or other strategic transactions and funding under government contracts. We may be unable to raise additional funds or to enter into such agreements or arrangements on favorable terms, or at all. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate certain of our research and development programs. There can be no assurances that other sources of financing would be available. The amount and timing of our future funding requirements will depend on many factors, including the pace and results of our research and development efforts.

VennDC, LLC ("Venn")

In December 2019, a collaboration and license agreement (the "License Agreement") was entered into with Venn to pursue research and development of certain payload and linker technologies that are useful for the development of antibody-drug conjugates. This collaboration was expected to allow Venn to further develop and

commercialize such antibody-drug conjugates developed under the collaboration. Under the collaboration agreement with Venn, we received a $400,000 upfront payment and was expected to be eligible to receive reimbursement of costs and expenses incurred, certain development and regulatory milestone payments, royalties and commercial milestone payments with respect to licensed products for each product. Milestone payments were expected to be payable following the achievement of certain development, regulatory and commercial milestone events in each product, up to an aggregate of $107.1 million per product. Royalty payments were expected to be based on net sales of licensed products on a licensed product-by-licensed product basis. The initial term of the research collaboration was expected to be three years. During the nine months ended September 30, 2022 and the years ended December 31, 2021 and 2020, we did not recognize any revenue related to the upfront payment as it was not probable that a significant reversal in the amount of cumulative revenue recognized would not occur. In addition, no reimbursement of costs and expenses incurred, and no other payments (for development and regulatory milestones, royalties, and commercial milestones with respect to licensed products for each product) were received by us during the nine months ended September 30, 2022 and years ended December 31, 2021 and 2020, as none of the performance obligations were satisfied by us. At December 31, 2021 and 2020, we recorded a liability to accrued expense of $400,000 related to this payment.

In April 2022, we entered into an agreement with our founder and director, in consideration of the repayment to be made by our founder and director to settle a contractual obligation for the upfront payment we received associated with the License Agreement with Venn. Per the agreement, we agreed to repay our founder and director $400,000, with interest to accrue on the unpaid principal balance at the rate of 1% per annum. The timing of the repayment will be determined and pursuant to the discretion of our Board of Directors.

In May 2022, our founder and director repaid to Venn the $400,000 upfront payment and the License Agreement was terminated. At September 30, 2022. we recorded a liability to related party loans of $400,000 related to this payment.

Financing

In May 2022, we entered into an agreement with a certain investor in which the investor purchased an aggregate of 63,856 shares of Peak Bio Co., Ltd. common stock for aggregate gross proceeds of approximately $1.2 million.

From July through September 2022, we received proceeds from loans in the amount of $1.25 million from several lenders. The loans mature on the second anniversary and bear interest at a rate of 5.0% per annum. The loans were evidenced by promissory notes, which contain customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. The loans may not be prepaid by us at any time prior to maturity without the consent of the lender. We will provide for the conversion of the principal and interest of the loans into shares of common stock at fair market value and 25% warrant coverage on common stock prior to the consummation of the Business Combination. Warrant coverage is conditioned on closing of the Business Combination and will be exercisable after the closing of the Business Combination with an exercise price of $0.01.

In September 2022, we received proceeds from a loan in the amount of $0.5 million from one of our director nominees. The loan matures on the second anniversary and bear interest at a rate of 5.0% per annum. The loan was evidenced by a promissory note, which contains customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. The loan may be prepaid by us at any time prior to maturity without the consent of the lender.

Ignyte Acquisition Corp (Ignyte)

On November 1, 2022 (the “Closing Date”), we completed the transactions contemplated by that certain business combination agreement, dated as of April 28, 2022 (the “Business Combination Agreement”), by and

among Ignyte, Ignyte Korea Co., Ltd., a corporation organized under the laws of the Republic of Korea ("Korean Sub"), and Peak Bio Co., Ltd. At the closing of the transactions, (i) the stockholders of Peak Bio Co., Ltd. transferred their respective shares of common stock to Korean Sub in exchange for shares of Ignyte common stock held by Korean Sub, and (ii) in the course of such share swap, Korean Sub distributed the shares of Peak Bio Co., Ltd. common stock to Ignyte in consideration of Ignyte common stock (which was in-turn delivered to the stockholders of Peak Bio Co., Ltd. as described in (i) above ((i) and (ii), collectively, the "Share Swap"). Upon consummation of the Share Swap, Peak Bio Co., Ltd. became a direct wholly-owned subsidiary of Ignyte. The transactions contemplated by the Business Combination Agreement are referred to herein as the "Business Combination."

On the Closing Date, a purchaser (the "Original Subscriber") purchased from us an aggregate of 50,000 shares of Ignyte Common Stock (the "Original PIPE Shares"), for a purchase price of $10.00 per share and an aggregate purchase price of $500,000, pursuant to a subscription agreement entered into effective as of April 28, 2020 (the "Original Subscription Agreement").

On the Closing Date, a number of additional purchasers (each, a "New Subscriber") purchased from us an aggregate of (i) 302,500 shares of Ignyte Common Stock (the "New PIPE Shares") and (ii) 281,325 warrants (the "PIPE Financing Warrants") to purchase shares of Ignyte Common Stock, at an exercise price of $0.01 per share, for a purchase price of $10.00 per share and an aggregate purchase price of $3,025,000, pursuant to separate subscription agreements entered into effective as of October 31, 2022 (each a "New Subscription Agreement"). The PIPE Financing Warrants are on terms substantially the same as the outstanding warrants that were included in the units issued in Ignyte's initial public offering, except that the new warrants are not redeemable, and the warrants shall be exercisable for one year.

On the Closing Date, a number of Peak Bio's lenders (each, a "Bridge Loan PIPE Subscriber" and together with the Original Subscriber and the New Subscribers, the "Subscribers") purchased from us an aggregate of (i) 176,579 shares of Ignyte Common Stock (the "Bridge Loan PIPE Shares" and together with the Original PIPE Shares and the New PIPE Shares, the "PIPE Shares") and (ii) 164,218 warrants (the "Bridge Loan PIPE Financing Warrants" and together with the PIPE Financing Warrants, the "PIPE Warrants") to purchase shares of Ignyte Common Stock, at an exercise price of $0.01 per share, in consideration for their agreement to cancel an aggregate principal amount of $1,750,000 and the interest accrued thereon in promissory notes evidencing the loans such lenders had extended to Peak Bio Co., Ltd. between July and September 2022, pursuant to separate subscription agreements entered into effective as of October 31, 2022 (each a "Bridge Loan PIPE Subscription Agreement" and together with the Original Subscription Agreement and the New Subscription Agreements, the "Subscription Agreements"). The Bridge Loan PIPE Financing Warrants are on terms substantially the same as the outstanding warrants that were included in the units issued in Ignyte's initial public offering, except that the new warrants are not redeemable, and the warrants shall be exercisable for one year.

Pursuant to the Subscription Agreements, we gave certain registration rights to the Subscribers with respect to the PIPE Shares and the PIPE Warrants. The sale of the PIPE Shares and PIPE Warrants was consummated concurrently with the Closing.

Upon the Closing, Ignyte as the registrant changed its name to "Peak Bio, Inc."

Convertible Note

On November 1, 2022, we issued a $1,512,500 convertible note. The convertible note accrues interest at a rate of 8% per annum and is payable on October 31, 2023, provided however that we agree to make mandatory prepayments on this note (which shall first be applied to accrued interest and then to principal) from time to time in amounts equal to 15% of the gross proceeds received by us from any equity lines, forward purchase agreements or other equity financings consummated by us prior to the maturity date.

On the maturity date, the note holder may, in its sole and absolute discretion, convert all or part of the principal and/or accrued interest of this convertible note into shares of our common stock of at a per share conversion price equal to 90% of the volume weighted average price of a share of our common stock for the five trading days immediately prior to the maturity date.

White Lion Common Stock Purchase and Registration Rights Agreements

On November 3, 2022, we entered into the White Lion Purchase Agreement and the White Lion RRA with White Lion. Pursuant to the White Lion Purchase Agreement, we have the right, but not the obligation to require White Lion to purchase, from time to time, up to $100,000,000 in aggregate gross Purchase Price of newly issued shares of our Common Stock, par value $0.0001 per share (the "Common Stock"), subject to certain limitations and conditions set forth in the White Lion Purchase Agreement. Capitalized terms used but not otherwise defined in this section shall have the meanings given to such terms by the White Lion Purchase Agreement and the White Lion RRA.

We are obligated under the White Lion Purchase Agreement and the White Lion RRA to file a registration statement with the SEC to register the Common Stock under the Securities Act, for the resale by White Lion of shares of Common Stock that we may issue to White Lion under the White Lion Purchase Agreement.

Subject to the satisfaction of certain customary conditions including, without limitation, the effectiveness of a registration statement registering the shares issuable pursuant to the White Lion Purchase Agreement, our right to sell shares to White Lion will commence on the effective date of the registration statement and extend until November 1, 2025. During such term, subject to the terms and conditions of the White Lion Purchase Agreement, we may notify White Lion when we exercise our right to sell shares (the effective date of such notice, a "Notice Date").

The number of shares sold pursuant to any such notice may not exceed (i) the lower of (a) the Purchase Notice Fixed Limit (described below) and (b) the product of (1) the Average Daily Trading Volume, and (2) the applicable Percentage Limit. The Purchase Notice Fixed Limit is $500,000 upon payment of the Initial Commitment Shares and can be increased in two tranches: (A) to $1,000,000 following an aggregate purchase of $5,000,000 shares and issuance by us to White Lion of an additional $250,000 in Commitment Shares, and (B) to $2,000,000 following an aggregate purchase of $10,000,000 shares and issuance by the for payment of an additional $250,000 in Commitment Shares.

The applicable Percentage Limit is 40% or 150% depending on the price we agrees to sell shares to White Lion. At an applicable Percentage Limit of 40%, the Purchase Price to be paid by White Lion for any such shares will equal 97% of lowest daily volume-weighted average price of Common Stock during a period of two consecutive Trading Days following the applicable Purchase Notice Date until an aggregate of $50,000,000 in Purchase Notice Shares have been purchased under White Lion Purchase Agreement, at which point the Purchase Price to be paid by White Lion will equal 98% of the lowest daily volume-weighted average price of Common Stock during a period of two consecutive Trading Days following the applicable Purchase Notice Date. At an applicable Percentage Limit of 150%, the Purchase Price to be paid by White Lion for any such shares will equal 94.5% of the lowest daily volume-weighted average price of Common Stock during a period of three consecutive Trading Days following the applicable Purchase Notice Date.

We will have the right to terminate the White Lion Purchase Agreement at any time after commencement, at no cost or penalty, upon three (3) Trading Days' prior written notice. Additionally, White Lion will have the right to terminate the White Lion Purchase Agreement upon three (3) days' prior written notice to us if (i) there is a Fundamental Transaction, (ii) we are in breach or default in any material respect of the White Lion RRA, (iii) there is a lapse of the effectiveness, or unavailability of, the registration statement for a period of 45 consecutive Trading Days or for more than an aggregate of 90 Trading Days in any 365-day period, (iv) the suspension of trading of the Common Stock for a period of five (5) consecutive Trading Days, (v) the material

breach of the White Lion Purchase Agreement by us, which breach is not cured within the applicable cure period or (vi) a Material Adverse Effect has occurred and is continuing. No termination of the White Lion Purchase Agreement will affect the registration rights provisions contained in the White Lion RRA. In consideration for the commitments of White Lion, as described above, we have agreed that it will issue to White Lion shares of Common Stock having a value of $250,000 based upon the Closing Sale Price of Common Stock two Trading Days prior to the filing of the Initial Registration Statement as Initial Commitment Shares. We may increase the number of shares it may sell to White Lion by issuing additional Commitment Shares in two additional tranches of $250,000 each. The Company issued Initial Commitment Shares of 50,200 shares of Common Stock to White Lion, based upon the Closing Sale Price of our Common Stock of $4.98 per share on November 30, 2022.

Concurrently with the execution of the White Lion Purchase Agreement, we entered into the White Lion RRA with White Lion in which we have agreed to register the shares of Common Stock purchased by White Lion with the SEC for resale within 30 days of the consummation of a business combination. The White Lion RRA also contains usual and customary damages provisions for failure to file and failure to have the registration statement declared effective by the SEC within the time periods specified.

The White Lion Purchase Agreement and the White Lion RRA contain customary representations, warranties, conditions and indemnification obligations of the parties. The representations, warranties and covenants contained in such agreements were made only for purposes of such agreements and as of specific dates, were solely for the benefit of the parties to such agreements and may be subject to limitations agreed upon by the contracting parties.

Components of Results of Operations

Operating Expenses

Prior to April 1, 2022, the carve-out condensed consolidated financial statements have been extracted from the accounting records of pH Pharma, Ltd. The historical results of operations, financial position, and cash flows may not be indicative of what we would have been had we been a separate stand-alone entity, nor are they indicative of what the results of operations, financial position and cash flows may be in the future.

The majority of our operating expenses related to research and development ("R&D"). R&D expenses directly related to us were entirely attributed to us in the accompanying carve-out consolidated financial statements. R&D salaries, wages and benefits were allocated to us using methodologies based on the proportionate share of R&D expenses for the PHP-303 and PH-1 ADC Platform programs compared to the R&D expenses for pH Pharma Ltd as a whole. We also received services and support from other functions of pH Pharma Ltd. Our operations are dependent upon the ability of these other functions to provide these services and support. The costs associated with these services and support were allocated to us using methodologies based on the proportionate share of R&D expenses for the PHP-303 and PH-1 ADC Platform programs compared to the R&D expenses for pH Pharma Ltd as a whole. These allocated costs were primarily related to corporate administrative expenses, non-R&D employee related costs, including salaries and other benefits, for corporate and shared employees, and other expenses for shared assets for the following functional groups: information technology, legal, accounting and finance, human resources, facilities, and other corporate and infrastructural services. These allocated costs were primarily recorded as R&D expenses and general and administrative ("G&A") expenses in the statements of operations and comprehensive loss.

The Spin-Off resulted in Peak Bio Co., Ltd. retaining the PHP-303 and PH-1 ADC Platform programs. Historically and throughout the periods presented, the PHP-303 and PH-1 ADC Platform programs have been owned by pH Pharma Co., Ltd and its subsidiaries (prior to the change of its name to Peak Bio Co., Ltd.). The PHP-303 and PH-1 ADC Platform programs have historically operated as a part of pH Pharma Co., Ltd and not as a separate stand-alone entity or group. The Spin-Off resulted in Peak Bio Co., Ltd. retaining approximately 90% of the equity outstanding in pH Pharma Co., Ltd., consisting of 8,283,613 shares of common stock and 693,000 stock options.

As of April 1, 2022, we concluded that all the assets and liabilities of the newly created Peak Bio Co., Ltd. legal entity were contributed by the parent company pH Pharma Ltd. No other assets or liabilities were considered to be attributable to Peak Bio Co., Ltd. or that would be transferred to Peak Bio Co., Ltd. upon the completion of the Business Combination, eliminating the necessity to allocate a portion of pH Pharma Ltd.'s assets and liabilities to Peak Bio Co., Ltd. on a carve-out basis. Therefore, there was no longer a need to allocate assets and liabilities, as well as expenses, from the parent for the carve-out condensed consolidated financial statements.

Our carve-out condensed consolidated financial statements for the nine months ended September 30, 2022 include the accounts of Peak Bio Co., Ltd. and its subsidiary, Peak Bio CA., Inc. All intercompany balances and transactions have been eliminated in consolidation.

Revenue

Our revenue has historically been generated through grants from government organizations. We currently have no commercially approved products. Grant revenue is recognized during the period that the research and development services occur, as qualifying expenses are incurred or conditions of the grants are met. We concluded that payments received under these grants represent conditional, nonreciprocal contributions, as described in ASC 958, *Not-for-Profit Entities*, and that the grants are not within the scope of ASC 606, *Revenue from Contracts with Customers*, as the organizations providing the grants do not meet the definition of a customer. Qualifying expenses are recognized when incurred as research and development expenses. Expenses for grants are tracked by using a project code specific to the grant, and the employees also track hours worked by using the project code.

Research and Development Expense

We expense research and development costs as incurred. Research and development expense consist primarily of costs related to personnel, including salaries and other personnel related expenses, contract manufacturing and supply, consulting fees, and the cost of facilities and support services used in drug development. Assets acquired that are used for research and development and have no future alternative use are expensed as in-process research and development.

General and Administrative Expenses

Our general and administrative expenses consist primarily of personnel costs, depreciation expense and other expenses for outside professional services, including legal fees relating to patent and corporate matters, human resources, audit and accounting services and facility-related fees not otherwise included in research and development expenses. Personnel costs consist of salaries, benefits and equity-based compensation expense, for our personnel in executive, finance and accounting, business operations and other administrative functions. We expect our general and administrative expenses to increase over the next several years to support our continued research and development activities, manufacturing activities, increased costs of expanding our operations and operating as a public company. These increases will likely include increases related to the hiring of additional personnel, fees to outside consultants, lawyers and accountants, and increased costs associated with being a public company such as expenses related to services associated with maintaining compliance with Nasdaq listing rules and SEC requirements, director and officer insurance premiums and investor relations costs.

Results of Operations for the Nine Months Ended September 30, 2022 and 2021

The following table provides selected financial information for the Company:

	Nine Months Ended September 30,		Change
	2022	2021	Amount
Revenues	$346,413	$497,578	$(151,165)
Operating expenses			
Research and development	3,443,147	5,759,896	(2,316,749)
General and administrative	3,543,018	1,663,734	1,879,284
Total operating expenses	6,986,165	7,423,630	(437,465)
Loss from operations	(6,639,752)	(6,926,052)	286,300
Other income, net	252,547	364,076	(111,529)
Loss before income tax benefit (expense)	$(6,387,205)	$(6,561,976)	$174,771

Revenue

Our revenue has historically been generated through grants from government organizations. The total revenue for government grants was $346,413 and $497,578 for the nine months ended September 30, 2022 and 2021, respectively.

Research and Development Expense

The following table summarizes our research and development expenses:

	Nine Months Ended September 30,	
	2022	2021
Third-party direct project expenses		
PHP-303	$371,218	$755,564
PH-1 ADC Platform	351,107	262,891
General program expenses and other pre-clinical programs	344,821	1,511,395
Total third-party direct project expenses	1,067,146	2,529,850
Other research and development costs		
Personnel costs	1,174,757	2,189,424
Facilities and other costs	1,201,244	1,040,622
Total other research and development costs	2,376,001	3,230,046
Total research and development costs	$3,443,147	$5,759,896

Research and development expense decreased by $2.3 million during the nine months ended September 30, 2022 compared to the nine months ended September 30, 2021. The decrease was primarily due to decreases in direct project expenses related to the PHP-303 program of $0.4 million and general program expenses and other pre-clinical programs of $1.2 million. In addition, there was a decrease in personnel costs of $1.0 million driven by a reduction of staff allocated to the Company during 2022. This decrease was partially offset by an increase to facilities and other costs of $0.2 million.

General and Administrative Expense

General and administrative expense increased by $1.9 million during the nine months ended September 30, 2022 compared to the nine months ended September 30, 2021. The increase was primarily driven by an increase

in professional fees of $1.4 million and consultants and other costs of $0.7 million primarily related to the Ignyte transaction, partially offset by a decrease in personnel costs of $0.2 million driven by a reduction of staff allocated to the Company during 2022.

Other Income, Net

Other income, net decreased by $111,529 during the nine months ended September 30, 2022 compared to the nine months ended September 30, 2021 primarily due to the receipt of an employee retention credit of $323,000 and fair value adjustments on the convertible promissory notes of $87,000 during the nine months ended September 30, 2022 and a $368,000 gain on extinguishment of debt related to our Paycheck Protection Program ("PPP") during the nine months ended September 30, 2021.

Results of Operations for the Years Ended December 31, 2021 and 2020

The carve-out consolidated financial statements have been extracted from the accounting records of pH Pharma, Ltd. The historical results of operations, financial position, and cash flows may not be indicative of what we would have been had we been a separate stand-alone entity, nor are they indicative of what the results of operations, financial position and cash flows may be in the future.

The majority of our operating expenses related to research and development. Research and development expenses directly related to us were entirely attributed to us in the accompanying carve-out consolidated financial statements. research and development salaries, wages and benefits were allocated to us using methodologies based on the proportionate share of research and development expenses for the PHP-303 and PH-1 ADC Platform programs compared to the research and development expenses for pH Pharma Ltd as a whole. We also received services and support from other functions of pH Pharma Ltd. Our operations are dependent upon the ability of these other functions to provide these services and support. The costs associated with these services and support were allocated to us using methodologies based on the proportionate share of research and development expenses for the PHP-303 and PH-1 ADC Platform programs compared to the research and development expenses for pH Pharma Ltd as a whole. These allocated costs were primarily related to corporate administrative expenses, non-research and development employee related costs, including salaries and other benefits, for corporate and shared employees, and other expenses for shared assets for the following functional groups: information technology, legal, accounting and finance, human resources, facilities, and other corporate and infrastructural services. These allocated costs were primarily recorded as research and development expenses and general and administrative expenses in the statements of operations and comprehensive loss.

The following table provides selected financial information for the Company:

	Year Ended December 31,		Change
	2021	2020	Amount
Revenues	$528,309	$—	$528,309
Operating expenses			
Research and development	7,124,077	10,400,570	(3,276,493)
General and administrative	2,469,762	2,938,111	(468,349)
Total operating expenses	9,593,839	13,338,681	(3,744,842)
Loss from operations	(9,065,530)	(13,338,681)	4,273,151
Other income (expense), net	855,021	(2,487)	857,508
Loss before income tax expense	$(8,210,509)	$(13,341,168)	$5,130,659

Revenue

Our revenue has historically been generated through grants from government organizations. The total revenue for government grants was $528,309 and $0, respectively, for the years ended December 31, 2021 and 2020.

Research and Development Expense

The following table summarizes our research and development expenses:

	Year Ended December 31,	
	2021	2020
Third-party direct project expenses		
PHP-303	$1,063,702	$1,903,014
PH-1 ADC Platform	1,134,817	1,289,348
General program expenses and other pre-clinical programs	891,493	1,870,021
Total third-party direct project expenses	3,090,012	5,062,383
Other research and development costs		
Personnel costs	2,555,631	3,701,118
Facilities and other costs	1,478,434	1,637,069
Total other research and development costs	4,034,065	5,338,187
Total research and development costs	$7,124,077	$10,400,570

Research and development expense decreased by $3.3 million during the year ended December 31, 2021 compared to the prior year. The decrease was primarily due to decreases in direct project expenses related to the PHP-303 program of $839,000, the PH-1 ADC Platform of $155,000 and other general and pre-clinical programs of $979,000 as a result of delays in our ongoing and planned research activities due to the COVID-19 pandemic. In addition, there was a decrease in personnel costs of $1.1 million driven by a reduction of staff during 2021. We reduced our average headcount from 33 to 21 employees primarily as a result of scaling back our clinical activities as a result of the COVID-19 pandemic.

General and Administrative Expense

General and administrative expense decreased by $468,000 during the year ended December 31, 2021 compared to the prior year. The decrease was primarily driven by a decrease in personnel costs of $538,000 driven by a reduction of staff during 2021. We reduced our average headcount from 12 to 9 employees primarily as a result of scaling back operating activities as a result of the COVID-19 pandemic.

Other Income (Expense), Net

Other income (expense), net increased by $858,000 during the year ended December 31, 2021 compared to the prior year. The increase was primarily due to a $866,332 gain on extinguishment of debt related to our PPP loans plus accrued interest.

Liquidity and Capital Resources

Sources of Liquidity

Since our inception, we have not generated any revenue from product sales and have incurred significant operating losses and negative cash flows from our operations. Our net loss was $6.3 million for the nine months ended September 30, 2022 and $8.3 million and $13.3 million for the years ended December 31, 2021 and 2020, respectively. In May 2022, we entered into an agreement with a certain investor in which the investor purchased an aggregate of 63,856 shares of Peak Bio Co., Ltd. common stock for aggregate gross proceeds of approximately $1.2 million. From July through September 2022, we received proceeds from loans in the amount of $1.75 million from several lenders. Our primary uses of cash to date have been to fund our research and development activities, business planning, establishing and maintaining our intellectual property portfolio, capital investments related to the Palo Alto, California office and laboratory facility and providing general and administrative support for our operations.

Funding Requirements

We expect to incur losses from operations for the foreseeable future primarily due to research and development expenses, including expenses related to conducting research activities, pre-clinical expenses and clinical trials. Our future capital requirements will depend on a number of factors, including:

- the scope, progress, results and costs of our clinical trials, including but not limited to PHP-303 and our PH-1 ADC Platform;
- the cost of manufacturing drug supply for our clinical and preclinical studies;
- the future results of on-going preclinical research and subsequent clinical trials for treatments for oncology, genetic disease, liver disease, inflammation, and other pipeline candidates we may identify from time to time, including our ability to obtain regulatory approvals;
- any changes in regulatory standards relating to the review of our product candidates; and our ability to timely obtain such required regulatory approvals;
- the number and development requirements of other product candidates that we pursue;
- the emergence of competing technologies and other adverse market developments;
- our ability, and the ability of our third-party manufacturers, to manufacture or supply sufficient quantities of clinical products;
- the costs of future commercialization activities, if any, including establishing sales, marketing, manufacturing and distribution capabilities, for any of our product candidates for which we receive marketing approval;
- our ability to achieve the degree of market acceptance necessary for future commercial success of our product candidates for which we receive marketing approval, if any;
- the costs of preparing, filing, and prosecuting patent applications and maintaining, enforcing, and defending intellectual property-related claims;
- the impact of litigation that may be brought against us or of litigation that we may pursue against others;
- the extent to which we acquire or invest in businesses, products, and technologies;
- our ability to successfully integrate acquired products and technologies into our business, including the possibility that the expected benefits of the transactions will not be fully realized by us or may take longer to realize than expected;
- our ability to establish and maintain collaborations, partnerships or other similar arrangements and to obtain or satisfy any milestone, royalty, or other payments from any such collaborations;
- the extent to which our business could be adversely impacted by the effects of COVID-19 outbreak, including due to actions by us, governments, suppliers or other third parties to control the spread of COVID-19, or by other health epidemics or pandemics; and
- the costs of operating as a public company.

We have not been capitalized with sufficient funding to conduct our operations. We have no available cash or credit facilities. We are dependent upon pH Pharma and its affiliates to provide services and funding to support our operations until, at least, such time as external financing is completed. We expect to incur significant expenses and operating losses for the foreseeable future as we continue our efforts to identify product candidates and seek regulatory approvals within our gene therapy portfolio.

Additional financing will be needed to fund our ongoing activities. We may raise this additional funding through the sale of equity, debt financings or other capital sources, including potential collaborations with other

companies or other strategic transactions and funding under government contracts. We may be unable to raise additional funds or enter into such other arrangements or arrangement when needed on favorable terms, or at all. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate certain of our research and development programs. There can be no assurances that other sources of financing would be available or that pH Pharma Ltd will continue to financially support our operations. Due to these uncertainties, there is substantial doubt about our ability to continue as a going concern.

Our future operations are highly dependent on a combination of factors, including (i) the timely and successful completion of additional financing; (ii) the success of our research and development programs; (iii) the development of competitive therapies by other biotechnology and pharmaceutical companies, (iv) our ability to attract and retain key employees, (v) our ability to manage growth of the organization; (vi) our ability to protect our proprietary technology; and ultimately (vii) regulatory approval and market acceptance of our product candidates.

Cash Flows Discussion

The following table summarizes our cash flows for the periods indicated:

	Nine Months Ended September 30,	
	2022	2021
Net cash used in operating activities	$(3,786,504)	$(7,017,268)
Net cash used in investing activities	(128,454)	(7,540)
Net cash provided by financing activities	4,175,505	7,101,473
Net increase in cash, cash equivalents and restricted cash	$260,547	$76,665

	Year Ended December 31,	
	2021	2020
Net cash used in operating activities	$(8,864,224)	$(11,644,564)
Net cash used in investing activities	(9,880)	(341,320)
Net cash provided by financing activities	8,385,001	12,658,130
Net (decrease) increase in cash, cash equivalents and restricted cash	$(489,103)	$672,246

Operating Activities

During the nine months ended September 30, 2022, net cash used in operating activities was $3.8 million, due to our operating loss of $6.3 million, partially offset by non-cash items including amortization of right-of-use asset of $0.6 million, depreciation expense of $0.1 million, and share-based compensation of $0.4 million, as well as a decrease in working capital of $1.3 million.

During the nine months ended September 30, 2021, net cash used in operating activities was $7.0 million, due to our operating loss of $6.6 million, gain on extinguishment of debt of $0.4 million and an increase in working capital of $0.1 million, partially offset by non-cash items including depreciation expense of $0.1 million.

During the year ended December 31, 2021, net cash used in operating activities was $8.9 million, due to our operating loss of $8.3 million, a non-cash gain on extinguishment of debt of $0.9 million and an increase in working capital of $93,000, partially offset by depreciation expense of $0.2 million and share-based compensation of $4,890.

During the year ended December 31, 2020, net cash used in operating activities was $11.6 million, due to our operating loss of $13.3 million, partially offset by share-based compensation of $0.9 million, working capital of $0.5 million and depreciation expense of $0.2 million.

Investing Activities

During the nine months ended September 30, 2022 and 2021, net cash used in investing activities was $128,454 and $7,540, respectively, primarily due to capital expenditures for furniture and fixtures related to the office in South San Francisco, California.

During the year ended December 31, 2021, net cash used in investing activities was $9,880, primarily due to purchases of research equipment and leasehold improvements related to the Palo Alto, California office and laboratory facility.

During the year ended December 31, 2020, net cash used in investing activities was $0.3 million, primarily due to capital expenditures for furniture and fixtures and leasehold improvements related to the office in South San Francisco, California.

Financing Activities

During the nine months ended September 30, 2022 net cash provided by financing activities was driven by the net proceeds from pH Pharma Ltd of $1.3 million, proceeds from the issuance of long-term debt of $1.3 million, proceeds from a related party loan of $0.5 million and the issuance of common stock for $1.2 million.

During the nine months ended September 30, 2021, net cash provided by financing activities was driven by the net proceeds from pH Pharma Ltd of $5.1 million and a PPP loan of $0.5 million.

During the year ended December 31, 2021, net cash provided by financing activities was driven by the net proceeds from pH Pharma Ltd of $6.4 million, a related party loan of $1.5 million and a PPP loan of $0.5 million, which was forgiven during the year ended December 31, 2021.

During the year ended December 31, 2020, net cash provided by financing activities was driven by the net proceeds from pH Pharma Ltd of $12.3 million and a PPP loan of $0.4 million, which was forgiven during the year ended December 31, 2021.

Contractual Obligations and Commitments

In October 2021, we entered into a lease for laboratory and office facilities in Palo Alto, California that expires in March 2027 with a five-year renewal option and opened a secured letter of credit with a third-party financial institution in lieu of a security deposit for $177,000. Base rent for this sublease is approximately $89,000 monthly with annual escalations of 3%.

On March 1, 2022, we and pH Pharma Ltd entered into an administrative services and facilities agreement whereby pH Pharma Ltd will perform services, functions and responsibilities for us. Under the agreement, we will pay pH Pharma Ltd $100,000 per month through August 30, 2022 and $15,000 from September 1, 2022 through February 28, 2023 based on the estimated value of the level of service to be performed. Additionally, we will pay pH Pharma Ltd $3,000 per month in lease payments. At September 30, 2022 we recorded a liability to accounts payable of $498,000 related to this agreement.

Off-Balance Sheet Arrangements

We had no off-balance sheet arrangements as of September 30, 2022 and December 31, 2021 and 2020.

Critical Accounting Policies and Significant Judgments and Estimates

Our discussion and analysis of our financial condition and results of operations are based on our carve-out consolidated financial statements included within this registration statement, which we have prepared in accordance with U.S. GAAP. The preparation of these carve-out consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the carve-out consolidated financial statements, as well as the reported expenses during the reporting periods. On an ongoing basis, we evaluate our estimates and judgments, including those described in greater detail below. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We believe that the following discussion represents our critical accounting policies.

Research and Development

We expect to continue to incur substantial research and development expenses as we continue to develop our product candidates. Research and development expense consists of:

- internal costs associated with our research and clinical development activities;
- fees owed to third-party contract research organizations in connection with preclinical, toxicology studies and clinical trials;
- payments we make to contract manufacturers, investigative sites, and consultants in connection with clinical trials;
- technology license costs;
- manufacturing development costs;
- personnel-related expenses, including salaries, benefits, travel, and related costs for the personnel involved in drug discovery and development;
- activities relating to regulatory filings and the advancement of our product candidates through preclinical studies and clinical trials; and
- facilities and other allocated expenses, which include direct and allocated expenses for rent, facility maintenance, as well as laboratory and other supplies.

We have multiple research and development projects ongoing at any one time. We utilize our internal resources, employees, and infrastructure across multiple projects. We record and maintain information regarding external, out-of-pocket research and development expenses on a project-specific basis.

We expense research and development costs as incurred, including payments made to date under our license agreements. We believe that significant investment in product development is a competitive necessity and plan to continue these investments in order to realize the potential of our product candidates. The successful development of our product candidates is highly uncertain. At this time, we cannot reasonably estimate or know the nature, timing, and costs of the efforts that will be necessary to complete the remainder of the development of our product candidates. As a result, we are not able to reasonably estimate the period, if any, in which material net cash inflows may commence from our product candidates. This uncertainty is due to the numerous risks and uncertainties associated with the conduct, duration, and cost of clinical trials, which vary significantly over the life of a project as a result of evolving events during clinical development, including:

- the number of clinical sites included in the trials;
- the length of time required to enroll suitable patients;

- the number of patients that ultimately participate in the trials;
- the results of our clinical trials; and
- any mandate by the FDA or other regulatory authority to conduct clinical trials beyond those currently anticipated.

Our expenditures are subject to additional uncertainties, including the terms and timing of regulatory approvals, and the expense of filing, prosecuting, defending, and enforcing any patent claims or other intellectual property rights. We may obtain unexpected results from our clinical trials. We may elect to discontinue, delay, or modify clinical trials of some product candidates or focus on others. A change in the outcome of any of the foregoing variables with respect to the development of a product candidate could mean a significant change in the costs and timing associated with the development, regulatory approval, and commercialization of that product candidate. For example, if the FDA or other regulatory authorities were to require us to conduct clinical trials beyond those which we currently anticipate, or if we experience significant delays in enrollment in any of our clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development. Drug development takes several years and millions of dollars in development costs.

Share-based Compensation

We recognize share-based compensation expense for grants under the pH Pharma Ltd stock option plan (the "Plan"), which provides for the granting of stock options to purchase common stock in pH Pharma Ltd to employees, directors, advisors, and consultants at a price to be determined by pH Pharma Ltd' Board of Directors. The Plan is intended to encourage ownership of stock by employees and consultants of the Company and to provide additional incentives for them to promote the success of pH Pharma Ltd' business. Under the provisions of the Plan, stock option will generally have a term of 7 years. The Board of Directors of pH Pharma Ltd, or its committee, is responsible for determining the individuals to be granted stock options, the number of stock options each individual will receive, the stock option price per share, and the exercise period of each stock option. Stock options granted pursuant to the Plan generally vest on the second-year anniversary date of grant and may be exercised in whole or in part for 100% of the shares vested at any time after the date of grant.

The Spin-Off was completed on March 1, 2022, prior to the execution of the Business Combination Agreement with Ignyte Acquisition Corp ("Ignyte"), with holders of stock options in the Plan retaining 693,000 stock options in us and 77,000 in the spun-out company pH Pharma Co., Ltd. Since this allocation of stock options was administrative in nature, it did not result in any incremental stock-based compensation expense under modification accounting.

The Black-Scholes option pricing model is used when estimating the grant date fair value for stock-based awards. Use of a valuation model requires management to make certain assumptions with respect to selected model inputs. Expected volatility was based on the historical volatility of a publicly traded set of peer companies of pH Pharma Ltd. The expected life was equal to the contractual life of the stock option. The risk-free interest rate is based on U.S. Treasury, zero-coupon issues with a remaining term equal to the expected life assumed at the date of grant.

Determination of the Fair Value of Convertible Notes

We have elected the fair value option for the accounting for the convertible promissory notes issued in 2022. Fair value adjustments to the convertible notes are included in our other income (expenses).

- The fair value of the initial closing of our convertible promissory notes in 2022 was determined to be equal to the proceeds of $1.25 million on issuance.

- The fair value of the convertible promissory notes as of September 30, 2022 was determined using a scenario-based valuation method based on the closing of the Business Combination Agreement. We assumed a 70%-75% probability of closing the Business Combination Agreement and 25%-30% probability of not closing at issuance of the convertible promissory notes. We assumed an 80% probability of closing the Business Combination Agreement and 20% probability of not closing at September 30, 2022.

Income Taxes

We had $42,000 and $109.0 million of federal and South Korea net operating loss carryforwards, respectively, as of December 31, 2021. Our carryforwards are subject to review and possible adjustment by the appropriate taxing authorities. These carryforwards may generally be utilized in any future period but may be subject to limitations based upon changes in the ownership of our shares in a prior or future period. We have not quantified the amount of such limitations, if any. The Korean net operating losses are historical net operating losses generated in years prior to the carve-out financials.

Recently Issued Accounting Standards

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 2, Summary of Significant Accounting Policies, to our carve-out condensed consolidated financial statements and our audited carve-out consolidated financial statements appearing elsewhere in this registration statement.

Quantitative and Qualitative Disclosures about Market Risk

Inflation generally affects us by increasing our cost of labor and research and development contracts. We do not believe that inflation has had a material effect on our financial results during the periods presented.

Internal Control Over Financial Reporting

Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with U.S. GAAP. Under standards established by the Public Company Accounting Oversight Board, or PCAOB, a deficiency in internal control over financial reporting exists when the design or operation of a control does not allow management or personnel, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. The PCAOB defines a material weakness as a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of annual or interim financial statements will not be prevented, or detected and corrected, on a timely basis.

Qualitative and Quantitative Disclosures About Market Risk

Concentration of Credit Risk

We received 100% of our revenue through a grant from a government organization during the nine months ended September 30, 2022 and the year ended December 31, 2021. To date, no receivables have been written off.

Interest Rate Risk

As of September 30, 2022 and December 31, 2021 and 2020, we had a cash balance of $0.4 million, $0.2 million and $0.3 million, respectively, all of which were maintained in business checking accounts and money

market accounts in the U.S. and South Korea. Our primary exposure to market risk is to interest income volatility, which is affected by changes in the general level of interest rates. As such rates are at a near record low, a 10% change in the market interest rates would not have a material effect on our business, financial condition or results of operations.

Foreign Currency Risk

We conduct our business in U.S. dollars and, thus, are not exposed to financial risks from exchange rate fluctuations between the U.S. dollar and other currencies.

Impact of the COVID-19 Pandemic

In March 2020, the World Health Organization declared the outbreak of a novel coronavirus, or COVID-19, as a pandemic, which continues to spread throughout the U.S. and worldwide. As with many companies around the world, our day-to-day operations were disrupted with the imposition of work from home policies and requirements for physical distancing for any personnel present in our offices and laboratories. During the nine months ended September 30, 2022 and the year ended December 31, 2021, our operations were not significantly impacted by COVID-19, with the exception of research and development expense decreasing during the year ended December 31, 2021 in part due to delays in our ongoing and planned research activities due to COVID-19. Research and development expense during the year ended December 31, 2021 also decreased in part as we reduced our average headcount from 33 to 21 employees primarily as a result of scaling back our clinical activities as a result of COVID-19. The pandemic has also disrupted our sales and marketing activities as shelter-in-place orders, quarantines, travel restrictions and other public health safety measures have impacted our ability to interact with our existing and potential partners for our solutions. There is significant uncertainty as to the trajectory of the pandemic and its impacts on our business in the future. We could be materially and adversely affected by the risks, or the public perception of the risks, related to the COVID-19 pandemic or similar public health crises. Such crises could adversely impact our ability to conduct on-site laboratory activities, expand our laboratory facilities, secure critical supplies such as reagents, laboratory tools or immunized animals required for discovery research activities, and hire and retain key personnel. The ultimate extent of the impact of any epidemic, pandemic, outbreak, or other public health crisis on our business, financial condition and results of operations will depend on future developments, which are highly uncertain and cannot be predicted, including new information that may emerge concerning the severity of such epidemic, pandemic, outbreak, or other public health crisis and actions taken to contain or prevent the further spread, among others. Accordingly, we cannot predict the extent to which our business, financial condition and results of operations will be affected. We remain focused on maintaining our operations, liquidity and financial flexibility and continue to monitor developments as we deal with the disruptions and uncertainties from the COVID-19 pandemic.

JOBS Act Accounting Election

We qualify as an “emerging growth company” as defined in the JOBS Act. An emerging growth company may take advantage of reduced reporting requirements that are not otherwise applicable to public companies. These provisions include, but are not limited to:

- being permitted to present only two years of audited financial statements and only two years of related Management’s Discussion and Analysis of Financial Condition and Results of Operations in this registration statement;
- not being required to comply with the auditor attestation requirements on the effectiveness of our internal controls over financial reporting;
- not being required to comply with any requirement that may be adopted by the PCAOB regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements (auditor discussion and analysis);

- reduced disclosure obligations regarding executive compensation arrangements; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We may use these provisions until the last day of our fiscal year in which the fifth anniversary of the completion of this offering occurs. However, if certain events occur prior to the end of such five-year period, including if we become a "large accelerated filer," our annual gross revenue exceeds $1.235 billion, or we issue more than $1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period.

We have elected to take advantage of certain of the reduced disclosure obligations in this registration statement and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our shareholders may be different than the information you receive from other public companies in which you hold stock.

The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards, until those standards apply to private companies. We have elected to take advantage of the benefits of this extended transition period and, therefore, we will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. Our financial statements may therefore not be comparable to those of companies that comply with such new or revised accounting standards. Until the date that we are no longer an emerging growth company or affirmatively and irrevocably opt out of the exemption provided by Section 7(a)(2)(B) of the Securities Act upon issuance of a new or revised accounting standard that applies to our financial statements and that has a different effective date for public and private companies, we will disclose the date on which we will adopt the recently issued accounting standard.

BUSINESS

SUMMARY

Peak Bio is a clinical-stage biopharmaceutical company focused on commercializing innovative therapeutics that aim to improve and address significant unmet medical need for patients with inflammatory, rare and specialty diseases and cancer. We will continue to explore and partner with researchers, clinicians, patient advocacy groups, academic institutions, governmental agencies, and our investors to continue to expand treatment options and partnerships to meet those expectations.

We will continue to grow our clinical pipeline by executing on our clinical plans for our existing program, and ideally add new clinical assets through acquisition, and through our internal oncology platform engine. To achieve this, we believe Peak Bio's management team, with more than a combined 50 plus years of industry experience in small molecule, antibodies, and antibody-drug-conjugates (ADC) drug development and having successfully led companies that created therapeutics in above categories during their tenures, are well suited to drive this strategic initiative. During his career, Dr. Huh has founded or co-founded companies such as pH Pharma and BridgeBio (NASDAQ: BBIO) and been a partner of McKinsey & Co (Healthcare/ Technology sector). He has held various leadership positions including Chairman at companies such as Pliant Therapeutics (NASDAQ: PLRX), CytomX Therapeutics (NASDAQ: CTMX), Geron Corporation (NASDAQ: GERN), Epizyme (NASDAQ: EPZM), Chief Executive Officer of BiPar Sciences (acquired by Sanofi) and has served on the Board of Directors for Facet Biotech (acquired by Abbott) and Nektar Therapeutics (NASDAQ: NEKTAR).

Our lead product candidate, PHP-303 is a small molecule, 5th generation, phase 2 clinical-ready neutrophil elastase (NE) inhibitor (NEI). PHP-303 is a potentially novel, oral, once daily, 0.65 nanomolar (nM; in vitro IC50 value for inhibition of human NE), selective, small molecule reversible inhibitor of NE designed to inhibit its bioactive form (von Nussbaum et al., 2015, Chem Med Chem 10:1163) that Peak Bio is developing for the treatment of alpha-1 antitrypsin (AAT) deficiency (AATD), a genetic disorder that may result in lung disease or liver disease and, potentially, acute respiratory distress syndrome (ARDS). Peak Bio has received a non-dilutive pre-clinical grant from the Department of Defense (DoD) to explore animal models of COVID-19-related ARDS. Currently, we are focusing our clinical efforts on developing PHP-303 for the treatment of the genetic disorder, AATD, a potentially life-threatening rare, genetic condition that results in severe debilitating diseases, including early-onset pulmonary emphysema. Scientific data indicate that the increased risk of lung tissue injury in AATD patients may be due to inadequately controlled NE caused by the insufficient amounts of AAT, the major antiprotease that inhibits NE, that these patients produce. We believe that by inhibiting NE, PHP-303 has the potential to reduce the destruction of lung tissue and stabilize clinical deterioration in AATD patients.

We are progressing, likely, to an end of Q2 2023 start for our phase 2 clinical study in AATD for which NE is hypothesized to be an important determinant of the disease progression (lung damage) in AATD. NE is a proteolytic enzyme that is required during the inflammatory response, but if inadequately opposed by endogenously produced antiproteases, such as AAT, can lead to tissue injury in the lungs, liver, and other major organs. Moreover, if chronically left unchecked this protracted inflammatory cascade, in which NE plays a major role, can lead to increased acute and/or chronic exacerbations and cause further tissue and organ damage that manifests immediately or in the long-term. This can ultimately result in increased morbidity and mortality in a genetic disorder such as AATD. The impact of deregulated NE inhibition is likely important in other diseases where inflammatory responses are left unchecked.

We have been able to deliver higher doses, with no serious adverse events (SAEs) reported, (than in earlier phase 1 trials) of PHP-303 in both single-ascending dose (SAD) and multiple-ascending dose (MAD) phase 1 human clinical trials. We have demonstrated dose-dependent pharmacokinetics and have achieved the recommended phase 2 dose for PHP-303. A maximal tolerated dose for PHP-303 in the phase1 trials was not achieved which suggests we could have still obtained higher NE inhibition with higher doses of PHP-303 and may explain the lack of adverse effects at the tested dose levels. The drug has been tested in nearly 200 subjects

including the most recent SAD and MAD studies. PHP-303 is a once daily, orally-dosed and reversible (von Nussbaum et al., 2015) NE inhibitor that achieves greater than 90% inhibition of the bioactive form of NE at doses (10 or 20 mg) deemed to be below the maximal tolerated dose, which has yet to be determined (See clinical characterization of PHP-303 section below; von Nussbaum & Lee, 2015, Bioorg & Med Chem Let 25: 4370–438;4381). At this time, the pharmacokinetic profile and phase 1 clinical study results of PHP-303 support the clinical evaluation of PHP-303 as an investigational therapy for the treatment of AATD in the chronic setting. That PHP-303 has already been dosed in nearly 200 subjects with no reported SAEs further supports phase 2 evaluation in AATD.

In addition, we have leveraged two decades of industry learnings in expanding an important area of the antibody-drug-conjugates (ADC) field allowing for highly targeted treatments in cancer. Despite the continued scientific advancements in the cancer field that has led to the many incremental improvements in patient cancer survival there continues to be a need for ADCs that not only deliver antibody-directed payloads selectively to their tumors, but to also release them via improved linker technology avoiding the potential for significant off-target toxicities. Secondly, we believe that adding an immunomodulatory effect to our toxin(s) that engages our immune systems to assist in the cancer killing would contribute to a long-term tumor regression.

These incremental improvements in cancer treatments for patients and specifically ADCs has also led to the growing commercial success of ADCs currently on the market and likely for those currently in development. A quick scan of the deal flow associated with ADCs over the past 5 years is encouraging both from their continued clinical and commercial success. We believe, Peak Bio is well-positioned to take advantage of this field with novel payload platform driven ADC based therapeutics. We are poised to launch off a platform of proprietary in-house technologies that differentiate our ADCs from existing on-market and in-development antibody or ADC programs. Why do we postulate that our approach could be a very important next step in the ADC field? Our programs have taken the traditional approach of an ADC and added an important component which we believe is attributed to the immunomodulatory effects of our novel toxin targeting alternative splicing. In essence, we hypothesize that our combination of Antibody + Linker + Peak Bio Toxin with Immune Modulation is potentially a better ‘Mouse Trap’ based on the clinical successes of checkpoint inhibitors that activate immune cell mediated killing of tumors.

Our most advanced platform in oncology utilizes our toxin, PH-1 or Thailanstatin (a spliceosome modulator) to generate a pipeline of proprietary ADC product candidates that are differentiated from traditional ADC-based therapies so that we may address unmet need in cancer patients. Differentiation is the first, and necessary step, towards the development of therapies serving an unmet need in patients. For e.g., the tumor may already be resistant to an approved ADC with payload A but may still respond to an investigational ADC with payload B, as the mechanism of action (MoA) is different. In that regard, PH-1 is a novel ADC payload and targets the proper splicing of introns. These mis-spliced RNAs are subjected to mRNA decay depriving cancer cells of thousands of essential proteins vital to survival and proliferation. In addition, PH-1 creates mis-spliced proteins or neoepitopes which the immune cells can target well after the initial “chemotherapy” is delivered, in essence creating a second mechanism for cancer killing.

Our first product candidate is an ADC targeting Trop2, which is an antigen broadly expressed in solid tumors of epithelial origin. Our Trop2 ADC and other undisclosed discovery-stage product candidates are based on our proprietary PH-1 platform of toxin payloads targeting RNA splicing. We will continue to identify cancer targets that are well suited to our technology. The goal over time and with the appropriate investment, Peak Bio desires to create a series of differentiated next generation cancer therapies targeting difficult to treat cancers and contribute to increase cancer survival to the benefit of patients, care givers, our potential future partners with the added benefit to our investors.

Even though Peak Bio’s PH1 platform approach has been initiated, and our first nominated ADC targeting Trop2 has been nominated, however we are still working on two additional toxins that are in early R&D to add to our armamentarium of novel toxins.

We believe that Peak Bio and the management team are well positioned to continue to work with our researchers, clinicians, patient advocacy groups, academic institutions, governmental agencies, and our investors to continue to address the significant unmet medical need for patients with AATD, ARDS and cancer with our approaches.

PHP-303

Overview

Peak Bio is a clinical-stage biopharmaceutical company focused on commercializing innovative therapeutics that aim to improve and address significant unmet medical need for patients with inflammatory, rare and specialty diseases and cancer. We will continue to explore and partner with researchers, clinicians, patient advocacy groups, academic institutions, governmental agencies, and our investors to continue to expand treatment options and partnerships to meet those expectations. Peak Bio will continue to grow our clinical and preclinical pipeline by executing on our clinical plans for our existing program, ideally add new clinical assets through acquisition and through our internal oncology platform engine.

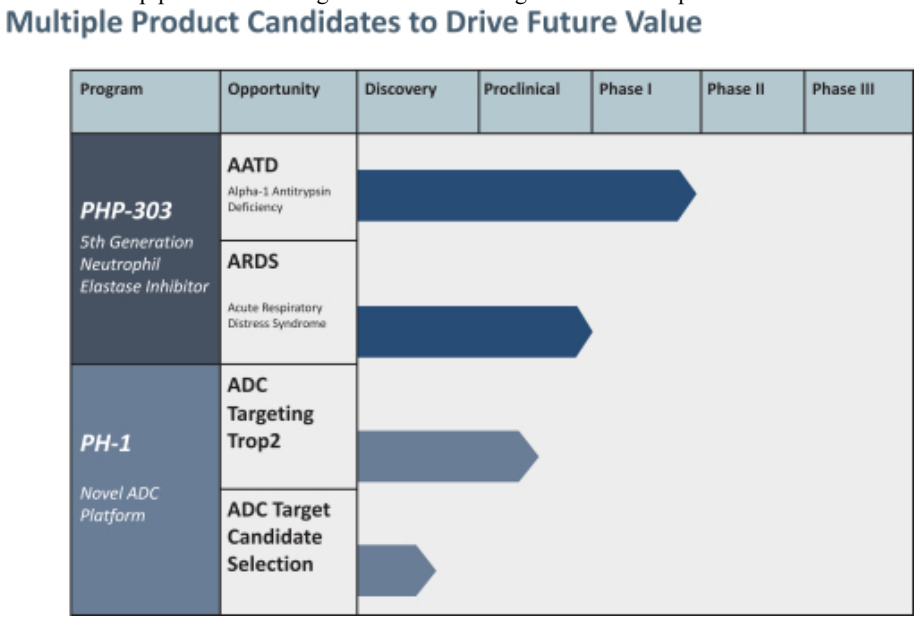
We are developing PHP-303 for the treatment of alpha-1 antitrypsin deficiency (AATD), a genetic disorder that can result in lung disease or liver disease and exploring opportunities with PHP-303 for the treatment of acute respiratory distress syndrome (ARDS). We believe our portfolio is well diversified because our product candidates employ different mechanisms of action and target separate indications. We intend to develop and potentially commercialize our rare disease product candidates and potentially future acquired opportunities to maximize potential future sales and marketing synergies. We will also consider potentially seeking strategic partnerships and relationships for further potential clinical development and/or commercialization of these assets.

As part of our strategic business plan, we sought and acquired a clinical stage asset that is a small molecule, a neutrophil elastase (NE) inhibitor (NEI). The Peak Bio senior management team, in addition to their business acumen and drug development and commercialization experiences across a multitude of therapeutic areas and technologies, has long-standing relationships with senior executives of large pharmaceutical, smaller biotech companies, key academic institutions and investment banks, which we believe enhances our ability to identify and acquire additional product candidates.

We acquired PHP-303 from Bayer in 2017 through our existing executives' professional longstanding relationships with Bayer. PHP-303 products' data package included substantial pre-clinical, clinical, and manufacturing data sets from Bayer, a well-known, well-regarded, multinational healthcare company. We have since completed two additional clinical studies (see clinical studies a Summary of PHP-303 Clinical Development Program table below), including a single ascending dose (SAD) and a multiple ascending dose (MAD) studies, that verify tolerability, and NE inhibition by PHP-303.

Our Pipeline

The following table summarizes our pipeline. We have global commercial rights to all of our product candidates.

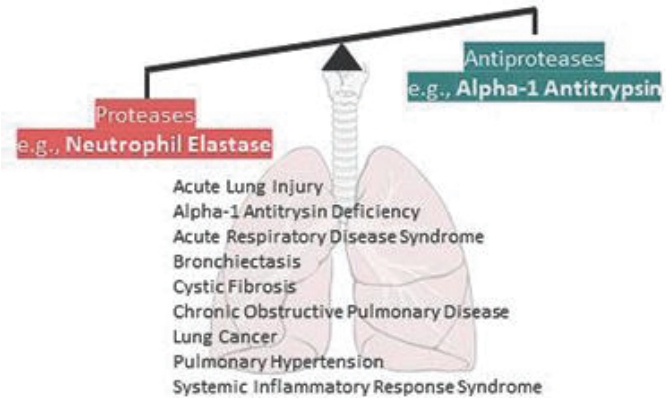


Our portfolio consists of the following product candidates:

PHP-303: PHP-303 is a potentially novel, oral, once daily, small molecule inhibitor of NE that Peak Bio is initially developing for two indications, AATD and ARDS. PHP-303 was licensed from Bayer, who previously conducted multiple non-clinical and clinical trials summarized below. These data support a potential clinical benefit of PHP-303 for treatment of patients with AATD, a genetic disorder that may result in lung or liver disease, or ARDS. We recently received a non-dilutive preclinical grant from the Department of Defense to study PHP-303 treatment for ARDS related to COVID-19 to support advancing PHP-303 potentially in this second clinical indication.

AATD is potentially life-threatening rare, genetic condition caused by a lack of alpha-1 antitrypsin (AAT) a protein (antiprotease) that protects the lungs from enzymatic degradation by endogenous proteases (such as NE). The disease manifests as early-onset pulmonary emphysema, caused by irreversible destruction of lung tissue supporting gas exchange (https://www.lung.org/lung-health-diseases/lung-disease-lookup/alpha-1-antitrypsin-deficiency/learn-about-alpha-1-antitrypsin-defiency). There are an estimated 70,000-100,000 patients in the United States and 120,000 patients in Europe with severe AATD (https://www.rarediseaseadvisor.com/disease-info-pages/alpha-1-antitrypsin-deficiency-epidemiology-aatd; Torres-Duran et al. 2018, Orpha J of Rare Dis 13:114). PHP-303 is designed to selectively inhibit NE, a neutrophil enzyme, which is the major protease responsible for the destruction of lung tissue in AATD.

The graphic below highlights potential disease targets for NEIs such as PHP-303. The unchecked imbalance of NE that occurs in many disease states is depicted, and in addition to AATD, it highlights ARDS as another disease indication for PHP-303 for which we have initiated some early preclinical work.



ARDS is a serious lung condition characterized by acute, diffuse, inflammatory lung injury resulting from a range of predisposing etiologies (https://www.uptodate.com/contents/image?imageKey=PULM%2F58759 Gonzales et al., 2015 June 4, Austin J Vasc Med 2:1). ARDS generally progresses from a stage of damage to one where “air” (gas) exchange unit becomes compromised, which is followed by a proliferative repair response by the body’s fibroblasts, ultimately leading to lung fibrosis and scarring likely resulting in an increase in morbidity, mortality and healthcare costs. The estimated incidence of ARDS in the US ranges from 64.2- 78.9 cases/100,000 people with 75% of these patients presenting with moderate to severe disease (reviewed in Diamond et al., 2021, Acute Respiratory Distress Syndrome – StatPearls—NCBI). The incidence of ARDS ranges from 1.5-79 cases/100,000 people in European countries (reviewed in Confalonieri et al., 2017, Eur Res Rev 26:160). The emergence of COVID-19 has led to an increase in the incidence of ARDS in a significant number of hospitalized COVID-19 patients, who may also have other significant complications in the renal, cardiovascular, gastrointestinal, and/or central nervous systems (Gibson et al., 2020, Med J Aust 213:54). At this juncture in the pandemic, we are now seeing incidences of not only acute ARDS associated from COVID-19 but also increased reports of “long- COVID”, which we are just beginning to understand (https://www.uptodate.com/contents/covid-19-epidemiology-clinical-features-and-prognosis-of-the-critically-ill-adult?topicRef=127926&source=related_link). In the future, we will be exploring the potential benefits of PHP-303 treatment across the spectrum of ARDS-related syndromes focusing not only on acute ARDS but also on the more protracted or chronic ARDS-Covid-19 situation.

Neutrophils (a type of immune cell) play an important role in the body’s defense against foreign invaders (Brinkmann et al., 2004, Science 303:1532; Potey et al., 2019, J Pathol, 247: 67; Rosales, 2018 Front Physiol, 9:article 113). They are one of the first immune cells to be recruited to a site of infection. One of the key enzymes involved in neutrophil movement and function is NE which is contained within and associated with the surface of neutrophils. During a normal immune response, NE is released from neutrophils to help degrade tissue allowing neutrophils to reach sites of infection. NE also influences cytokine signaling pathways to increase the immune response. Most importantly, NE directly destroys pathogens by 3 mechanisms: by release into the extracellular matrix, within neutrophils after pathogen engulfment, and by association with neutrophil extracellular traps (NETs). NETs, released from neutrophils, are large web-like structures comprised of sticky circulating free (cf) DNA to which histones and other antimicrobial proteins (including NE and other proteases), are attached. NETs can have both defensive and pro-inflammatory functions: they trap and kill extracellular pathogens, thereby limiting their spread, but can also cause direct or indirect tissue injury.

Under highly pro-inflammatory states, as occurs in patients with COVID-19- associated ARDS, neutrophils become dysregulated and vast numbers invade the area directly releasing excessive amounts of NE and large

numbers of NETs (Janoff 1985, Am Rev Respir Dis, 132:417-433; Barnes et al., 2020; Pechous, 2017, Front in Cell and Infect Microbio|, 7:Article 16). The body's endogenous antiprotease production/release that typically acts to limit damage of NE are overwhelmed and the inadequately opposed high concentrations of NE in the microenvironment cause tissue damage leading to fibrosis. There is also evidence that this large increase in NET production contributes to thrombosis (NETs, and particularly cfDNA, serve as scaffolds that activate platelets and coagulation), which results in further tissue damage.

We believe the inhibition of NE has the potential to protect AATD and ARDS patients from further lung damage by decreasing the impact of high NE tissue concentrations that are insufficiently opposed by endogenous antiproteases. In AATD, the body is unable to produce adequate levels of AAT for sufficient inhibition of NE. In ARDS, NE production and release overwhelms endogenous antiprotease activity leading to tissue damage. Thus, both diseases are, at least in part, due to an overabundance of NE in lung that causes damage. A selective NE inhibitor such as PHP-303 may inhibit this excess NE and provide a potential therapy for AATD and ARDS patients. Furthermore, because NE is necessary for the production of NETs, an NE inhibitor would also be expected to decrease the process of NET formation (NETosis) in patients with COVID-19-associated ARDS, potentially reducing lung injury, thrombosis and cytokine storm.

Peak Bio plans to conduct a Phase 2 proof-of-concept clinical trial in patients with severe AATD with trial initiation, potentially, in 2023. This study has approved Clinical Trial Applications in the UK and Ireland with all approvals necessary to initiate the study shortly after funding is received. Additionally, we have a relationship with and have a research agreement with the Alpha-1 Project. We believe that this relationship will assist in accessing patients, clinicians, thought leaders for our future planned clinical trials.

Preclinical studies characterizing PHP-303 in models of acute lung injury and COVID-19 infection are currently on-going and are being funded by the US Department of Defense (DoD). These studies will inform the role of NE and NETosis in COVID-19 and non-COVID-19 associated ARDS.

Our Strategy

Potentially develop and directly commercialize PHP-303 for AATD treatment and build upon skills sets and relationships with pharmaceutical, biotech, academia, and advocacy groups to build our pipeline/portfolio.

- We are ready to commence a phase 2 clinical trial of PHP-303 for the treatment of AATD in Europe and possibly the U.S. in mid-2023. If the results are favorable, and pending regulatory feedback, we plan to continue to develop PHP-303 toward approval and commercialization. In the future, we would consider a plan to establish our own sales and marketing organization in the United States and potentially in Europe for PHP-303. However, as an example, we would likely need additional inflammation or rare disease product candidates as part of our portfolio to maximize commercialization expenses and rationale.
- Upon completion of the preclinical studies under the DOD grant we received, we will have results indicating whether PHP-303 inhibits NETosis in freshly isolated neutrophils from humans and 2 different animal species and whether it ameliorates pulmonary damage/ untoward inflammatory response in 3 acute lung injury and 1 COVID-19 infection preclinical studies. We intend to continue preclinical and potentially clinical development of PHP-303 for the ARDS indication, if possible, and will apply for non-dilutive US DoD funding. We will make a determination on whether or not to advance PHP-303 in an ARDS indication based on our eventual preclinical and clinical results and access to any additional funding to potentially commercialize PHP-303 for ARDS and related conditions. We could initiate a phase 2 clinical trial of PHP-303 for the treatment of ARDS as soon as the second half of 2023 and, if the results are favorable and pending regulatory feedback, continue to develop PHP-303 toward approval and commercialization.
- We believe that we are a preferred partner for large pharmaceutical and biotechnology companies as they seek to unlock the potential in their development pipelines and deliver therapeutics to patients in

areas of high unmet medical need. We have strong relationships with these companies, as evidenced by our agreement with Bayer and other partners our leadership team has worked with, and a track record of structuring transactions that enable us to leverage our core development capabilities while creating value for all stakeholders. We intend to continue to enter into strategic relationships that align our interests with those of large pharmaceutical and biotechnology companies and that we believe to be mutually beneficial.

Efficiently advance our specialty disease product candidate(s) and explore strategic relationships with third parties for further possible clinical development and/or commercialization.

- Based on the top-line results from our as yet to be started phase 2 clinical trial of PHP-303 for the AATD indication, we plan to enter into one or more strategic relationships with third parties for PHP-303 to undertake the next phase of potential clinical development and, if approved, commercialization. We intend to continue preclinical and clinical development of PHP-303 for the ARDS indication, if possible, and apply for U.S. DoD funding. We plan to enter into strategic relationships with third parties for commercialization, if approved. We may also enter into strategic relationships with third parties to complete the late-stage clinical development of PHP-303 for treatment of ARDS.

Leverage our expertise in business development to expand our pipeline of product candidates.

- Our senior management team has extensive relationships with large pharmaceutical and biotechnology companies. We intend to leverage these relationships to grow our pipeline with a focus on rare diseases. We intend to continue to identify, acquire, develop, and ultimately commercialize novel product candidates that have received significant investment from large pharmaceutical companies. We will continue to focus on acquiring product candidates with either proof-of-concept clinical data in our target indication or with clinical data in a related disease and a strong scientific rationale that supports development in our target indication. Using a disciplined approach, we intend to continue building a diverse portfolio of product candidates that we believe have compelling market potential, robust pre-clinical, clinical, and manufacturing data packages, and a clear regulatory pathway.
- Continue to be a partner of choice for large pharmaceutical and biotechnology companies with a demonstrated potential for clinical development of PHP- 303

- PHP-303, had been studied in five phase 1 clinical trials in healthy subjects, exploring a range of doses and schedules and one phase 2 clinical trial in patients with non-cystic fibrosis bronchiectasis (NCFB). Please refer to the table below.

Summary of PHP-303 clinical development program

Clinical Stage and Test No. (Report)	Nation (Number of organization)	Target	Test purpose	Number of subjects (Test group/ placebo group)	Administration and frequency	Test Design	Primary and secondary Endpoints	Whether Endpoints were met	Persons/ Entities that conducted trial	Number of subjects that experienced drug-related adverse event
Phase 1 BAY 85-8501 /14431	Germany (1)	Healthy Volunteers	Evaluation of safety, tolerability, pharmacokinetic, pharmacodynamic evaluation	N = 37 (27/10)	Single-dose administration	Single-center, randomized, single-blind, parallel-group, placebo-controlled, inter-group comparison, single ascending dose	Primary: safety and tolerability Secondary: pharmacokinetics	Yes	Bayer	7/27 treated subjects — 11 AEs; 5/10 untreated subjects – 6 AEs
Phase 1 BAY85-8501/ 14433	Germany (1)	Healthy Volunteers	Evaluation of safety, tolerability, pharmacokinetic properties, and relative bioavailability	N = 12 (12/0)	Single-dose administration	Single-center, randomized, open-label, single-dose, 4-fold crossover test	Primary: safety, tolerability, and pharmacokinetics No secondary endpoints	Yes	Bayer	7/12 over 48 treatment doses – 12 AEs
Phase 1 BAY85-8501 /16332	Germany (1)	Healthy Volunteers	Evaluation of safety, tolerability, and pharmacokinetic properties	N = 34 (26/8)	Single administration at day 1. A single dose once a day for 13 days from the 3rd day	Single-center, randomized, single-blind, parallel-group, placebo-controlled, inter-group comparison, repeated ascending dose	Primary: safety, tolerability, and pharmacokinetics No secondary endpoints	Yes	Bayer	7/26 treated subjects – 7 AEs; 3/8 placebo subjects - 4 AEs
Phase 1 PHP-303-N101 (Sponsor: pH Pharma)			Safety, tolerability, maximum tolerated dose (MTD), pharmacokinetic properties Exploratory: effects on neutrophil elastase (NE) engagement	N = 48 (36/12)	Ascending dose cohorts (6 active and 2 placebos per cohort) conducted sequentially with a 2-week interval (before ascending the dose)	Single ascending dose	Primary: safety, tolerability, and maximum tolerated dose (MTD) Secondary: pharmacokinetics	Yes	pH Pharma	10/36 treated subjects – 8 AEs; 5/12 untreated subjects – 12 AEs

Clinical Stage and Test No. (Report)	Nation (Number of organization)	Target	Test purpose	Number of subjects (Test group/ placebo group)	Administration and frequency	Test Design	Primary and secondary Endpoints	Whether Endpoints were met	Persons/ Entities that conducted trial	Number of subjects that experienced drug-related adverse event
Phase 1 PHP-303-N102 (Sponsor: pH Pharma)		Overweight or obese but otherwise healthy male and female subjects	Safety, tolerability, MTD, pharmacokinetic properties. Exploratory: effects on NE engagement; proof-of-mechanism as an insulin sensitizer	N = 50 (40/10)	PHP-303 Oral IR tablets of 1, 2, 5, 10, and 20 mg; cohorts of 10 subjects (8 active and 2 placebo)	Phase 1, single center, randomized, double-blind, placebo-controlled, multiple ascending-dose	Primary: safety, tolerability, and maximum tolerated dose (MTD) Secondary: pharmacokinetics	Yes	pH Pharma	14/40 treated subjects - 32 AEs; 1/10 placebo subjects - 1 AE
Phase 2a/ BAY85-8501/ 16359	Germany, U.K., Italy, Spain (28)	Non-cystic fibrosis bronchiectasis patients	Safety, efficacy evaluation	N=94 (47/47)	28 days One dose per day	Multi-national, multi-center, randomized, double-blind, parallel-group, placebo-controlled, inter-group comparison, repeated ascending dose study	Primary: safety and tolerability Secondary: Effect on pulmonary function, inflammation, and pharmacokinetics	Partially, results of one of the lung function tests met the expected criteria in the treated subjects compared with the placebo group, other endpoints did not meet expected trends (treatment duration insufficient for effect to be observed)	Bayer	92 subjects analyzed for safety 11/45 treated subjects - 14 AEs; 12/47 placebo subjects - 7 AEs

Clinical characterization of PHP-303.

Nearly 200 subjects have been exposed to one or more doses of PHP-303, and the data shows that PHP-303 was tolerated with no SAEs reported. PHP-303 is rapidly absorbed in the fasted state, where median peak concentrations of drug were achieved in $\leq$ 1 hour and half-life was in the range of 110 to 175 hours. Exposure pharmacokinetics appeared to increase proportionally with increasing dose to 40 mg. With multiple dosing, steady-state concentrations are reached by Day 21. Food delayed the rate of absorption of PHP-303 and therefore moderately decreased maximum serum concentration, but there was no effect on overall exposure to PHP-303. PHP-303 administered in an oral, daily schedule causes inhibition of NE, suggesting potential benefit in several NE and/or NET mediated diseases including AATD and ARDS.

PHP-303 tolerability and adverse effects

The phase 1 clinical studies were not designed to evaluate statistical significance on clinically approvable endpoints. The phase 2 clinical study results and analysis are described in (Watz et al., 2019, Pulm Pharmacol Ther, 56:86). Some 186 subjects have received one or more doses of PHP-303 in clinical studies conducted by Bayer and Peak Bio. These include 141 healthy volunteers and 45 subjects with NCFB, a chronic condition characterized by lung inflammation and airway damage. Doses studied range from 0.05 mg to 20 mg daily, with maximum study duration of 28 days. No serious adverse events (SAEs) have been attributed to drug

administration in this program. Across all studies, 84 drug-related adverse events were reported. The most commonly reported adverse events (AEs) observed across clinical studies of PHP-303 include headache, nasopharyngitis, and cough. There was no apparent dose relationship to the reported adverse events and subjects who received placebo had similar frequencies and types of adverse events. Mild, sporadic, and transient elevations in LFTs, lipase, and CPK were uncommonly observed, but these events did not appear to be drug related.

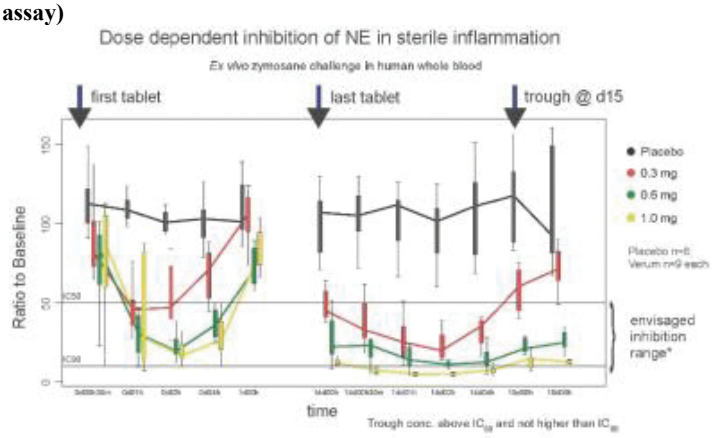
Confirmation of NE inhibitory effect of PHP-303 *in vivo*

Study 16332, (an earlier Bayer study), evaluated whole blood NE activity using an ex vivo zymosan challenge assay. Samples were collected at baseline and several time points after dosing. Samples were incubated with zymosan, a yeast cell wall component that activates neutrophils and release of NE.

PHP-303 resulted in dose and time-dependent inhibition of human NE (hNE) activity. At steady-state repeat dosing, inhibition of hNE exceeded 50% (relative to placebo) at lowest or trough concentration (Day 14 pre-dose) at all dose levels, and approximated 90 to 100% maximal inhibition after the last dose at the mid and high dose levels. Importantly, daily dosing of PHP-303 at doses of 0.5 mg or 1.0 mg yielded long lasting (≥ 24 hours) inhibition of NE at levels exceeding 50%. Similar effects on systemic inhibition of hNE activity were observed in the Phase 2a Study 16359, (conducted by Bayer), in patients with NCFB; a chronic condition characterized by lung inflammation and airway damage. [NOTE: NCFB is a type of bronchiectasis (permanent dilation of the airways of the lungs) that arises as a result of chronic inflammation and is not due to the genetic condition cystic fibrosis.]

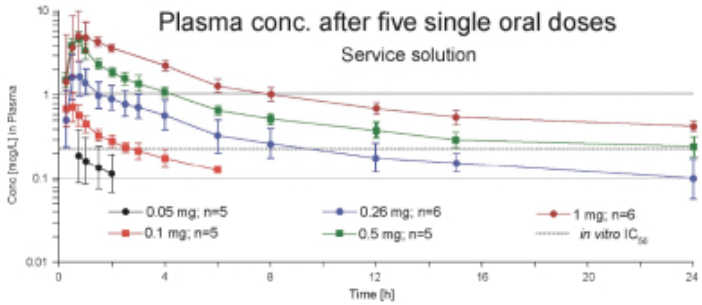
Changes in neutrophil elastase activity in accordance with plasma concentration and time of PHP-303 tablets (ex-vivo zymosane challenge) and the envisaged inhibitory range for neutrophil elastase

(IC50, IC90 values based on in vitro assay)



(Source: Clinical Trial Investigator Data Collection, PHP-303_16332 Clinical Test Results Report

Drug Concentration in Blood by Dose After a Single Oral Dose PHP-303 in Liquid Form (Source: PHP-303-14431 Clinical Test Result Report: PHP-303 Data Package _Page 45)

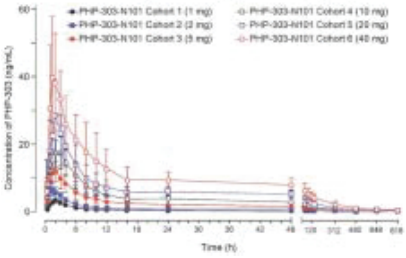


Phase 2a study in non-Cystic Fibrosis bronchiectasis:

Bayer performed Study 16359 to explore the potential benefit of PHP-303 at a daily dose of 1 mg, administered once daily for 28 days in patients with NCFB. The drug was tolerated with no SAEs reported and showed inhibition of systemic NE, but it had no clear benefit on any pulmonary function endpoint. Interestingly, post-bronchodilator lung function test FEV1 increased slightly over the 28-day treatment interval (+26 ml) in drug treated, but not placebo treated subjects (-51ml, p = Not Significant). The lack of clinical benefit may reflect the relatively limited overall drug exposure time or limited local exposure in the relevant lung compartment. The sponsor discontinued further development of the compound in this indication.

Peak Bio (pH Pharma) Conducted Phase 1 Clinical Trials with PHP-303

Peak Bio, (pH Pharma) after acquiring PHP-303 from Bayer, and to better characterize and improve the chances for future clinical success, repeated both the Phase 1 dose trials of single ascending dose (SAD) and multiple ascending dose (MAD) studies. The studies reconfirmed that PHP-303 was tolerated with no SAEs reported in either study. In both studies dose proportional PK exposure was observed. Dose-dependent NE inhibition was greatest in the 10 and 20 mg cohorts and steady state was achieved between 11 and 18 days in the MAD study. The studies were conducted at Alta Sciences in Kansas City, MO.

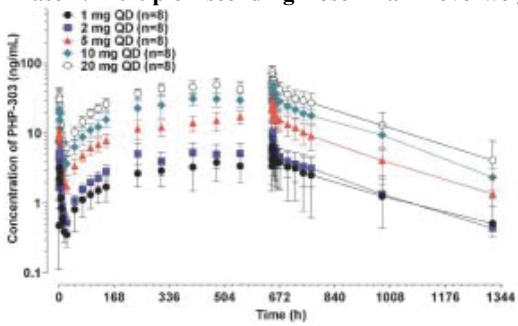


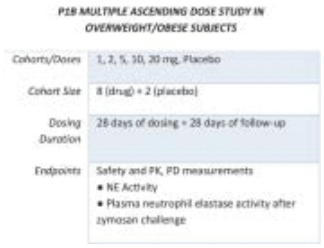
P1B ASCENDING DOSE STUDY IN HEALTHY SUBJECTS

Cohorts/Doses	1, 2, 5, 10, 20, 40mg, Placebo
Cohort Size	6 (drug) +2 (placebo)
Dosing Duration	Single dose
Endpoints	Safety and PK
Study Period	3Q18-4Q18

- PHP-303 was tolerated; no severe AEs reported
- Dose proportional pharmacokinetic (PK) properties
- Phase 1 clinical trial results & PK profile support MAD study in overweight and obese healthy volunteers

Phase 1: Multiple Ascending Dose Trial in overweight Obese Subjects (MAD)



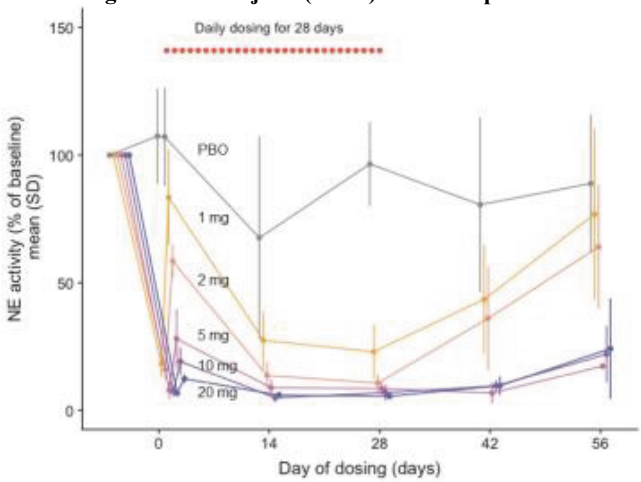


- PHP-303 was tolerated with no SAEs reported at doses up to 20 mg QD for 28 days in healthy overweight/obese subjects;
- Majority of AEs were mild; no dose limiting toxicities were observed;
- Proportional dose-dependent pharmacokinetics (PK);
- Steady state achieved between 11 and 18 days;
- Dose-dependent inhibition of NE activity;
- Doses of 10-20 mg QD were required for greatest inhibition;

Neutrophil Elastase Inhibition Activity

As part of the MAD study, NE activity was measured to determine what doses of PHP-303 had the highest suppression of NE. The study demonstrated an Inverse Correlation between Drug Concentration and Neutrophil Elastase Activity. Sustained, dose-dependent suppression of NE activity was observed and appeared to be more complete at doses of 10mg and 20mg of PHP-303. Those two dose cohorts demonstrated greater than 90% NE inhibition over a 24-hour period suggesting that a once-daily dose of 10-20mg can progress to our Phase 2 trials. Again, the PHP-303 doses of 10mg and 20mg demonstrated rapid onset < 2-4 hr and the drug was tolerated with few adverse events and no SAEs over a 28-day dosing period. The results suggest that PHP-303 has acceptable PK and tolerability profiles making it amenable for long-term chronic therapy in a disease such as AATD.

Phase 1: Multiple Ascending Dose Trial in overweight Obese Subjects (MAD) — Neutrophil Elastase Activity



Peak Bio Clinical Trial Strategy

Based on its preclinical and clinical data package, Peak Bio licensed PHP-303 (formerly Bay 85-8501) from Bayer and performed two additional phase 1 studies to extend the dose range in single ascending and multiple ascending dose trials. The drug demonstrates PK and tolerability profiles that make it suitable for an oral, once daily dosing schedule. Based on these data the company is preparing to initiate a phase 2a proof of concept study in patients with AATD and performing collaborative proof of principle studies in preclinical models of acute lung injury.

The clinical development and commercialization of Peak Bio's products will be regulated by the Food and Drug Administration (USA), the Medicines and Healthcare Products Regulatory Agency (MHRA) in the UK and European Medicines Agency (for countries in the European Union). Other countries have national authorities such as Canada (Health Canada) that also regulate clinical development and commercialization of therapeutic products.

Peak Bio has approved Clinical Trial Applications in both UK and Ireland for a planned Phase 2 trial in patients with a genetic disease – alpha-1 antitrypsin deficiency disease. The specific gene responsible for the disease is found in individuals of Scandinavian origin, thus our target geographies for commercialization are in Western Europe and North America. We have not yet filed applications for clinical trials in the USA or Canada, nor anticipate the need to file in these jurisdictions in order to complete the approved clinical trial. Peak Bio does maintain an active IND with the FDA to support the follow-up to the completed clinical trials in healthy volunteers.

Peak Bio has filed a request for Orphan Drug Designation with the US FDA. We are in the process of responding to FDA questions. Under the Orphan Drug Act of 1983 (the "Orphan Drug Act"), the FDA may designate a product as an orphan drug if it is intended to treat a rare disease or condition, defined as one occurring in a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. If Peak Bio is able to obtain approval from the FDA, PHP-303 will be eligible the following benefits:

- 7-year marketing exclusivity to sponsors of approved orphan products
- 25% federal tax credit for expenses incurred in conducting clinical research within the United States
- Tax credits may be applied to prior year or applied over as many as 20 years to future taxes
- Waiver of Prescription Drug User Fee Act (PDUFA) fees for orphan drugs
- A value of approximately $2.9 million in 2021
- Ability to qualify to compete for research grants from the Office of Orphan Products Development (OOPD) to support clinical studies for orphan drugs
- Eligibility to receive regulatory assistance and guidance from the FDA in the design of an overall drug development plan

Ongoing healthcare legislative and regulatory reform measures may have a material adverse effect on our business and results of operations. Changes in regulations, statutes or the interpretation of existing regulations governing the regulatory clearance or approval, manufacture, and marketing of regulated products or the pricing, coverage and reimbursement thereof could impact our business in the future by requiring, for example: (i) changes to our manufacturing arrangements; (ii) additions or modifications to product labeling; (iii) the recall or discontinuation of our products; or (iv) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business.

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs. We cannot predict the likelihood, nature, or extent of health reform initiatives that may arise

from future legislation or administrative action. However, we expect these initiatives to increase pressure on drug pricing. Further, certain broader legislation that is not targeted to the health care industry may nonetheless adversely affect our profitability. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

Even if we obtain FDA approval of any of our product candidates, we may never obtain approval or commercialize such products outside of the United States, which would limit our ability to realize their full market potential. In order to market any products outside of the United States, we must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval procedures vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking foreign regulatory approvals could result in significant delays, difficulties, and costs for us and may require additional preclinical studies or clinical trials which would be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our products in those countries. Satisfying these and other regulatory requirements is costly, time consuming, uncertain, and subject to unanticipated delays. In addition, our failure to obtain regulatory approval in any country may delay or have negative effects on the process for regulatory approval in other countries. We do not have any product candidates approved for sale in any jurisdiction, including international markets, and we do not have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, our ability to realize the full market potential of our products will be harmed.

Drug marketing and reimbursement regulations may materially affect our ability to market and secure reimbursement for our products. We intend to seek approval to market our product candidates in both the United States and in selected foreign jurisdictions. If we obtain approval in one or more foreign jurisdictions for our product candidates, we will be subject to rules and regulations in those jurisdictions. In some foreign countries, particularly those in the EU, the pricing of drugs is subject to governmental control and other market regulations which could put pressure on the pricing and usage of our product candidates. In these countries, pricing negotiations with governmental authorities can take considerable time after obtaining marketing approval of a product candidate. In addition, market acceptance and sales of our product candidates will depend significantly on the availability of adequate coverage and reimbursement from third-party payors for our product candidates and may be affected by existing and future health care reform measures.

Even if we receive regulatory approval of any product candidates, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense, and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our product candidates. If any of our product candidates are approved, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies and submission of safety, efficacy, and other post-market information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities. In addition, we will be subject to continued compliance with current Good Manufacturing Practice, or cGMP, and Good Clinical Practice, or GCP, requirements for any clinical trials that we conduct post-approval.

Manufacturers and their facilities are required to comply with extensive FDA and comparable foreign regulatory authority requirements, including ensuring that quality control and manufacturing procedures conform to cGMP regulations. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any marketing application, and previous responses to inspection observations. Accordingly, we and others with whom we work must continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production, and quality control.

Any regulatory approvals that we receive for our product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials and surveillance to monitor the safety and efficacy of the product candidate. The FDA may also require a risk evaluation and mitigation strategies, or REMS, program as a condition of approval of our product candidates, which could entail requirements for long-term patient follow-up, a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or a comparable foreign regulatory authority approves our product candidates, we will have to comply with requirements including submissions of safety and other post-marketing information and reports and registration.

The FDA may impose consent decrees or withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with our product candidates, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of our products, withdrawal of the product from the market or voluntary or mandatory product recalls;
- fines, warning letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us or suspension or revocation of license approvals;
- voluntary or mandatory product recalls and related publicity requirements;
- total or partial suspension of production;
- product seizure or detention or refusal to permit the import or export of our product candidates; and
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising, and promotion of products that are placed on the market. Products may be promoted only for the approved indications and in accordance with the provisions of the approved label. However, companies may share truthful and not misleading information that is not inconsistent with the labeling. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses and a company that is found to have improperly promoted off-label uses may be subject to significant liability. The policies of the FDA and of other regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government

If we receive U.S. orphan drug designation for PHP-303 for the AATD indication and apply for and receive MHRA and/or EMA orphan drug designation, we may not be able to realize the benefits of such designation, including potential marketing exclusivity of our product candidates, if approved.

Regulatory authorities in some jurisdictions, including the United States and other major markets, may designate drugs intended to treat conditions or diseases affecting relatively small patient populations as orphan drugs. Under the Orphan Drug Act of 1983, the FDA may designate a product candidate as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as having a patient population of fewer than 200,000 individuals in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the

United States. In order to obtain orphan designation in the European Economic Area, or EEA, the product must fulfill certain challenging criteria. Under Article 3 of Regulation (EC) 141/2000, a medicinal product may be designated as an orphan medicinal product if it meets the following criteria: (1) such product is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition; (2) either the prevalence of such condition must not be more than five in 10,000 persons in the EU when the application is made, or without the benefits derived from orphan status, it must be unlikely that the marketing of the medicine would generate sufficient return in the EU to justify the investment needed for its development; and (3) there exists no satisfactory method of diagnosis, prevention or treatment of such condition authorized for marketing in the EU or if such a method exists, the product will be of significant benefit to those affected by the condition, as defined in Regulation (EC) 847/2000. A potential/ future designation of any of our product candidates as an orphan drug does not mean that any regulatory agency will accelerate regulatory review of, or ultimately approve, that product candidate, nor does it limit the ability of any regulatory agency to grant orphan drug designation to product candidates of other companies that treat the same indications as our product candidates.

Generally, if a product candidate with an orphan drug designation receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the FDA or foreign regulatory authorities from approving another marketing application for a product that constitutes a similar medicinal product treating the same indication for that marketing exclusivity period, except in limited circumstances. The applicable period is seven years in the United States and ten years in the EEA. The ten year period of market exclusivity in the EEA can be extended by a further two years if the product qualifies for a pediatric extension, but can be reduced to a period of six years if the orphan designation criteria are no-longer met after the fifth year Orphan drug exclusivity may be revoked if any regulatory agency determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the product to meet the needs of patients with the rare disease or condition.

Even if we obtain orphan drug exclusivity for a product candidate, that exclusivity may not effectively protect the product candidate from competition because different drugs can be approved for the same condition in the United States or EEA. Even after an orphan drug is approved, the FDA or EMA may subsequently approve another drug for the same condition if the FDA or EMA, as applicable, concludes that the latter drug is not a similar medicinal product or is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care.

Our business is subject to risks associated with conducting business internationally. We source research and development, manufacturing, consulting, and other services from companies based throughout the United States, the EU, and select Asian countries and we will be planning and conducting our clinical trials in the United States, Canada, certain European countries, in the near-term and in the future.

Accordingly, our future results could be harmed by a variety of factors, including: economic weakness, including inflation, or political instability in varying economies and markets; differing regulatory requirements for drug approvals in non-European Union (EU) countries; differing jurisdictions could present different issues for securing, maintaining, or obtaining freedom to operate for our intellectual property in such jurisdictions; such jurisdictions; potentially reduced protection for intellectual property rights; difficulties in compliance with non-US laws and regulations; changes in non-U.S. regulations and customs, tariffs, and trade barriers; changes in non-U.S. currency exchange rates of the USD and currency controls; changes in a specific country’s or region’s political or economic environment, trade protection measures, import or export licensing requirements or other restrictive actions by the USA or non-U.S. governments; differing reimbursement regimes and price controls in certain non-U.S. markets; negative consequences from changes in tax laws; compliance with tax, employment, immigration, and labor laws for employees living or traveling outside of the USA; business interruptions resulting from geo-political actions, including war and terrorism, health epidemics and other widespread outbreaks of contagious disease, or natural disasters, including earthquakes, typhoons, hurricanes, floods, and fires; and business interruptions resulting from the COVID-19 pandemic or any other similar pandemic.

The United Kingdom’s (UK) withdrawal from the European Union (commonly referred to as Brexit) on January 3, 2020, may adversely impact our ability to obtain regulatory approvals of our product candidates and in

particular PHP-303 in AATD in the European Union and may require us to incur additional expenses in order to develop, manufacture and commercialize our product candidates in the European Union. There is considerable uncertainty resulting from a lack of precedent and the complexity of the UK and EU's intertwined legal regimes as to how Brexit (following the Transition Period) will impact the life sciences industry in Europe, including our Company, including with respect to ongoing or future clinical trials, among other aspects. Since a significant proportion of the clinical and regulatory framework for PHP-303 utilizes Irish investigators and the fact that the UK (Brexit) would be applicable to our business and our product candidate for AATD is derived from EU directives and regulations, the withdrawal could materially impact the regulations with respect to the development, manufacture, importation, approval and commercialization of our product candidates in the UK or the EU.

- The impact will largely depend on the model and means by which Ireland and the UK's relationship with the EU is governed post-Brexit and the extent to which the UK chooses to diverge from the EU regulatory framework.
- As a result of Brexit, incentives related to an orphan designation granted in the EU are limited to the EU and Ireland but are not valid in UK.
- The UK competent authority, MHRA, will review applications for orphan designation at the time of a marketing authorization, and there is no pre-marketing authorization orphan designation.
- It is therefore possible that conditions that are currently designated as orphan conditions in the UK will no longer be and that conditions not currently designated as orphan conditions in the European Union will be designated as such in the UK.
- In the EU, similar political, economic, and regulatory developments may affect our ability to profitably commercialize, or co-commercialize, our product candidates, if approved.
- In addition to continuing pressure on prices and cost containment measures, legislative developments at the EU or member state level may result in significant additional requirements or obstacles that may increase our operating costs.
- The delivery of healthcare in the EU, including the establishment and operation of health services and the pricing and reimbursement of medicines, is almost exclusively a matter for national, rather than EU, law and policy.
- National governments and health service providers have different priorities and approaches to the delivery of health care and the pricing and reimbursement of product candidates in that context.
- In general, however, the healthcare budgetary constraints in most EU member states have resulted in restrictions on the pricing and reimbursement of medicines by relevant health service providers. Coupled with ever-increasing EU and national regulatory burdens on those wishing to develop and market product candidates, this could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to commercialize, or co-commercialize, our product candidates, if approved.
- In markets outside of the United States, the EU and the UK, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific product candidates and therapies.
- We cannot predict the likelihood, nature, or extent of government regulation that may arise from future legislation or administrative action in the United States, the EU, the UK, or any other jurisdictions.
- If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

- There have been, and likely will continue to be, additional legislative and regulatory proposals at the foreign, federal, and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. Such reforms could have an adverse effect on anticipated revenues from product candidates that we may successfully develop and for which we may obtain marketing approval and may affect our overall financial condition and ability to develop product candidates.

PHP-303 for the Treatment of AATD

Overview

We are developing PHP-303 for the treatment of AATD, a potentially life-threatening rare, genetic condition that results in severe debilitating symptoms, including early-onset pulmonary emphysema. PHP-303 is a novel, selective, oral, once-daily, small molecule that is designed to inhibit the bioactive form of NE. Scientific data indicate that the increased risk of lung tissue injury in AATD patients may be due to inadequately controlled NE caused by insufficient AAT. We believe that by inhibiting NE, PHP-303 has the potential to reduce the destruction of lung tissue and stabilize clinical (lung) deterioration in AATD patients.

Background of Alpha-1-Antitrypsin Deficiency: AATD is a rare genetic disease that results in quantitative and/or qualitative defects in the AAT protein (https://www.lung.org/lung-health-diseases/lung-disease-lookup/alpha-1-antitrypsin-deficiency). Individuals can be characterized by the genotype of the *SERPINA1* gene. In general, single nucleotide polymorphisms give rise to gene variants resulting in AAT proteins with single amino acid alterations. Although the AATD is an autosomal recessive disease, protein levels are regulated in an autosomal codominant manner, such that each allele contributes 50 percent to the serum AAT level. Most severely affected AATD patients include individuals who are homozygous for the Z allele (PI*ZZ), the null allele or the F (PI*FF) allele. These individuals experience emphysema at young age of onset with risk dramatically increased by exposure to cigarette smoke or occupational exposures. Patients with PI*ZZ genotype are also at high risk of liver cirrhosis, due to abnormal intracellular protein folding of mutant ATT resulting in damage to liver cells. The F allele results in a functionally abnormal protein without anti-protease activity, although AAT levels are normal. Non-smoker heterozygotes (PI*MZ or PI*SZ genotypes) experience a lower risk of lung disease, though risk increases in smokers.

There are estimated to be 70,000 to 100,000 individuals with AATD in the US. Worldwide, more than 3 million people are at risk of severe deficiency of AAT (https://www.rarediseaseadvisor.com/disease-info-pages/alpha-1-antitrypsin-deficiency-epidemiology-aatd). Similar to smoking related chronic obstructive pulmonary disease (COPD), AATD patients present clinically with dyspnea, cough, sputum production and wheezing. Lung function testing reveals fixed airflow obstruction and reduced diffusing capacity. Two distinct features of AATD are younger age of onset and a particular pattern of emphysema on lung imaging. The presentation of emphysema in a non-smoker or an individual with a family history of liver disease are also suggestive. Laboratory diagnosis of AATD has also advanced: current approaches favor simultaneous testing of the serum AAT level and targeted genotyping for the most common variants. The natural history of AATD is variable, with liver dysfunction accounting for most mortality in patients less than 40 years old. Longitudinal studies demonstrate progressive loss of lung function in older individuals, with annual rates of FEV1 decline of 44 -110 ml/year in non-smokers and much higher rates in smokers with AATD. Mortality rates increase dramatically as FEV1 falls below 35% predicted levels.

In addition to smoking abstinence or cessation, supportive treatment for COPD includes nutritional support, pulmonary rehabilitation, prophylactic vaccines and supplemental oxygen. Guidelines support administration of bronchodilators and corticosteroids. Replacement therapy for AAT is used for individuals with low serum levels of AAT and airflow obstruction. Pooled human AAT is administered by weekly infusion and is associated with adverse events and vein collapse necessitating a central line with long-term weekly intravenous infusions and include such products as Prolastin, Aralast, Zemaira, Trypsone, Alfalastin, Glassia, Respreeza. These agents have been approved in the United States and Europe based on biochemical efficacy or demonstration of increased

plasma levels of AAT. The 2015 RAPID trial demonstrated that replacement therapy reduced the rate of decline of lung density assessed by High-Resolution CT imaging, suggesting likely clinical benefit. This effect was sustained for a four-year treatment period (Chapman et al., 2015, Lancet 386:360). Lung transplantation is an option for selected subjects with advanced emphysema. Experimental therapies in development for AATD include inhibitors of NE, (such as PHP-303), RNA interference agents, AAT correctors and gene therapy. None of these experimental approaches has yet demonstrated compelling clinical benefit nor gained regulatory approval.

Our Approach

Our product candidate for treating AATD is PHP-303, a 0.65 nM (in vitro IC50 value for inhibition of human NE), selective, oral, once-daily, small molecule that is designed to inhibit the bioactive form of NE (von Nussbaum et al., 2015). We believe that by inhibiting NE, PHP-303 has the potential to reduce the enzymatic destruction of lung tissue in these patients. pH Pharma (now Peak Bio Co., Ltd.) has established a research agreement with the Alpha-1 Project, a for-profit organization that pursues treatments for AATD to enhance the lives of these patients. We believe that this relationship with the Alpha-1 Project will help garner access to patients, potential investigators, clinicians, and important information on advances in the treatment of AATD. The convenient once-daily, oral dosing of PHP-303 could provide a significant advantage compared to the current treatments for AATD which are surgery or weekly intravenous AAT augmentation therapy.

Planned Phase 2 Clinical Trial in AATD

We plan to evaluate the safety, tolerability, pharmacokinetic properties, and pharmacodynamic properties (elastin degradation and anti-inflammatory biomarkers, patient questionnaire, lung function) for two doses (10 mg and 20 mg) of PHP-303 in AATD patients and determine the optimal dosage for patients based on these parameters. pH Pharma, now Peak Bio Co., Ltd., has contracted with a principal investigator at the Royal College of Surgeons in Ireland and with a principal investigator at the University of Birmingham to conduct the Phase 2 AATD trial in Ireland and UK, each of whom have numerous publications and experience in the area of AATD clinical trials (For e.g., European Respiratory Journal 2019 53: 1900138; DOI: 10.1183/13993003.00138-2019). Data from this trial will inform design of a pivotal trial with registrational intent.

Phase 2 Clinical Trial Design (proposal)

Item	Details
Administration group	3 treatment groups: 2 doses of PHP-303 (10 mg, 20 mg), placebo
Subject	Patients with alpha-1 antitrypsin deficiency
Number of subjects	Approximately 60 (20 in each treatment group)
Administration period	3 months
Test design	Randomized, double-blinded, parallel group, placebo-controlled
Test purpose	-Primary: Safety evaluation -Secondary: Pharmacokinetic evaluation (sputum, plasma) -Search: As pharmacodynamic evaluation, it consists of biomarker evaluation for degradation of elastin and anti-inflammatory (sputum, blood), patient questionnaire and chronic obstructive pulmonary disease evaluation, pulmonary function evaluation, frequency and degree evaluation of disease exacerbation
Efficacy criteria	-Biomarkers: Changes in elastin degradation biomarkers; changes in anti-inflammatory biomarkers -Changes in patient questionnaire (St. George's Respiratory Questionnaire, SGRO-C), changes in chronic obstructive pulmonary disease (COPD Assessment Test, CAT) -Evaluation of changes in lung function (expiratory volume per second), the frequency and degree evaluation of disease exacerbation

(Source:PHP-303-A201_Protocol

PHP-303 for the Treatment of ARDS

Acute respiratory distress syndrome, ARDS, is acute, severe, and results in lung injury. It is defined as respiratory failure with bilateral lung opacities, not due to cardiac failure or fluid overload, occurring within one

week of a known clinical insult or the onset of new pulmonary symptoms. Severity correlates with blood oxygen levels with mortality reaching 50% for individuals with severe disease. Although numerous conditions can predispose to ARDS; sepsis, aspiration pneumonitis, bacterial or viral pneumonia, trauma and inhalational injuries are commonly recognized complications that follow. The recent emergence of COVID-19. a pathogen with the ability to directly damage lung epithelial cells. has led to a large number of ARDS cases.

The National Center for Biotechnology Information (NCBI; Nov. 2019) estimated, that in the US, the incidence of ARDS ranged from 64.2 to 78.9 cases/100,000 people with 75% of those cases being moderate to severe (reviewed in Diamond et al., 2021, Acute Respiratory Distress Syndrome – StatPearls—NCBI). The incidence of ARDS in European countries has been reported as a range of 1.5 to 79 cases per 100,000 population and that ARDS rates were higher in North America, Oceania, and Europe compared to South America, Africa, and Asia (reviewed in Confalonieri et al., 2017, Eur Res Rev 26:160). We will be able to estimate the potential of PHP-303 therapy in ARDS, only when we know how COVID-19 has impacted the numbers (and severity) of ARDS worldwide.

The pathophysiology of ARDS begins with an exudative or fluid leakage in the lungs, a phase also termed diffuse alveolar damage. Prominent features included damage to the alveolar-capillary membrane and alveolar filling with fluid, protein debris and cellular infiltrates (Gonzales et al., 2015; Mathay & Zemans, 2011, Annu Rev Pathol, 6:147). Alveolar type II cell hyperplasia and formation of hyaline membranes are also recognized. A fibroproliferative phase follows characterized by resolution of alveolar and interstitial edema, continued proliferation of type II alveolar cells, squamous metaplasia, myofibroblast infiltration and collagen deposition. Some patients progress to a fibrotic stage with destruction of lung units and replacement by fibrous tissue (scarring) and cyst formation leading to greater morbidity and potentially mortality.

Accumulating evidence suggests that release of inflammatory cytokines and proteolytic enzymes from neutrophils, platelets, monocytes and macrophages may contribute to lung inflammation and epithelial damage characteristic of ARDS. This suggestive evidence is a central theme and hypothesis for the utility of PHP-303, in ARDS. NET formation has been correlated with COVID-19-associated ARDS severity and mortality in both preclinical models and human data. (Barnes et al., 2020, J Exp Med, 217; Adrover et al, 2022, JCI Insight,7:e15734). NET formation has also been implicated in small and large vessel thrombotic events recognized in the context of acute lung injury.

We are presently performing preclinical studies to examine the role of NE, NET formation and treatment with PHP-303 in several lung injury models. These studies are designed to determine if PHP-303 can inhibit NETosis in activated freshly isolated neutrophils; reach effective concentrations in the lung; and demonstrate efficacy in preclinical animal models of lung damage/COVID-19 infection with evidence of a decrease in NETosis.

The results of these studies will guide further preclinical and potentially clinical development of PHP-303 for the treatment of ARDS. We postulate that by inhibiting NE, PHP-303 has the potential to reduce the destruction of lung tissue and alleviate clinical deterioration in ARDS patients, particularly in those patients in which the development of their diseases is associated with high levels of NETosis.

Material Agreements

The Bayer Agreement

In March 2017, the Company entered into an Assignment, License, Development and Commercialization Agreement with Bayer (the "Bayer Agreement") in regard to the assignment by Bayer to the Company of Bayer's patents covering a neutrophil elastase inhibitor compound (which we refer to as PHP-303) and a license by Bayer to the Company of Bayer's know-how for the development, manufacture and commercialization of the compound.

In consideration for the rights granted under the Bayer Agreement, the Company made aggregate payments to Bayer of USD $1.5 million and in connection with certain development and regulatory milestones, we agreed to make future payments of up to USD $23.5 million in the aggregate. Further, we have agreed to make tiered royalty payments to Bayer over a period equal to the longer of ten years from first commercial sale or the expiry of the assigned patents in the applicable country based on annual worldwide net sales of the future commercialized products, at percentages ranging from the mid-single digits to high-single digits with potential downward adjustments as a result of competitive products and royalty stacking terms.

The Bayer Agreement is terminable by either party for material breach by the other party or in the event the of bankruptcy or insolvency of the other party, in each case, subject to an opportunity to cure of 90 and 60 days respectively. The Bayer Agreement is also terminable by the Company at any time for convenience or in the event of Company safety concerns.

Alpha-1 Project Research Agreement

On June 28, 2019, the Alpha-1 Project, Inc. (TAP) entered into a sponsored Research Agreement with pH Pharma Co, Ltd, now referred to as Peak Bio Co., Ltd. TAP is a for-profit entity focused on identifying, funding, providing expertise and accelerating diagnostic and therapeutic interventions for patients with the rare disease AATD. Peak Bio proposed use of its molecule PHP-303 for research activities for developing novel therapeutics based on PHP-303, a neutrophil elastase inhibitor targeting AAT and AATD. Peak Bio Co., Ltd.has entered into a funding agreement with TAP to support funding for activities related to Phase 2 clinical trials for PHP-303. $100,000 USD was provided by TAP for the research effort and for that consideration and upon execution of the agreement Peak Bio Co., Ltd. issued TAP 4,800 shares of its common stock at the most recent share price at that time.

The funding is for the sole purpose of the clinical trial activities of the PHP-303 in the treatment of AATD, however, Peak Bio Co., Ltd.shall be solely responsible for the management, conduct, oversight and generation of a final report of the Research Plan and results. TAP has the right to participate in any future external grant funding activities of Peak Bio Co., Ltd. and TAP may elect to participate in such funding on a “most favored nations” basis. Peak Bio and TAP formed a “steering committee” to oversee the funded activities during the term of the agreement and to act as a forum for TAP to provide reasonable comments and input on the scientific progress of the research.

TAP and Peak Bio Co., Ltd. have rights to publications of completed data within scope of not compromising of Peak Bio’s confidential information or proprietary know-how or trade secrets or that could compromise securing patent protection of any inventions arising from the research plan. In addition, Peak Bio Co., Ltd. is required to acknowledge the support of TAP in any future publications from the research. Each of TAP and Peak Bio retained ownership and control of their respective works of authorship, know-how, information, and data, and intellectual property therein, that were in existence as of the date of the Research Agreement or are later generated outside of scope of the research plan. Peak Bio Co., Ltd. will own all arising data and intellectual property arising from the research plan, and accordingly, TAP hereby assigns to Peak Bio Co., Ltd. (and shall cooperate with Peak Bio Co., Ltd. to execute assignment documents as necessary to perfect the assignment to Peak Bio Co., Ltd. of any and all such intellectual property rights arising out of the research plan). TAP will acquire no ownership interest or other rights or licenses of any kind whatsoever in any intellectual property, data or results or any patents or patent applications or know-how arising out of the research plan.

TAP will be entitled to receive milestone payments as a percentage of total funding, with such payments due if, as and when there occur the following events in the development and commercialization of any product derived from the research plan. Milestone payments in aggregate will not exceed 350% of any money funded by TAP to Peak Bio for regulatory approval, achievement of first commercial sale and after cumulative net sales considerations. To date, the amount of the funded research proceeds provided to Peak Bio Co., Ltd. by TAP is $100,000 USD that would be subject to this payment calculation.

pH Pharma Inc. (Peak Bio Co., Ltd.) Collaboration with the U.S. DoD

In January 2021, we entered into an agreement with the U.S. DoD to perform "Preclinical Studies of PHP-303, a Neutrophil Elastase Inhibitor to Treat Severe COVID-19 Associated Acute Respiratory Distress Syndrome and Lung Injury". We have been awarded up to $3,954,626 in expense reimbursement for preclinical studies to obtain pharmacokinetic data with PHP-303, a neutrophil elastase (NE) inhibitor, and to determine if PHP-303 can inhibit NETosis and/or oppose the damaging effects of the large amounts of NE released into tissue during this biological process. And, if PHP-303 does inhibit NETosis, does this improve outcomes in animal models of acute lung injury including a COVID-19 model. Through this effort with the DoD, we intend to identify whether, based on preclinical data, PHP-303 looks like a potential treatment for ARDS that occurs in a subset of some of the most ill COVID-19 patients. The work being done under this grant could also establish a preclinically-based foundation of data for the potential utility of PHP-303 treatment of patients with ARDS due to other underlying bacterial/viral infections and/or in other disease states in which high levels of neutrophil elastase and/or NETosis are part of the disease etiology. COVID-19 is most easily spread among individuals in close contact and has a disproportional impact on persons of advanced age, so PHP-303 may offer significant benefit to active-duty warfighters, veterans, and their families aligning our capabilities with the DoD's mission to respond to the COVID-19 pandemic and to provide medical countermeasures for the warfighter and the nation against present and future biological and chemical agents of concern. If the studies performed under this grant indicate that PHP-303 could be a promising treatment for COVID-19-related ARDS, we are positioned such that we could take PHP-303 into a phase 2 clinical trial. PHP-303 is already in clinical development. We believe our partnership with the DoD could enable us to leverage our compound, PHP-303, in additional therapeutic applications, such as in a future viral pandemic if it involves lung damage induced by inadequate endogenous opposition of NE and/or NETosis. We own all study data generated under the DoD Agreement, whether generated by us or the DoD , and the DoD will have no ownership interest in any inventions resulting from the agreement. Accordingly, any therapeutic or prototype developed under the agreement will be owned by us. Under the DoD agreement, we are required to use commercially reasonable efforts to complete specified research activities for the prototype project based on the estimated cost for such prototype. In connection with the DoD Agreement, we are eligible to receive up to $$3,954,626 in the aggregate from DoD, subject to continued compliance with the terms of the DoD agreement and future pricing strategy. We are not obligated to pay any royalties or other future consideration under this agreement. The DoD agreement was extended to expire March 31, 2023, subject to completion of the prototype project as determined by a DoD official in accordance with key technical goals established for the project or results that justify completion. The DoD may terminate the agreement in its entirety for convenience or in whole or in part for our material breach of the agreement.

The following statement are required to accompany any public release of information pertaining to the agreement:

(1) "The U.S. Army Medical Research Acquisition Activity, 820 Chandler Street, Fort Detrick MD 21702-5014 is the awarding and administering acquisition office."

(2) "This work was supported by the Assistant Secretary of Defense for Health Affairs, through the Peer Reviewed Medical Research Program under Award No. W81XWH2110042. Opinions, interpretations, conclusions and recommendations are those of the author and are not necessarily endorsed by the Department of Defense."

(3) "In conducting research using animals, the investigator(s) adheres to the laws of the United States and regulations of the Department of Agriculture."

(4) "In the conduct of research utilizing recombinant DNA, the investigator adhered to NIH Guidelines for research involving recombinant DNA molecules."

(5) "In the conduct of research involving hazardous organisms or toxins, the investigator adhered to the CDC-NIH Guide for Biosafety in Microbiological and Biomedical Laboratories."

Manufacturing

We have been using raw materials and finished products supplied directly from Bayer in Germany, which has the highest level of CMC (manufacturing/quality) technology among global pharmaceutical companies and have used them in our preclinical and initial clinical trials. For our finished products, we recently transferred technology to Catalent, the largest contract producer in the United States, for manufacture, allowing for the establishment of a very stable and efficient partnership for the supply of clinical investigational drugs and the development of commercial products.

PHP-303 Clinical Reagent Manufacturer

Division	Performer
Production of drug substance	Proton Pharma Solutions Ltd.
Production of finished drug	Sherpa Clinical Packaging
QC	Catalent

Although PHP-303 is currently in the early clinical development stage, we took over the technology after reaching a high process development level in Bayer to the extent that high-purity raw materials of several kilograms (Kg) or more can be produced, so late clinical supply is possible. The finished product has also been developed with a stable formulation, so our CMC development process has been completed from adding of high-capacity tablets to large-scale commercial production.

We do not own or operate facilities for the manufacturing of our product candidates, nor do we have plans to develop our own manufacturing operations in the foreseeable future. We have entered into manufacturing agreements with a number of drug substance, drug product, and other manufacturers and suppliers for PHP-303, and we intend to enter into additional manufacturing agreements as necessary. Following our license of PHP-303, we acquired certain clinical trial materials and we plan to outsource production of further clinical supplies to our own manufacturing partners. We also intend to outsource certain product formulation trials. We expect that drug product pre-validation and validation batches will be manufactured to satisfy regulatory requirements when we progress products to late-stage trials.

We do not yet have any contractual relationships for the manufacture of commercial supplies of PHP-303, and we intend to enter into contractual relationships for commercial supplies following approvals of our investigational therapies. Any batches of product candidates for commercialization will need to be manufactured in facilities, and by processes, that comply with the requirements of the FDA, the EMA, and the regulatory agencies of other jurisdictions in which we are seeking approval. We utilize our internal resources and experienced consultants to manage our manufacturing contractors and ensure they are compliant with current good manufacturing practices.

Commercialization, Sales, and Marketing

We do not have our own marketing, sales, or distribution capabilities. In order to commercialize our product candidates, if approved for commercial sale, we must either develop a sales and marketing infrastructure or collaborate with third parties that have sales and marketing experience. We plan to establish our own sales and marketing organization in the United States and Europe for PHP-303 and may seek to directly commercialize our future product candidates. In markets for which commercialization may be less capital efficient for us, we may selectively pursue arrangements with third parties in order to maximize the commercial potential of PHP-303, and our future product candidates. We intend to seek to and may enter into one or more strategic relationships with third parties for PHP-303 to undertake the next phase of clinical development and, if approved, for commercialization, enter into strategic relationships with third parties for further clinical development and/or commercialization of PHP-303.

Competition AATD

We compete directly with other biopharmaceutical and pharmaceutical companies that focus on the treatment of AATD or ARDS. We may also face competition from academic research institutions, governmental agencies, and other various public and private research institutions. We expect to face increasingly intense competition as new technologies become available. Any product candidates, including PHP-303 that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future.

Current approved treatments for alpha-1 antitrypsin deficiency

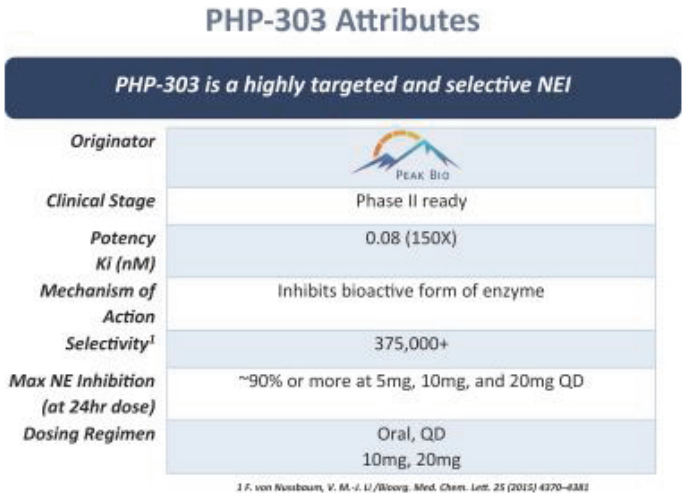
Developer	Product name	Country of approval (permitted year)
Bayer	Prolastin	Germany, United States of America, Italy, Canada, etc. (1987)
Baxter	Aralast	United States of America (2002)
CSL Behring	Zemaira	United States of America, Brazil (2003)
Grifols	Trypsone	Mexico, Brazil, Spain, Argentina, Chile (2004)
LFB	Alfalastin	France (2005)
Kamada	Glassia	United States of America, Brazil (2010)
CSL Behring	Respreeza	Europe (2015)

We consider PHP-303's current closest potential competitors for the treatment of severe AATD to be alpha1-proteinase inhibitors that are administered intravenously in AAT augmentation therapy. Currently, there are four inhibitors on the market in the United States: Grifols's Prolastin-C, Shire's Aralast, CSL's Zemaira and Kamada's Glassia. Kamada is also investigating an inhaled version of augmentation therapy and Apic Bio and Adverum are in the early stages of developing gene-therapy approaches for AATD. Santhera has in licensed an inhaled NEI and is planning a multiple ascending dose study, with the initial indication targeted being cystic fibrosis.

In Phase 2 development is the Mereo BioPharma compound, alvelestat, which was licensed from AstraZeneca. On May 9, 2022, Mereo announced positive top-line efficacy and safety results from its "ASTRAEUS" a Phase 2 study of the investigational oral NEI, alvelestat (MPH-966), in patients with severe AATD-associated emphysema. The double-blind, placebo-controlled study evaluated two different doses of alvelestat (high or low [120mg] dose) administered twice daily versus placebo over a 12-week period (with evaluation at weeks 4, 8 and 12), and its effect on three primary biomarker endpoints associated with AATD-related lung disease, blood NE activity, a NE-driven target breakdown product of fibrogen, A@-val360, and the elastin breakdown product, desmosine. At the high dose, alvelestat demonstrated statistically significant changes versus placebo in all three primary biomarker endpoints that included ~90% inhibition of NE at the high undisclosed dose

It is our belief these Mereo data support target and pathway engagement in AATD patients by a NEI at clinically available doses. To the extent these are class effects, these data potentially de-risk the Peak Bio PHP-303 AATD program. Based on PHP-303's attributes, Peak Bio plans to move it forward into phase 2 trials with oral administration at doses of 10 mg and 20 mg once daily. We have been and continue to follow closely any biomarkers assessed in AATD clinical trials, and data around them, but do believe that the regulatory approach still needs better assessment at this juncture. As we learn more, we intend to capture as much intelligence around a good clinical and regulatory strategy moving forward. Overall, the Mereo NEI positive results contribute to our belief that PHP-303 is well positioned for possible clinical development.

As discussed previously, PHP-303 has demonstrated greater than 90% NE inhibition at doses of 5mg, 10mg and 20mg as a once daily oral administration. Additionally, PHP-303 appears to inhibit the bioactive form of NE. This will be explored more in-depth as we progress the program forward.



Competition ARDS (Acute/Subacute, Covid-19)

The competitive nature of ARDS treatments (Acute, Sub-acute, and Chronic) as they relate specifically to traditional definitions of ARDS or most recently the global pandemic associated with COVID-19-associated ARDS, has many facets. There is an evolving science around COVID-19 and ARDS in which it is potentially important to consider the roles of Acute, Chronic, and now Sub-Acute COVID-19 and the various treatment options for these conditions that are both on the market and still experimental. In many instances there is cross-over in the treatments associated with ARDS and COVID-19 and very dependent on severity of disease. Since we are focused on pharmaceutical treatments and specifically immunomodulation and the impact of the inflammatory cascade associated with ARDS in COVID-19 and ARDS we will forgo discussion of other therapies involving mechanical ventilation strategies, the evolving utility of ECMO and antiviral therapies.

Immuno-modulators: As discussed previously, a subgroup of patients with severe COVID-19 and/or ARDS demonstrate a serious immune response known as cytokine release syndrome. Current suggestions are to screen all patients with severe COVID-19 for this syndrome, even though it's usually rare.

Corticosteroids and monoclonal antibodies: To treat hyper-inflammation, immune-modulator drugs such as corticosteroids or monoclonal antibodies are emerging as therapies but with equivocal results. For example, the monoclonal antibody therapies being utilized either experimentally or approved were originally developed to treat conditions such as rheumatoid arthritis. They may limit lung inflammation but also inhibit immune responses and pathogen clearance, according to observational studies on SARS/MERS patients.

Due to the lack of reliable evidence from large-scale randomized clinical trials, there has been uncertainty with regards to the effectiveness of corticosteroids in COVID-19 patients. Preliminary findings from a recent study report shows that a low dosage of dexamethasone reduces 28-day mortality in patients with COVID-19 who are receiving respiratory support. The results have many caveats but generally suggest corticosteroid therapy may be beneficial. However, it is unclear which ARDS patients are most likely to benefit from this treatment, because ARDS patients consist of heterogeneous populations with likely different inflammatory pathways leading to ARDS.

With regards to monoclonal antibody approaches there are two monoclonal antibodies, tocilizumab and sarilumab [antibodies that block interlukin-6 receptor (IL-6R)], that have been re-purposed for the treatment of ARDS in COVID-19 patients. Both agents were approved for the treatment of rheumatoid arthritis. Tocilizumab has been tested in several COVID-19 clinical studies with sometimes conflicting results, but overall the data

suggests a mortality benefit (reviewed in https://www.uptodate.com/contents/covid-19-management-in-hospitalized-adults?search=covid-19-management-inhospitalized%20adults&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1). Sarilumab treatment, in COVID-19 trails, on the other hand, has had less robust effects. COVID-19 has now moved into its endemic phase and some new stains are better at evading our immune system responses, therefore the search for new treatments continues.

We believe that PHP-303 could potentially serve as one of several novel approaches to the treatment of ARDS and may also have potential utility in treating "long-COVID". We now see a growing cohort of individuals suffering from this condition. Long-COVID, or similar conditions, are likely to greatly impact patients' long-term quality of life including hampering their ability to even do the simplest of tasks associated with daily living or work. Resources-permitting, we may investigate the role of PHP-303 in inflammation, and inflammation involving long COVID-19.

Antibody-drug-conjugates (ADC):

Peak Bio has leveraged two decades of industry learnings in expanding an important area of the antibody-drug-conjugate (ADC) field allowing for highly targeted treatments in cancer. Despite the continued scientific advancements in the cancer field that has led to the many incremental improvements in patient cancer survival, there continues to be a need for ADCs that not only deliver antibody-directed payloads selectively to their tumors, but to also release them via improved linker technology avoiding the potential for significant off-target toxicities. Secondly, based on the success of immune checkpoint inhibitors, we believe that adding an immunomodulatory effect to our toxin(s) that engages our immune systems to assist in the cancer killing would contribute to increased tumor regression.

These incremental improvements in cancer treatments for patients and specifically ADCs has also led to the growing commercial success of ADCs currently on the market and likely for those currently in development. A quick scan of the deal flow associated with ADCs over the past 5 years is encouraging both from their continued clinical and commercial success. We believe, Peak Bio is well-positioned to take advantage of this field with our proprietary ADC based therapeutics. We are poised to launch our platform of proprietary in-house technologies that enable us to design ADCs that we believe potentially offers improved ADC characteristics such as a dual mechanism of action (MoA), immune stimulation, and being refractory to multi-drug resistance (MDR)- related forms of resistance.

Antibody drug conjugates are an established therapeutic approach in oncology where an antibody is used to selectively deliver a potent toxin directly to tumor cells. The goal is to focus and maximize the ADC's activity at the tumor site, sparing normal tissues and organs, resulting in a wide therapeutic index. There are four important aspects of an ADC approach/ program- 1) an antigen, a carbohydrate or protein moiety that is expressed preferentially on tumor cells, or cells in the tumor microenvironment contributing to its survival, 2) an antibody, a protein from the immunoglobulin family that is highly selective for seeking out the tumor antigen wherever tumor cells reside, 3) a toxin that is often a small molecule or a protein (also called payload or warhead) that is 10-10,000 times more potent than conventional chemotherapy, or sometimes a chemotherapy itself and 4) a linker that serves to attach the small molecule to the antibody.

Cell-surface receptor internalization and recycling is a process that is physiological to normal and cancer cells and most ADCs that complex with target antigen receptors are internalized within the cancer cells, delivering, and releasing the payload, triggering cell death. Additionally, some ADCs also may have a feature engineered into their linkers that allow the payload to be released in the tumor environment by exploiting some feature specific to a tumor, for e.g., low pH conditions, or high tumor expression of certain enzymes such as beta-glucuronidase.

ADCs have demonstrated therapeutic efficacy in clinical trials and an increasing number of ADCs are standards of care in various hematologic and solid cancers (see below). Most of ADC research has primarily focused on antigen and target discovery as opposed to payload discovery where Peak Bio is making progress.

FDA-approved ADCs through 2022

ADC	Trade name	Target	Company	Indication	Approval Year
Microtubule inhibitor payload class					
Brentuximab vedotin	Adcetris	CD30	Seattle Genetics, Millennium/ Takeda	relapsed HL and relapsed sALCL	2011
Trastuzumab emtansine	Kadcyla	HER2	Genentech, Roche	HER2-positive metastatic breast cancer (mBC) following treatment with trastuzumab and a maytansinoid	2013
Polatuzumab vedotin-piiq	Polivy	CD79	Genentech, Roche	relapsed or refractory (R/R) diffuse large B-cell lymphoma (DLBCL)	2019
Enfortumab vedotin	Padcev	Nectin-4	Astellas/ Seattle Genetics	adult patients with locally advanced or metastatic urothelial cancer who have received a PD-1 or PD-L1 inhibitor, and a Pt-containing therapy	2019
Belantamab mafodotin-blmf	Blenrep	BCMA	GlaxoSmithKline (GSK)	adult patients with relapsed or refractory multiple myeloma	2020
Tisotumab vedotin-tftv	Tivdak	Tissue factor	Seagen Inc	Recurrent or metastatic cervical cancer	2021
Disitamab vedotin	Aidixi	Her2	Remegen Biosciences/ Seagen Inc	HER2 expressing urothelial cancer	2021
Mirvetuximab soravtansine	Elahere	FR alpha	Immunogen	Platinum-resistant ovarian cancer	2022
DNA-acting payload class					
Gemtuzumab ozogamicin	Mylotarg	CD33	Pfizer/ Wyeth	relapsed acute myelogenous leukemia (AML)	2017 2000
Inotuzumab ozogamicin	Besponsa	CD22	Pfizer/ Wyeth	relapsed or refractory CD22-positive B-cell precursor acute lymphoblastic leukemia	2017
Loncastuximab tesirine-lpyl	Zynlonta	CD19	ADC Therapeutics	Large B-cell lymphoma	2021
Topoisomerase I inhibitor payload class					
Trastuzumab deruxtecan	Enhertu	HER2	AstraZeneca/ Daiichi Sankyo	adult patients with unresectable or metastatic HER2-positive breast cancer who have received two or more prior anti-HER2 based regimens. unresectable or metastatic breast cancer patients with HER2-low lesions and NSCLC patients with HER2-mutations	2019 2022
Sacituzumab govitecan	Trodelvy	Trop-2	Immunomedics	adult patients with metastatic triple-negative breast cancer (mTNBC) who have received at least two prior therapies for patients with relapsed or refractory metastatic disease	2020
Peptide toxin class					
Moxetumomab pasudotox	Lumoxiti	CD22	AstraZeneca	adults with relapsed or refractory hairy cell leukemia (HCL)	2018

Peak Bio antibody catalog:

We leverage our team's deep experience and proficiency in oncology research for selecting our target antigens. If there is scientific validation from academia or industry in peer-reviewed journals or clinical validation by any form of oncology therapeutic, then these targets are given weighted preference. Here the primary focus is directed towards engineering in desired features in combination with our novel payload(s). Also, we utilize our expertise in data mining of publicly available clinical data sets to seek out under-represented targets that may be relevant to hematologic and solid cancers.

Once short-listed, we perform literature searches for published monoclonal antibodies that have been described to target those candidates. Using such information, we generate a catalog of proof-of-concept (POC) antibodies to be used in combination with our proprietary toxins to create differentiated ADCs. Where needed, we may also generate our own monoclonal antibodies in normal or humanized mice. To date, we have generated over twenty POC antibodies and expressed them in monomeric IgG format in Chinese hamster ovary cells for exploratory evaluation at laboratory scale. Using processes described above and platforms such as Oncomine and Megasampler, we have identified over 50 cancer-associated targets that we intend to evaluate with antibody-based therapeutics.

Need for new ADC Toxin strategies:

The ADC field started with the most potent toxins- for e.g., calicheamicin (Wyeth/ Pfizer). After observing the pre-clinical and clinical toxicities of these toxin warheads, the field moved down the potency scale towards the maytansines and the auristatins- monomethyl auristatin E/ F abbreviated MMAE/ MMAF (Seattle Genetics/ SeaGen), Auristatin Au101 (Pfizer)- and towards the camptothecins (Immunogen). This is where the moderate potency payload containing ADCs achieved clinical successes with multiple different targets. Those ADC programs working with the more potent toxin warheads focused on linker stability and identifying targets with low to normal tissue expression to achieve acceptable therapeutic indices.

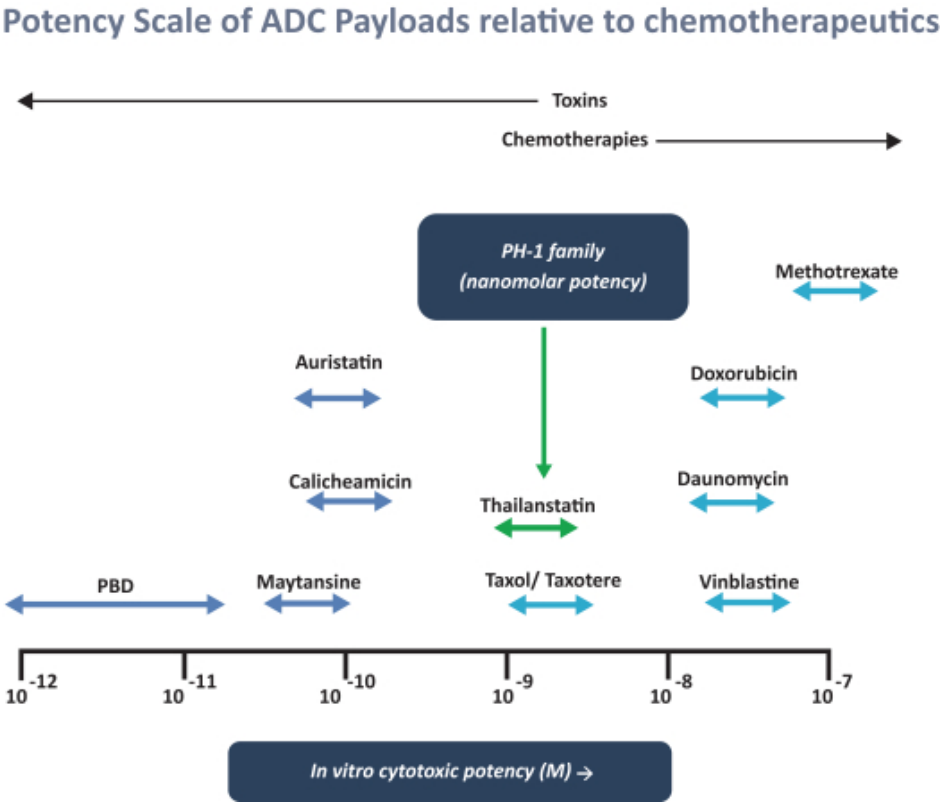
Of the 14 ADCs that are currently in the clinic, eight feature microtubule inhibitors- vedotin/ MMAE (5), mafodotin/ MMAF (1), soravtansine/ DM4 (1) and emtansine/ DM1 (1); two feature topoisomerase inhibitors- govitecan (1) and deruxtecan/ DXd (1); three feature DNA-acting payloads- ozogamicin/ calicheamicin (2) and tesirine (1); and lastly, one featuring a peptide toxin from the bacterium *Pseudomonas aeruginosa*- pasudotox (1).

Based on published results, even after opting for lower potency, these payloads have been linked to the following toxicities in multiple approved ADCs- MMAE (*neutropenia, peripheral neuropathy and gastrointestinal*), MMAF (*thrombocytopenia and ocular*), DM1 (*thrombocytopenia, neutropenia and gastrointestinal*), calicheamicin (*thrombocytopenia, gastrointestinal and hepatic veno-occlusive disease*) and DXd (*stomatitis and interstitial lung disease).*

Research and investment into novel payloads are also necessary from the viewpoint of durable efficacy and reducing the potential for resistance. Like several chemotherapies, ADC payloads such as MMAE are substrates of MDR pumps (also called ABC transporters or P-glycoprotein) and MDR-mediated resistance to ADC therapy are being highlighted in scientific publications. Finally, topoisomerase I mutations associated with resistance to camptothecin/ irinotecan family of payloads have also been identified.

The above factors limit the ability of current ADC payloads to maintain durable tumor regression and reemphasize the need for new ADC payloads in drug development. We, therefore, focused on payload research, to provide optionality for our patients.

Our strategy was to select for a payload with nanomolar potency with sufficient cytotoxic ability and select for MoA that would include a second complementary punch to provide additional potency.

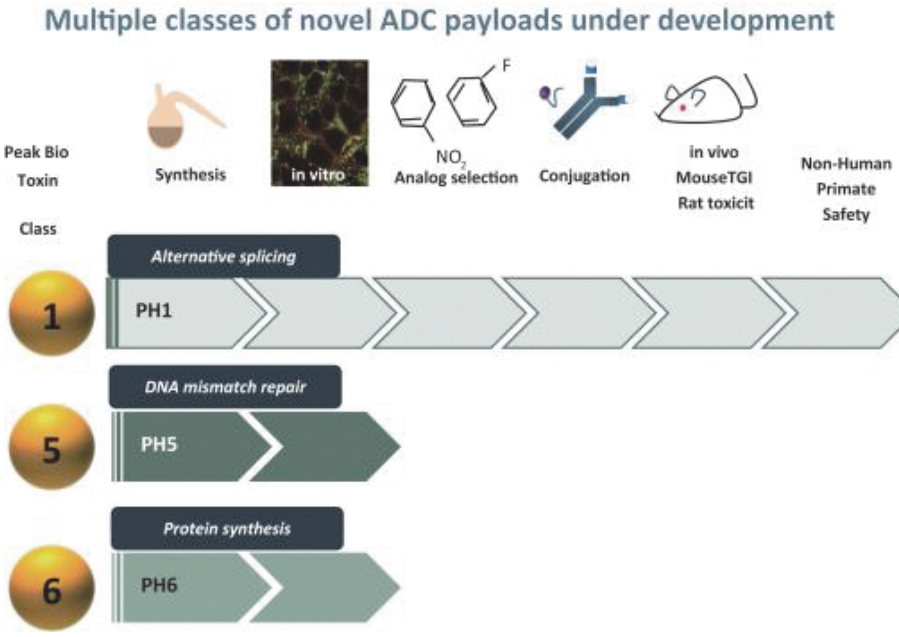


Given the clinical success of various checkpoint inhibitors, it was reasonable that the modulation of the innate or adaptive immune system by an ADC payload could perform this complementary, yet orthogonal function. Immune cells are nature's defense against foreign invaders- bacteria and viruses- but fail to identify and destroy cancer cells as a) the latter are derived from self, and b) immune cells are prone to active suppression by the tumor. We leveraged our understanding of oncology, immunology, and immuno-oncology to prioritize biologies that would have this dual activity. It is this concept that we believe allows for a potentially more robust cancer therapeutic approach.

In theory, these dual acting payloads would have:

1. A mechanism for inducing cell death that would be distinct from that of approved clinical ADC payloads. This could potentially give rise to ADCs with different AEs and risk profiles.

2. A mechanism for modulating the immune system as a) the latter's entire function is to seek and destroy cells with a target antigen, b) these cells have the inherent VDJ recombination diversity to match the evolving landscape of tumor mutations and escape, c) can affect long term durable regressions due to immune activation and memory cells that may be activated during recurrence, d) can expand the scope of therapy beyond the ADC's target antigen by recognizing other antigens (termed epitope spreading) on the cancer cell surface, and e) potentially reduce the payload dose by not being reliant on the cytotoxic mechanism alone. As it takes at least 2 weeks to obtain an adaptive immune response, this second mechanism would follow the initial payload-induced cytotoxicity in time and kill the tumor cells that were not killed by or escaped the ADC treatment.



PH-1 family of payloads targeting splicing:

a) Biology of splicing:

In higher organisms, eukaryotes, coding regions of the genome called exons are interrupted by noncoding sequences known as introns or "junk DNA". Genes are expressed by a two-step process. A first step called transcription that expresses deoxyribonucleic acid (DNA) as an intermediate called ribonucleic acid (RNA). It is at this intermediate step that introns are removed to generate a mature and functional mRNA molecule. The splicing machinery, known as spliceosomes, comprises five small nuclear ribonucleoprotein particles (snRNPs) that interact with more than 200 different auxiliary and regulatory factors that work in concert to precisely remove introns and connect the coding exons end-to-end and generate the final "mature" RNA. The removal of introns from mRNA is referred to as alternative splicing (AS) or simply splicing. In step two, the mature RNA is translated into various functional proteins.

Over the past 15 years, the role of alternative splicing in human disease has become apparent. When the human genome project was completed, in silico analysis predicted that at least 75% of human genes underwent splicing and that 15-50% of genetic diseases were related to aberrant splicing events. With growing knowledge in the areas of algorithms that accurately predict splicing, and advances in areas of high-throughput validation of spliced protein isoforms (proteomics and immunopeptidomics), we now know that this percentage is even higher.

We now know splicing has been implicated in malignant progression of hematologic and solid tumors, enhancing development of features such as increased cell proliferation, invasion, and recruitment of tumor blood vessels. This happens in different ways:

1. The molecular hallmark of the above features is that alternative splicing switches (AS switches) out protein variants or isoforms that function much like oncogenes in stimulating the same molecular signaling pathways as oncogenic driver mutations do. Alternatively, mutations in spliceosome component genes such as *SF3B1, PH5A, and U2AF1,* and genes affecting their regulation, may also drive AS switches as was detected in multiple studies across 33 different cancer types. These "hotspot" mutations in spliceosome proteins affect AS on a global scale and affect multiple signaling pathways contributing to malignant

transformation. Conversely, cancers with splicing hotspot mutations also had reduced T-cell infiltration as determined by gene signatures suggesting that cancers with defective splicing may respond to immune stimulation.

2. During oncogenic transformation of hematopoietic cancers such as acute myeloid leukemia (AML) and myelodysplastic syndrome (MDS), AS maintained the “stem-cell” state of healthy stem cell progenitors and changed during the malignant transition.

3. In addition to the altered RNA processing role of splicing in cancer, other studies implicated AS and splice variants in development of drug resistance due to emergence of new variants that were not susceptible to current standards of care. Alternatively, higher intron retention was observed in chronic myelogenous leukemia (CML) patients undergoing remission as opposed to healthy donors. The latter observation suggests that CML remission may be linked to a form of correction or reversal associated with splicing.

4. Finally, mutations in *SF3B1* and *SRFSF1* spliceosome genes have been associated with synthetic lethality during malignant hematopoiesis. Where function of one normal copy of the gene is lost during the malignant transformation process of MDS, AML, and chronic lymphocytic leukemia (CLL) cancers, if the remaining functional copy is targeted by genetic deletion or its function by inhibitors, it results in defective hematopoiesis of leukemia cells.

Therefore, we hypothesized that ADC payloads targeting splicing may have the following effects:

1. Global effects on splicing of thousands of genes vital to the cancer cell survival and proliferation, even AS switches functioning as oncogenic drivers. Assuming fail-safe mechanisms called nonsense-mediated decay (NMD) functioned normally, identified, and prevented the mis-spliced RNAs from being translated into protein, this would result in global depletion of genes vital to the cancer cell and result in cell death.

2. Depending on potency, accumulation of thousands of aberrant mis-spliced, and potentially mis-folded unnatural proteins within the cell may cause death by endoplasmic reticulum (ER) stress and unfolded protein response.

3. Induce synthetic lethality in cancers containing one functional copy of spliceosome genes.

4. Reduction in some aspect or feature of malignancy.

5. Increased sensitivity to some standards of care and/ or targeted therapies.

6. Finally, if a significant fraction of mis-spliced RNAs overcame NMD, the resultant proteins containing unnatural or neopeptides (also known as neoepitopes) could aid in immune recognition of cancer cells as foreign and result in their eradication.

Thus, having identified a biology for ADC payload that may simultaneously a) induce cytotoxicity by a mechanism different from conventional ADCs, and b) stimulate and activate immune cells, we turned our focus towards spliceosome modulators.

b) Thailanstatin payloads:

In nature, bacteria and fungi are the source of many toxins.

One such bacterium *Pseudomonas* sp. 2663 produced a small molecule toxin termed FR901464 or Spliceostatin A. FR901464 biosynthesis by *Pseudomonas* sp. 2663 was performed by a cluster of genes called fr9. Screening of fr9-like gene clusters in other bacteria identified a bacterium by the name of *Burkholderia thailandensis* MSMB43, that produced the toxin Thailanstatin. Research groups then proceeded to purify Thailanstatins A, B and C from fermentation broth and demonstrated its cytotoxic effect on cell lines and confirmed its anti-splicing MoA.

We focused on Thailanstatin as an ideal ADC payload with the potential to induce cytotoxicity and immune activation creating two distinct ways to enhance the killing of targeted cancer cells.

Over time, we generated and evaluated a series of 13 non-natural Thailanstatin (Th) analogs through structure activity relationship (SAR) studies and optimized for potency and metabolic stability. These naked analogs were evaluated for potency and permeability against a panel of a dozen cell lines. Those analogs that were amenable to linker addition and suited for ADC development were given preference. Test conjugations of Th linker-toxin analogs were performed with clinical-grade Trastuzumab, purified to remove free toxin, and laboratory-grade ADC preparations were evaluated against a panel of Her2-high, Her2-low, and Her2-negative cell lines to determine baseline levels of ADC potency and specificity. Using this approach, we made SAR-based changes in three generations, making modifications, and optimizing for potency, stability, specificity, and conjugation ability as we went along. The first Generation yielded analog 3 (ThA3), second Generation yielded analog 9 (ThA9), and the third Generation gave us analog 13 (ThA13). Based on our results, a derivative of ThA13 was selected as our final analog.

Unlike conventional ADC toxins where linkers and toxins are separate and modular, and one linker is applied to multiple toxins for e.g., alanine-alanine, valine-valine, valine-alanine, or valine-citrulline formats; Th—compatible linkers had to be designed and then built into the synthesis route of the toxin analog. Subsequently, the synthetic route for each toxin analog and its derivative linker toxin was determined, then optimized for better yield at each step. Unlike other ADCs, where the linker and the toxin are coupled in the last steps, Th-linker toxins were assembled during the chemosynthetic process. Furthermore, where possible, we made both non-cleavable and cleavable versions of linkers (L) for conjugation to either lysine or cysteine amino acids.

The Thailanstatin ThA13 suite comprising the PH-1 family of validated linker-toxins (L-Ts) comes with a set of seven related molecules with distinct ADC features that have been extensively characterized in vitro and in vivo as Her2 ADCs:

1) Lysine non-cleavable L-Ts ThA13L2 and ThA13L22

2) Lysine cleavable L-Ts ThA13L91, ThA13L92 and ThA13L94

3) Cysteine non-cleavable L-T ThA13L18

4) Cysteine cleavable L-T ThA13L11

All above ThA13 L-Ts and ADCs derived from them are collectively referred to as the PH-1 ADC platform. Stability and performance of these L-Ts has been characterized on at least two different antibodies targeting different antigens, Her2 and Trop2, yielding similar results. After proving selectivity on target-positive (*vs* target-negative cells), a measure of off-target activity, we tested their ability to shrink pre-implanted target-positive 200 mm3 sized-tumors in therapeutic mode. Of these, the lead L-T that yielded the maximum anti-tumor growth inhibition (TGI) in *in vivo* xenograft studies as a Her2 or Trop2 ADC conjugate was the non-cleavable L-T ThA13L22, later renamed PH1.

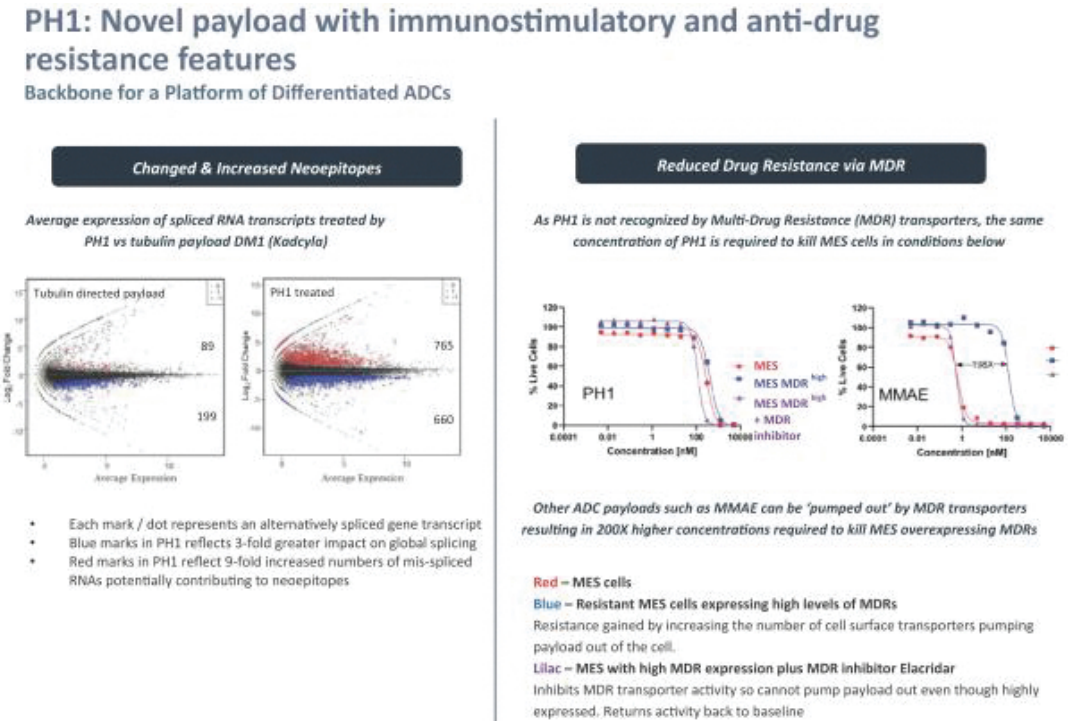
After reviewing the adverse effects associated with various non-cleavable vs cleavable ADCs for e.g., T-DM1 vs T-DXd, we concluded that PH1 ADCs in non-cleavable format are likely to be associated with fewer serious toxicities due reduced systemic exposure of the free payload. To corroborate this viewpoint, we refer to the recent meta-analysis performed by Wynn et al (DOI: 10.1200/JCO.2022.40.16_suppl.3032 Journal of Clinical Oncology 40, no. 16_suppl (June 01, 2022) 3032-3032) of commercially available ADCs that showed that ADCs with non-cleavable linkers were associated with significantly less toxicity than those with cleavable linkers. ADCs with cleavable linkers tended to have greater instances of >Grade 3 adverse events (AEs). 47% of patients (total 1082) treated with 7 cleavable L-Ts developed AEs ≥ grade 3 compared to 34% of patients (total 1335) treated with 2 non-cleavable L-Ts. This was significantly different (weighted risk difference -12.9%; 95% Confidence Interval ranging from -17.1% to -8.8%). There was also a significant difference favoring non-cleavable ADCs for ≥ grade 3 neutropenia (-9.1%; 95% CI -12% to -6.2%) and ≥ grade 3 anemia.

We therefore decided to proceed with the non-cleavable L-T PH1 as a) our non-cleavable format was associated with better TGI conjugated to Her2 and Trop2 antibodies, b) 57% and 14% of TNBC patients treated

with cleavable Trop2 ADC (Trodelvy®) presented with >Grade 3 hematologic and gastrointestinal AEs, respectively (Bardia et al 2019)., and c) non-cleavable ADCs were likely to be associated with less systemic exposure and toxicity.

Microtubule inhibitor payloads are known to induce immunogenic cell death and/ or induce anti-tumor immunity in combination with checkpoint inhibitors for e.g., MMAE in Adcetris® and Tivdak®, and DM1 in Kadcyla®. Therefore, we compared PH1 with DM1 in their abilities to induce immunogenicity over and above that of vehicle control treatment.

We performed an unbiased comparison of PH1-, DM1- and DMSO- treated human gastric cancer cells by RNA sequencing of all genes and looked for sequences that would give rise to aberrant proteins (neoepitopes). After identifying the normal and novel RNA species, we highlighted the neoepitope-containing species that increased in response to DM1 *vs* DMSO and PH1 *vs* DMSO treatments (red dots in figure below). As expected, DM1-treated cells contained 89 more neoepitope-containing RNA species than control, proving that microtubule inhibitor payloads are indeed immunogenic. However, PH1-treated cells contained 765 neoepitope-containing species, suggesting that PH1 payload may be highly proficient at recruiting immune cells to the tumor and impacting immune-cell mediated cancer cell death. We believe that this ability to recruit immune cells may evolve into an important future differentiator for our PH1 program and current and ensuing ADC constructs.



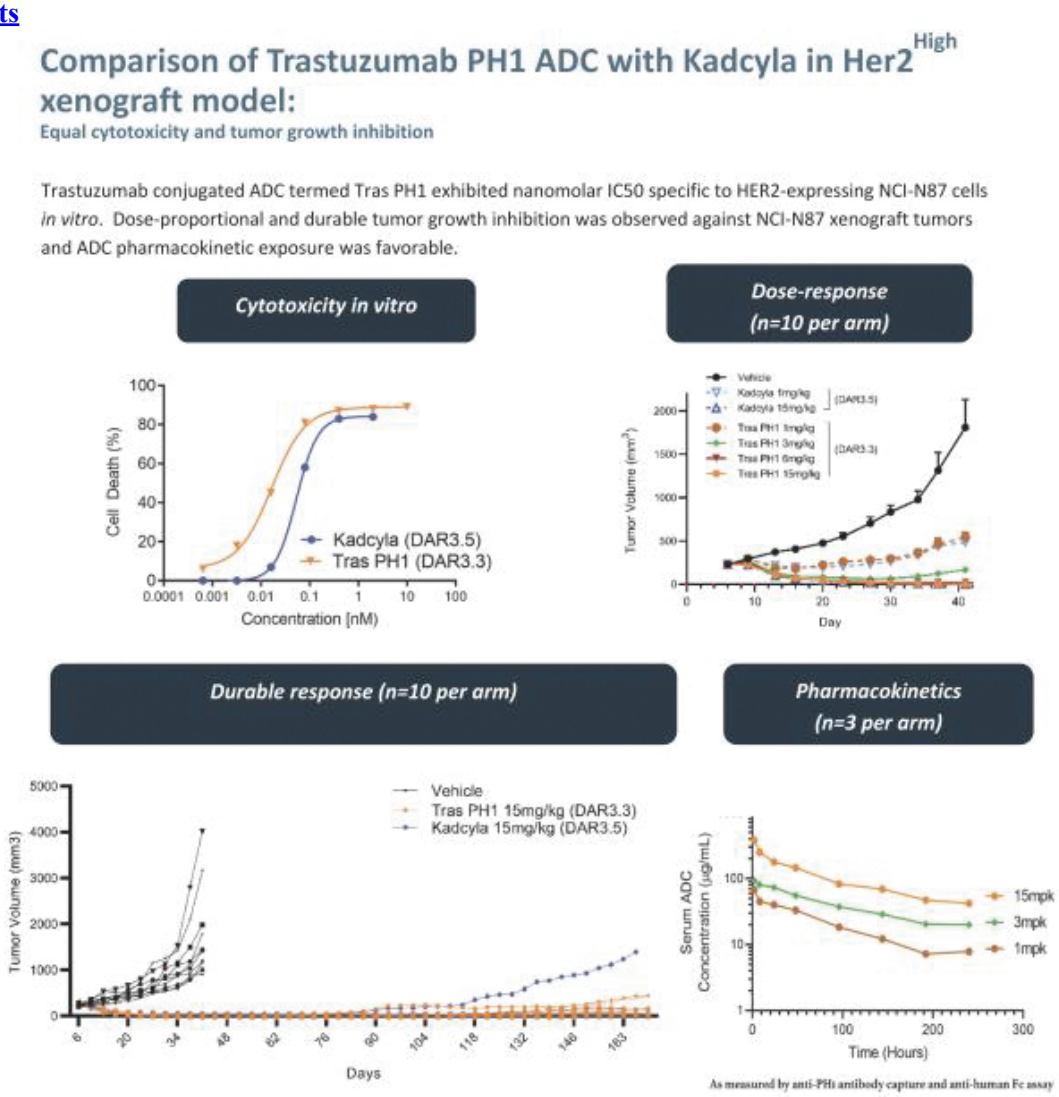
When we looked for genes that were negatively impacted and reduced in quantity (blue dots in figure above), we found 660 different RNA species were depleted in PH1-treated cells. Likely due to the combined effects of our payload targeting splicing with NMD-mediated degradation, these RNAs encompassed genes fueling proliferation, growth, and malignancy, and therefore, vital to the survival of the cancer cell. This was due to PH1's global impact on splicing and largely reflected this payload's MoA as opposed to DM1, where the payload functions by targeting microtubules.

We then evaluated PH1's performance *vs* auristatins such as MMAE that are substrates of multi-drug transporter (MDR) pumps. MMAE is actively pumped out of the cancer cells, giving rise to ADC resistance. Even within the normal course of ADC administration there are concerns about increased resistance to these payloads over time and why potentially this attribute could serve as an important market differentiator.

We evaluated PH1 and MMAE's ability to kill MES cells with normal *vs* high levels of MDR. We found that MMAE, not PH1, was recognized by these pumps, and the presence of high levels of these pumps reduced the *in vitro* cytotoxicity (IC50) of MMAE 198-fold. The presence of high levels of these pumps had no significant effect on the cytotoxic potency of PH1, as the latter were not substrates and therefore not recognized by MDRs nor pumped out of the cell. The MDR-specific inhibitor Elacridar prevented MDR pumps in MDR-high MES cells from pumping MMAE payload out of the cell, allowing its accumulation, and returning MMAE's cell killing potency back to baseline. This finding confirmed that the loss of MMAE's potency was specific to increase in the elevated number of MDR pumps and did not occur even in the presence of increased numbers, when we blocked MDR's ability to pump out the payload using Elacridar. This is important because MDR transporters are known to be implicated in the emergence of resistance against many chemotherapies, including some ADC payloads. Furthermore, if MDRs recognized PH1, it would have reduced its potency, and restricted its cytotoxicity to only targets that were highly expressed in cancer cells.

c) Properties of PH1 ADCs:

We used the Her2-targeted antibody Trastuzumab to tease out the differentiating properties of PH1 ADCs. As trastuzumab is an FDA-approved therapeutic, both as a naked antibody and as an ADC (trastuzumab emtansine, also known as T-DM1, or Kadcyla®), with well-published pre-clinical TGI and toxicology profiles in animal models, we decided to use clinical grade Trastuzumab for conjugation with PH1. The resulting ADC, Tras PH1, was benchmarked against Kadcyla® to determine how our payload would fare relative to microtubule targeting payload DM1 on the same antibody backbone.



When conjugated at drug-to-antibody ratio (DAR) of 3.3, Tras PH1 ADC demonstrated cytotoxic potency in the sub-nanomolar range. The ADCs were then evaluated against pre-established Her2-high expressing tumors in athymic mice; mice that lack an intact immune system to prevent rejection of human tumors. We then paid attention to the ADC dose that a) showed statistically significant TGI and b) shrank established 200 mm3 tumors, and we evaluated both the short- (30-day) and the long-term or durable (5 months or more) responses of the two ADCs.

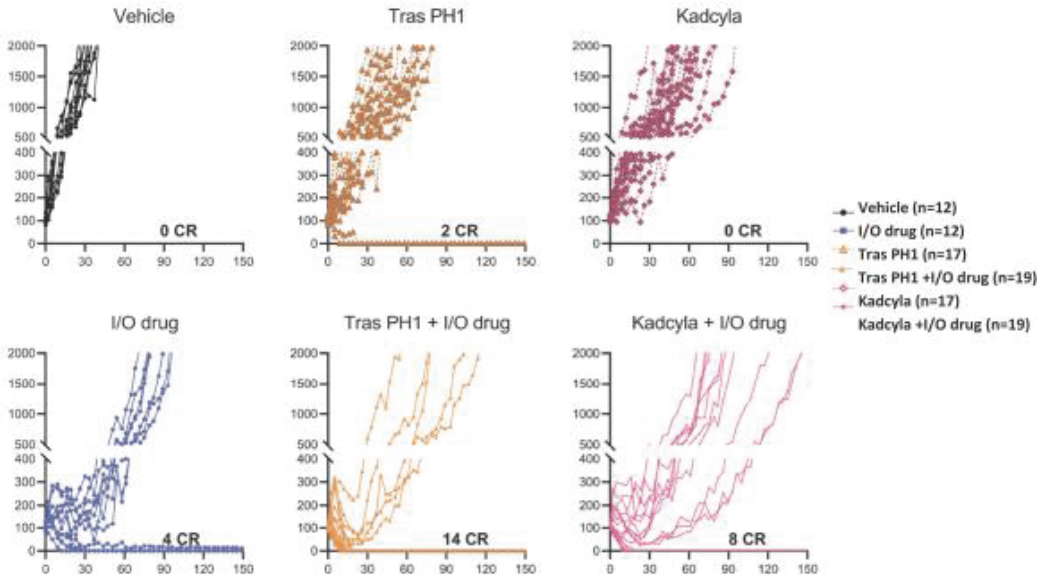
The short-term TGI of both ADCs was indistinguishable in doses ranging from 1- 15 mg/kg. Both ADCs showed statistically significant tumor growth inhibition at 1 mg/kg and both ADCs shrank established 200 mm3 tumors equally at 3 mg/kg or higher doses. The results suggested that a DAR-matched ADC containing PH1 was at least as effective as DM1 *in vitro* and *in vivo*.

When we followed the mice for extended observations, we noted that in the high-dose 15 mg/kg- treated animals, Kadcyla®-treated tumors occasionally rebounded within 3-months and Tras PH1-treated tumors

rebounded in around 5 months. Tras PH1 ADC showed dose-dependent pharmacokinetics and the linker was stable in mouse circulation.

Previously, we showed that PH1 had an increased propensity to stimulate neoepitopes due to its anti-splicing MoA. In order to evaluate the immunogenic potential of our payload, we evaluated tumor growth inhibition in syngeneic mice with an intact immune system. We used murine MC38 colorectal cancer cells that were genetically engineered to swap out the mouse *Her2* gene with its human counterpart, so that our ADCs targeting human *Her2* could be evaluated in this tumor model.

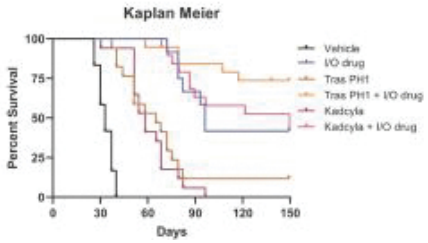
Trastuzumab PH1 ADC- Checkpoint Inhibitor Combination Therapy on Tumor Growth Inhibition:



- 3% Colon/colorectal cancer is Her2+
- 15% of Colon/ colorectal cancers have high microsatellite instability or are mismatch repair deficient, and are eligible for immunotherapy
- Tras PH1 ADC completely regresses 74% of Her2+ colon tumors when combined with checkpoint inhibitor therapy
- Checkpoint inhibitor alone regresses 33%

Trastuzumab PH1 ADC- Checkpoint Inhibitor Combination Therapy Is Correlated with Improved Overall Survival in tumor-bearing mice:

Combination in human Her2 expressing syngeneic mouse model with intact immune system



Arms	Median Survival	Fraction surviving (D149)
Vehicle	33 days	0.0%
I/O drug	96 days	41.7%
Tras PH1	65 days	11.8%
Tras PH1 + I/O drug	Not reached	73.7%
Kadcyla	58 days	0.0%
Kadcyla + I/O drug	149 days	42.1%

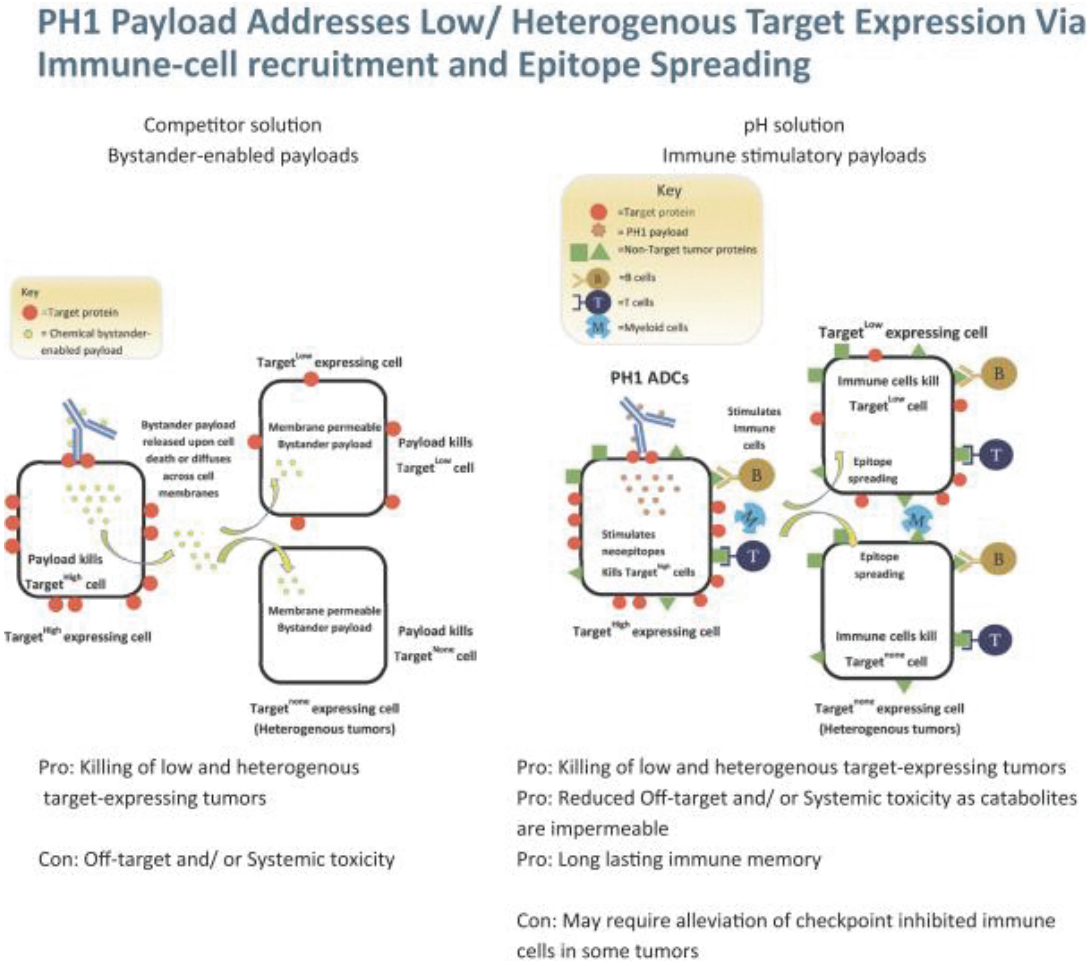
Also, 15% of colorectal cancer patients are eligible to receive checkpoint inhibitor therapy and we selected this particular murine cell line as it is responsive to different immunooncology (I/O) therapies.

We then evaluated a DAR-matched Tras PH1 ADC with Kadcyla®, separately and in combination with checkpoint inhibitor therapy (termed I/O drug) and compared short- and long-term responses. TGI of Tras PH1 and Kadcyla® were largely similar, except for a small proportion of complete regressions observed only in Tras PH1-treated mice. As anticipated, the tumor model responded to standard-of-care I/O drug administered as a single agent.

When administered as a combination with checkpoint inhibitor therapy, the Tras PH1 ADC induced complete regressions (CRs) in 14 mice whereas 5 tumors rebounded after initial shrinkage (n=19 mice per arm). As a result, 73% of Tras PH1 + I/O treated mice showed complete regressions and were still on study at 5 months and the median survival was not reached. In Kadcyla® combination arm, there were 8 CRs, and 11 tumor rebounds, and 42% of Kadcyla® + I /O treated mice were tumor-free at 5 months. The median survival of Kadcyla® combination was 149 days.

The above results support our theory that immunostimulatory ADC payloads will induce longer and deeper responses due to greater immune cell engagement with tumor cells. In checkpoint blocked tumor cells, this deep response may require checkpoint alleviation. Also, the Tras PH1 combo-treated CR mice rejected a rechallenge with a fresh round of tumor cells, suggesting the presence of anti-tumor immunity. This immunity rejected MC38 cells with or without human Her2, suggesting that the immune response had spread beyond the original protein that the Her2 ADC targeted. This phenomenon of epitope spreading is characteristic of immune B and T cells that surveil many surrounding epitopes of the cancer cell and are not restricted to the target protein.

This is an advantage of immunostimulatory payloads such as PH1 that attract immune cells to the tumor. As payload delivery, and therefore cytotoxicity is directly proportional to the amount of target antigen receptors, target heterogeneity (for e.g., high-Her2 and low-Her2 expressing cells) within the same tumor is often a problem. It is likely that ADCs may not be able to deliver sufficient cytotoxic payload to kill the tumor cells with lower expression.



Pro: Killing of low and heterogenous target-expressing tumors

Con: Off-target and/ or Systemic toxicity

Pro: Killing of low and heterogenous target-expressing tumors

Pro: Reduced Off-target and/ or Systemic toxicity as catabolites are impermeable

Pro: Long lasting immune memory

Con: May require alleviation of checkpoint inhibited immune cells in some tumors

To solve this problem, different ADC programs have taken various approaches:

1. Increase potency of the payload.
2. Engineer unstable linkers that release the toxin in the tumor environment, killing both high- and low-expression cells.
3. Engineer or identify toxins with chemical bystander activity that can kill the targeted cell, and upon release by the dead cell, kill the neighboring cells that may/ may not express the target.

All above approaches have consequences relating to off-target cell killing.

We have focused our efforts and prefer that our payloads have inherent immunostimulatory properties that attract immune cells. Having derived from self, immune T and B cells do not have the toxicity concerns of a payload gaining access to the systemic circulation.

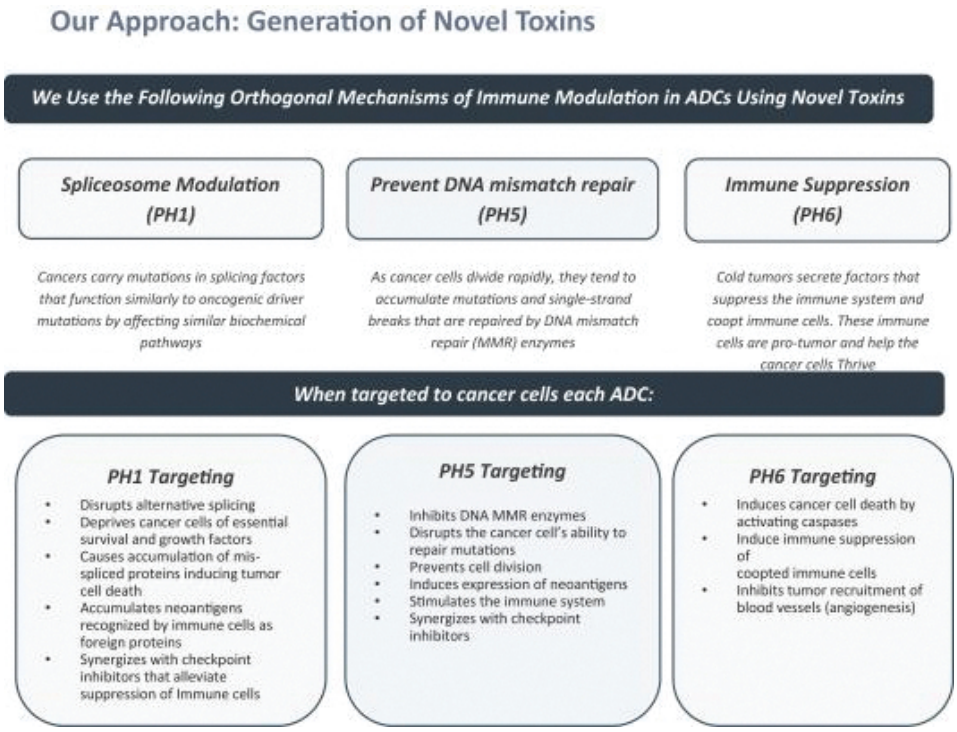
Our DAR-matched Trastuzumab ADC was then evaluated in non-human primates (NHP) to assess the toxicology and toxicokinetic (TK) properties of Tras PH1 ADC.

The Maximally Tolerated single IV Dose (MTD) of Tras PH1 ADC was 20 mg/kg. Below 15 mg/kg dose, there were no Tras PH1 ADC-related clinical signs, changes in body weight, food consumption, or clinical pathology parameters (hematology, serum chemistry). Below 15 mg/kg dose, there were no test article-related organ weight changes, nor macroscopic or microscopic findings. At MTD, moderate elevations in liver enzymes and moderate decreases in platelets were noted; and yet both changes were completely reversed to baseline after 10 days. These changes were also noted and published for Kadcyla® at the highest non-severe toxic dose (HNSTD) by Poon, *et al*.

Remarkably at MTD with Tras PH1 ADC, histology of bone marrow smears was within normal limits and there was no evidence of neutropenia by hematology. Also, no gross lesions were observed in eyes and optic nerves (ocular toxicity) and sciatic nerves (peripheral neuropathy) of animals treated at MTD with Tras PH1 ADC.

The toxicology data suggested PH1 ADCs would also be differentiated from conventional payload ADCs by toxicology parameters, in addition to pharmacology (TGI).

These findings support differentiated features, creating a pipeline of PH1 ADCs against multiple targets using our catalog of POC antibodies.



PH5 payloads targeting DNA mismatch repair (MMR) and/ or DNA damage response (DDR):

Biology of MMR:

Cancer cells are associated with uncontrolled cell division. Before cells divide, they replicate their DNA to forward one chromosome copy to each daughter cell. Largely, DNA replication is a robust process controlled by enzymes with precise fidelities, low error rates, and the presence of correction mechanisms termed DNA mismatch repair (MMR). Due to rapid and frequent cell division, cancer cells tend to accumulate errors such as mutations,

single-, and double-stranded DNA breaks, that are corrected in real time by MMR enzymes. Errors left uncorrected trigger a set of cellular responses collectively termed the DNA damage response (DDR). The DDR engages signaling pathways that regulate the recognition of DNA damage, the recruitment of DNA repair factors, the initiation and coordination of DNA repair pathways, and transition through the cell division cycle. If the cells are at a significant survival disadvantage, DDR processes activate apoptosis and trigger cell death.

When cancer cells are treated with DNA-damaging chemotherapeutic agents for e.g., such as the DNA alkylating agent platinum, cancer cells activate DDR and MMR processes, and when the errors are significant in terms of cellular liability and cannot be repaired, they are committed to programmed cell death.

In adult cancer patients, cancer cells are likely to be actively involved in cell division compared to normal differentiated cells. Therefore, ADC payloads that target DNA DDR and/or MMR is likely to preferentially target proliferating cancer cells. If we prevent the repair mechanisms, cancer cells are likely to be committed to cell death because of the errors they incorporate. We may even choose to accelerate the process by combining with certain chemotherapies.

Conversely, mutations in MMR and DDR genes may provide a selective advantage to the cancer cell by not correcting the mutation that would offer a significant growth or survival advantage. MMR-deficiency (dMMR) is common in many colorectal, gastrointestinal, and endometrial cancers and found in lower frequency in other solid cancers of breast, prostate, bladder, and thyroid. Here, dMMR patients can have increasing numbers of microsatellite repeats, also called high microsatellite instability (MSI-H). Both dMMR and MSI-H are considered biomarkers and predict response to checkpoint therapy and may go hand in hand with the neoepitopes that are formed when errors in DNA go uncorrected.

It is therefore likely that an ADC payload targeting MMR/ DDR biology may have a dual punch, inducing apoptosis in targeted cells on the one hand and activating the immune system by the other. This biology is compatible with Peak Bio philosophy of generating ADC payloads with multiple, orthogonal MoAs.

We are currently evaluating the first generation of PH5 linker-toxins against an undisclosed MMR/ DDR target. The toxin is bystander-enabled for killing the neighboring cell and may be adapted for low and heterogenous target expression. This is in addition to potential killing by immune activation *via* neoepitopes.

PH6 payloads targeting immune suppression:

Protein synthesis is integral to most biological functions. Even slow-growing, stem cell-like progenitors of tumor cells that divide less frequently synthesize proteins to support vital functions. DNA is transcribed into RNA and RNA is translated into protein. Theoretically, both inhibitors of transcription and translation may function as ADC payloads if one can partition them selectively to cancer cells using target-specific antibodies that can differentiate them from a normal cell. PH6 is an undisclosed payload that prevents protein synthesis at the stage of transcription.

Tumors containing an active population of immune cells capable of responding to immunogenic stimuli and killing cancer cells are referred to as immune “hot” tumors. Conversely, those tumors that have a low population of immune cells or have immune cells that are actively suppressed or co-opted into working for the tumor are referred to as immune “cold”. An extreme form of immune cold tumors called immune desert reflects tumors where immune cells are confined to the tumor periphery.

Immune cold tumors are hard to target and are typically unresponsive to immunotherapy. Checkpoint inhibitor therapy and immune stimulation approaches have largely been unsuccessful due the immune cells being suppressed or co-opted. These tumors have regulatory T cells (T-regs) that suppress T cell activation or express soluble factors that induce immune deserts. In this case, Peak Bio is testing payloads that a) induce cytotoxicity

of tumor cells, and b) suppress immunosuppressive immune cells. This dual action protein synthesis inhibitor payload may potentially have a second function where tumor immunogenicity is increased by killing co-opted immune cells or suppressing function(s) of immunosuppressive cells.

We are currently evaluating the first generation of PH6 linker-toxins against an undisclosed target and validating its second MoA. Due to the varied effects of new protein synthesis inhibition, this toxin may also prevent the formation or recruitment of new blood vessels to the tumor.

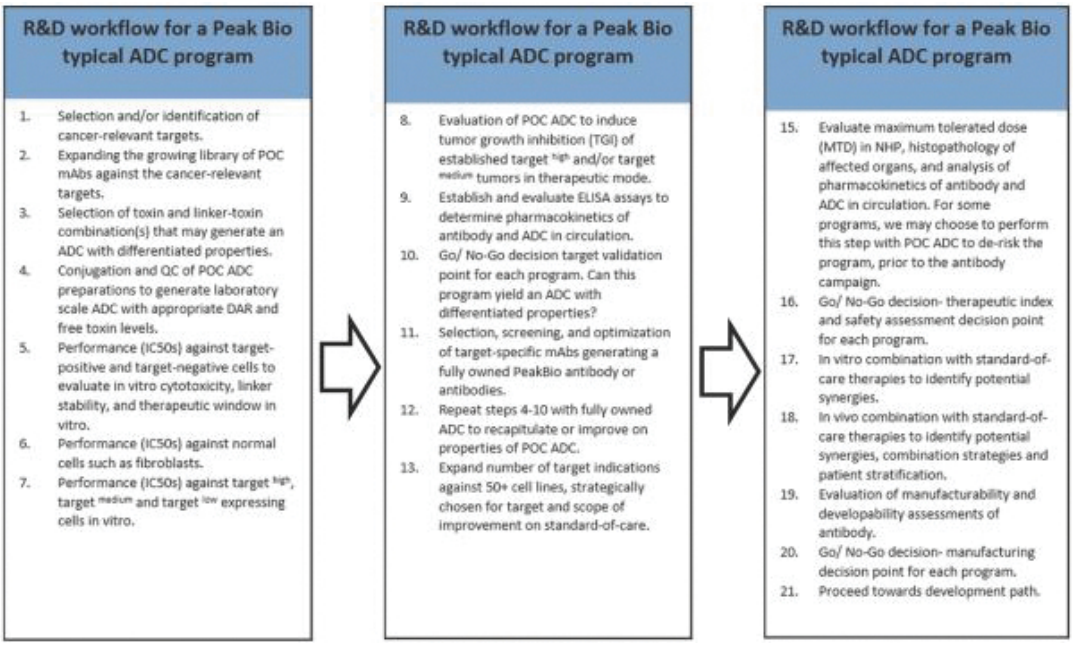
Antibody-based Platforms:

Our objective is to use our expertise in antibodies and our novel technologies to develop our product pipeline and discover new product candidates for the treatment of cancer and related diseases. Our strategy includes initiatives to:

- Continue to identify and develop novel monoclonal antibodies (mAbs). Together with advances in Next-gen sequencing (NGS), significant technology advances in antibody generation in humanized mouse platforms and high throughput B-cell sequencing methods, thousands of potential new targets are being continuously discovered. Antibodies that bind to these targets can be generated rapidly and in a cost-effective manner. We believe that antibodies will be one of the primary areas for therapeutic development for the foreseeable future, particularly as genomic research identifies new disease targets. We have focused on the research and development of antibodies since our inception and have successfully identified novel antibodies with potential therapeutic applications. We will continue to apply our expertise in antibodies and utilize our technologies to identify novel antibodies that bind to these new targets.
- Use our technologies to enhance potency of monoclonal antibody therapies. Antibodies make excellent delivery vehicles since they bind specifically to cell surface targets. We can transform highly specific mAbs into drug candidates by improving the cancer cell killing potency of mAb-based therapeutics through our antibody-toxin conjugates (ADC), antibody-PROTAC and bispecific antibody programs. We are also actively developing additional technologies where our vision is to grow the portfolio and simultaneously de-risk current programs. We plan to file patent applications at the appropriate time to ensure the patent life encompasses a significant development span of our therapeutics. Furthermore, our technology provides us with an opportunity to develop our own product candidates, but also enables us to add significant value to mAbs and targets owned by other companies, and opens up partnership opportunities, co-development strategies, and additional sources of funding.
- Develop a broad portfolio of products. We are developing multiple products for many potential indications simultaneously, thereby increasing our opportunities to identify successful drugs. Our drug candidates utilize multiple MoAs and target a variety of different receptors expressed in several types of cancer cells.
- Acquire attractive toxins, small molecules and/ or antibodies. In addition to our own development efforts, we will continue to identify products and technologies to in-license. We believe that we are well positioned to continue to attract in-licensing and acquisition candidates because of our expertise in mAbs, toxins, and ADCs. Previously, we successfully in-licensed our lead small molecule PHP-303 from Bayer. While we expect that many new product candidates will arise from our internal research programs, we will continue to seek in-licensing opportunities to build our product candidate pipeline.
- Establish strategic collaborations. We intend to enter into corporate collaborations at various stages in the research and development process. We may seek a corporate collaborator prior to initiating phase 2 clinical trials or may choose to partner some products at a later stage to increase our potential downstream participation in product sales. We believe our collaboration strategy provides us with distinct advantages, including:
- it builds on our fundamental strength in research and discovery of innovative mAb-based products such as ADCs

- it capitalizes on our future corporate partners' strengths in product development, manufacturing, and commercialization
- it enables us to develop a greater number of leads and programs than otherwise would be possible
- it reduces our financing requirements.

Summarized below is an average R&D workflow for a typical ADC program:



Peak Bio has additional discovery research programs directed towards identifying and developing new mAb-based products and technologies to treat cancer. Our discovery programs are currently focused on identifying and screening cancer-relevant targets, mAbs, ADCs, antibody-PROTACs and bispecific antibody therapies.

Our preclinical candidates:

Trop2 PH1 ADC is a Clinically validated target: Trophoblast antigen 2 (Trop2) or Tumor- Associated Calcium Signal Transducer 2 (TACSTD2) is a transmembrane glycoprotein that is highly expressed in many cancers over and above that of levels observed in normal healthy tissue, making this protein a prime ADC target. Trop2 levels are elevated in several solid tumor cancers (see table below). Trop2 overexpression in metastatic tissues makes it an attractive and potential therapeutic target for late-stage diseases.

Table 2: Expression of Trop2 target in various cancers

Cancer	Trop2 Expression	Prognostic Significance
Anaplastic large cell lymphoma (ALCL)	No expression, implicating that its expression may not be involved in tumor growth	No
Breast	Elevated in some types; reduced in others	Yes
Cervical carcinoma	Elevated	Suggested
Colon cancer	Elevated	Yes
Colorectal carcinoma	Elevated	Yes
Endometrioid endometrial cancer (EEC)	Elevated; higher tumor grade and cervical involvement	Yes
Esophagus	Elevated	Suggested
Gastric cancer	Elevated	Yes
Glioma	Elevated	Yes
Head and neck squamous cell carcinoma	Not elevated on tumors	No
Hilar cholangiocarcinoma	Elevated	Yes
Kidney	mRNA expression is reduced	Suggested
Large intestine	mRNA expression is elevated	Suggested
Lung and non-small cell lung cancer (NSCLC)	Reduced in most lung cell lines	Yes, low Trop2 expression is significant
Chronic lymphocytic lymphoma (CLL)	Elevated	Possible
Extra nodal NK/T-cell lymphoma, nasal type (ENKTL)	Elevated	Yes
Non-Hodgkin's lymphoma (NHL)	Elevated	Possible
Small-sized Pulmonary adenocarcinoma	Elevated	Yes
Squamous cell carcinoma of the oral cavity	Elevated	Yes
Ovarian	Elevated	Yes
Pancreatic	Elevated	Yes
Prostate	Elevated	Yes
Stomach carcinoma	Elevated	Suggested
Thyroid carcinoma	Elevated	Suggested
Urinary bladder carcinoma	Elevated	Suggested
Uterine	Elevated	Suggested

Table from Shvartsur and Bonavida (2015) doi: 10.18632/genesandcancer.40

The Trop2 ADC approach has been clinically validated and has outperformed standard-of-care in at least two cancer settings- metastatic triple negative breast cancer (TNBC) and in advanced urinary bladder (urothelial) cancer. The Trop2 ADC Trodelvy®, also known as Sacituzumab govitecan or IMMU-132, has obtained approvals in the above indications after demonstrating significant improvement in clinical efficacy. Due to the potential of targeting Trop2 in multiple cancer settings (see table above), different companies have tried to carve out their niche using the advantages/ properties of their payloads (see table below). While Datopotamab DXd is currently being tested in Phase 1b clinical trial on NSCLC patients and have expanded to Phase 2 and Phase 3 clinical trials, others such as BAT8003 and PF-06664178 have discontinued their Trop2 programs for different reasons. The status of the other Trop2 ADC programs is unknown.

Table 3: ADC-based Trop2 therapeutics in clinical trials

Product (alias)	**Company**	**Description**	**Clinical stage**
Trodelvy® (Sacituzumab govitecan/ IMMU-132)	Gilead (formerly Immunomedics)	Humanized IgG1 mAb conjugated to irinotecan metabolite (SN-38) warhead via a maleimide–PEG–acid-sensitive cleavable carbonate linker	Approved for metastatic TNBC, Accelerated approval for advanced urothelial cancer Several combination trials ongoing (Phase 2 and 3)

Product (alias)	Company	Description	Clinical stage
Datopotamab deruxtecan (DS-1062)	Daiichi Sankyo, AstraZeneca	Humanized IgG1 mAb conjugated via a thioether bond to DNA topoisomerase I inhibitor exatecan derivative (DXd) warhead using an enzymatically cleavable tetrapeptide linker	Phase 1 ongoing (TNBC) Phase 2 ongoing (NSCLC) Phase 3 ongoing (NSCLC)
SKB264	Klus Pharma, Merck	Humanized IgG1 mAb conjugated to topoisomerase I inhibitor belotecan via a cleavable linker	Phase 1 ongoing
JS-108/ DAC-002	Shanghai Junshi Bioscience Co., Ltd. DAC Biotech	Humanized IgG1 mAb conjugated to tubulysin B analog Tub196 warhead via a 2,3-disubstituted long side chain hydrolysis-resistant linker	Phase 1 (SCLC) Phase 1 (solid tumors)
BIO-106	BioOneCure Therapeutics	mAb targeting Trop2 conjugated to unknown tubulin inhibitor payload	Phase 1 (solid tumors)
LCB84	Legochem (South Korea)	mAb targeting cleaved Trop2 conjugated to MMAE	Unknown
BAT8003	Bio-Thera Solutions (Guangzhou, China)	Humanized IgG1 mAb with afucosylated Fc conjugated to microtubule-binding maytansine derivative batansine via a non-cleavable linker	Phase 1. Batansine technology discontinued after Her2 ADC Phase 3 failure
PF-06664178	Pfizer	Humanized IgG1 mAb conjugated to microtubule inhibitor auristatin (Aur0101) warhead using a cleavable linker and site-specific transglutaminase	Discontinued in phase 1 for business reasons

The Trop2 ADCs under development have topoisomerase I- targeting payloads such as the irinotecan active metabolite SN38 (Trodelvy®), deruxtecan (DS-1062), and belotecan (SKB264).

Members of the camptothecin family of topoisomerase inhibitors such as irinotecan/ SN38 and topotecan are substrates of the MDR family of transporters and may be pumped out of the cancer cell, giving rise to resistance. Non-transport mechanisms of resistance have also been described wherein patients under Trodelvy® therapy for 6 months had progressed due to resistance mutations in the topoisomerase I (*Top1*) gene. In a study performed at Massachusetts General Hospital, *Top1* mutations such as *E418K* and *-p.-122* frameshift rendered cancer cells refractory to topoisomerase inhibition, and *Trop2 T256R* mutations reducing cell surface translocation of Trop2, resulted in resistance to Trodelvy® therapy and metastasis to liver and peri-aortic lymph nodes. Since our payload has a different MoA, it will not be subject to these topoisomerase-specific forms of resistance.

Furthermore, the immunostimulatory properties of the PH1 payload may induce:

1. immune memory: Since the selection pressure resulting from sustained ADC regimen gives rise to resistance mutations in patients, in theory, the immune memory component of our MoA does not necessitate the sustained dosing of our ADC.

2. epitope spreading: Since the selection pressure resulting from sustained ADC regimen may give rise to *Trop2 T256R* mutations impacting cell-surface Trop2 giving rise to resistance, PH1-induced epitope spreading beyond Trop2 may keep the anti-tumor response evolving to other neoepitopes and cancer-related proteins.

Properties of Peak Bio Trop2 PH1 ADC:

After evaluating the Trop2 ADCs that are currently FDA-approved or heading towards approval in clinical trials, we investigated the potential of a differentiated Trop2 PH1 ADC with favorable resistance and immunogenicity characteristics from PH1 payload.

We optimized a fully- humanized antibody that was selective for the human and non-human primate versions of Trop2 but did not recognize rodent forms of Trop2. While compatible with evaluation of cytotoxic potency *in vitro* and evaluation of anti-xenograft tumor growth inhibition in athymic mice, this meant we had to engineer mouse cell lines with human Trop2 to test the immunostimulatory MoA in syngeneic mice models.

Since our antibody did not recognize rodent Trop2, standard evaluations of body weight loss in rodent models such as mice and rats would not provide meaningful toxicology data other than to reflect uncoupling of the payload from the ADC. NHP model would provide the relevant toxicology data.

Trop2 PH1 Antibody Drug Conjugate Shows Nanomolar Potency in Various Indications

Cell No.	Cell lines	Absolute IC50		% Inhibition at top conc.	
		Trop2 PH1 (nM)	Cisplatin (μM)	Trop2 PH1 (nM)	Cisplatin (μM)
1	***Pancreatic 1***	1.21	15.35	88.52%	93.41%
2	***Pancreatic 2***	1.50	0.39	88.62%	99.98%
3	***Pancreatic 3***	7.52	0.70	82.82%	99.94%
4	***Gastric 1***	1.32	2.36	85.07%	97.52%
5	***Gastric 2***	4.03	10.03	88.93%	92.97%
6	***Bladder 1***	1.77	4.12	95.19%	99.97%
7	***Bladder 2***	1.97	1.29	93.54%	99.99%
8	***Lung 1***	1.63	3.08	90.31%	99.96%
9	***Lung 2***	1.88	9.00	74.29%	95.28%
10	***Lung 3***	3.69	4.15	63.30%	91.17%
11	***Lung 4***	4.65	2.36	81.52%	99.71%
12	***Breast 1***	7.77	7.03	83.38%	99.67%
13	***Breast 2***	12.30	1.52	77.55%	99.53%
14	***Uterine 1***	9.68	0.93	74.10%	99.96%

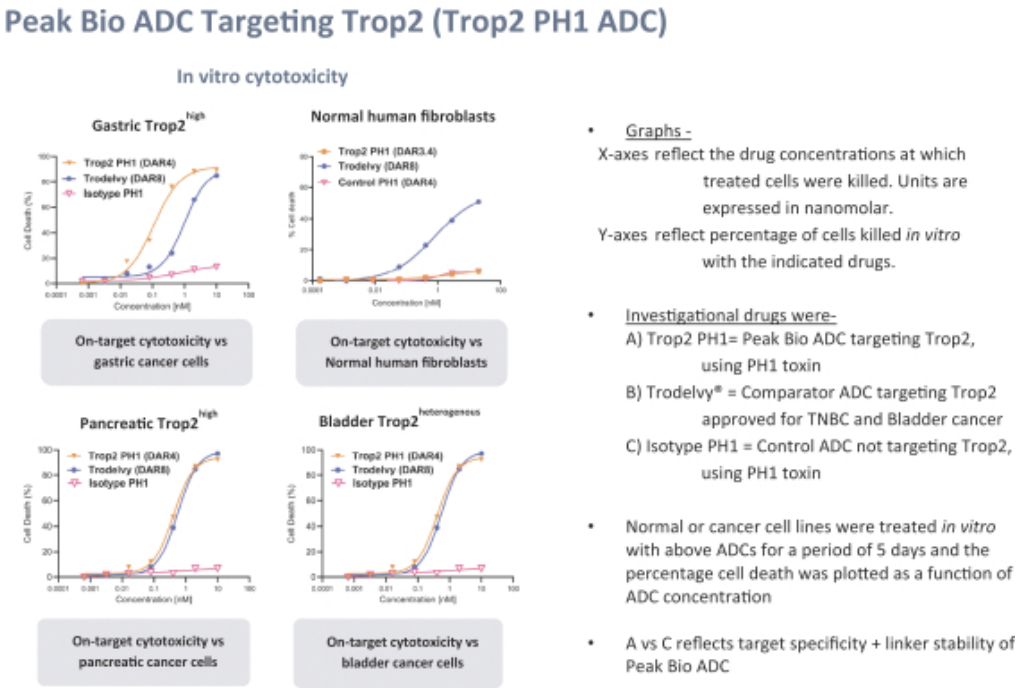
Even without the immunostimulatory mechanism, our investigational Trop2 PH1 ADC demonstrated nanomolar cytotoxic potency against cancer cells *in vitro*. In a parallel arm of the same study, cisplatin, a conventional chemotherapy exhibited micromolar cytotoxic potency. Also, these studies demonstrated that the potency of our Trop2 ADC was specific to the target and did not kill lung cancer cell lines that lacked Trop2. This is important to prevent off-target effects of our ADC against normal cells that lack Trop2.

As previously mentioned in our Thailanstatins section, PH1 belongs to the lysine non-cleavable class of payloads and was specially selected to reduce off-target effects of our Trop2 ADCs. While Trop2 is elevated significantly in solid tumors, there is small yet significant Trop2 expression in normal lung epithelium, prostate, skin, tongue, and salivary glands. This may be relevant as stomatitis (inflammation of the tongue and mouth) was

observed as the dose-limiting toxicity in the TROPION PanTumor01 clinical trial for DS-1062. This meant that in addition to preventing off-target effects in our Trop2 PH1 ADCs, we may have to mitigate potential on-target effects.

In PH1, we selected a payload that potentially prevents reduced on and off-target effects by generating metabolites that are impermeable to neighboring cells. The low expression of Trop2 in normal tissue, potency range of PH1, and impermeability of generated active payload species are designed to limit the side effects of incidental Trop2 targeting with our ADC. Trodelvy® and DS-1062 are both bystander-enabled to extract maximal tumor cell killing. However, the payload's function in Trop2 PH1 ADC is to stimulate initial tumor debulking, induce neoepitopes and stimulate the immune system whereupon the immune-mediated cell-killing MoA would kick in. In addition to opting for a non-bystander payload, we also opted for lower drug-to-antibody (DAR) ratio of 4 to reduce on-target toxicity to normal cells. By not opting for chemical bystander activity and by opting for lower DAR, we introduced control elements to differentiate our ADC program from a toxicology standpoint. Heterogenous Trop2 expression in cancer tissue would be addressed by immunostimulatory and epitope-spreading features of PH1 described previously.

Further supporting our hypothesis, not only did our cysteine and lysine cleavable Trop2 ADC versions kill cancer cell lines non-specifically i.e., they had higher baseline activity against non-target cells, but also had lower TGI *in vivo* in animal models. Therefore, our best strategy was to allow toxin accumulation within the target cell and have an inactive or impermeable payload species when released by lysed target cells. The active payload species of PH1 ADCs such as the Trop2 PH1 ADC would only be "cytotoxic" when internalized as an ADC by the target cancer cells, and impermeable as the active payload species to neighboring cells or other organs when in blood circulation, further reducing the potential for off-target effects. We therefore decided to proceed with PH1 for the Trop2 ADC program and tested low DAR ADCs for TGI against human tumors in animal xenograft models.



To demonstrate target-specific killing of cancer cells, we compared the cytotoxic potency of our Trop2 PH1 ADC with an ADC made from an isotype control mAb (not targeting Trop2) conjugated to the same PH1 L-T at

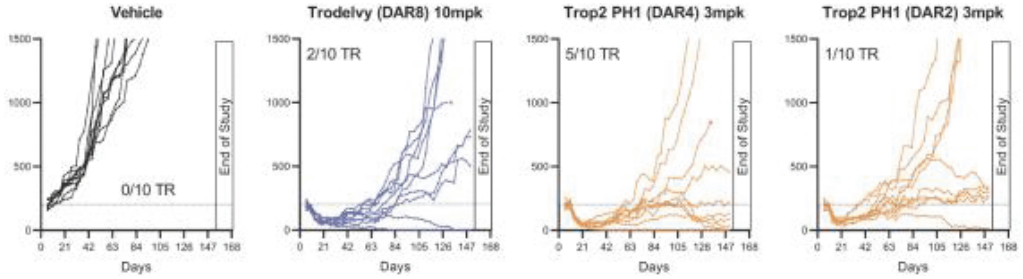
a similar DAR, against gastric, pancreatic and bladder cancer cell lines. As the isotype antibody targets viral proteins and is characteristically absent on cancer cells, the wide margin between on-target and off-target killing against all above cell lines can be attributed to the stability of our linker. In this context, if the linker fell apart on Trop2 PH1 and Isotype control ADCs, it would release the toxin and kill the cells whether Trop2 was present on the cells or not, and this would be observable as activity for the Isotype PH1 ADC.

As Trop2 expression is mainly observed in cells of epithelial origin, we evaluated the cytotoxic potency of our Trop2 PH1 vs Isotype PH1 ADC and found no significant killing against normal human fibroblasts. Some cell death was observed upon confluence in all cell lines and occurred even on untreated cells.

Trodelvy® is the first-in-class Trop2 ADC with an acid-labile carbonate linker. It was included as an experimental arm in the above cytotoxicity assays and demonstrated potent in vitro activity against gastric, pancreatic and bladder cancer cell lines. Trodelvy® showed some off-target killing against normal human fibroblast cells in this setting.

To further corroborate our *in vitro* observations, we evaluated Trop2 PH1 ADC and Trodelvy® against the same Trop2high gastric carcinoma cell-line derived xenograft (CDx) grown as tumors in mice. For the studies to translate to a clinical setting, Trodelvy® (DAR 7.6) was administered on Day 1 and Day 8 as 10 mg/kg doses (QWx2). Trop2 PH1 ADCs at lower DARs (2 and 4) were tested only at 3 mg/kg. This was purely to evaluate the TGI from the Trop2 PHI ADC's cytotoxic MoA alone in the absence of PH1's immunostimulatory MoA, in xenograft tumor-bearing athymic mice lacking an immune system. The purpose of the experiment was to evaluate whether Trop2 PH1 ADC's first MoA alone was sufficient for TGI in Trop2high expressing tumors.

When administered in therapeutic mode, against pre-established tumors of 200 mm3 size, all three ADCs induced tumor regression between 3-6 weeks. The TGIs for 10mg/kg Trodelvy®, 3mg/kg Trop2 PH1 ADC (DAR 2) and 3mg/kg Trop2 PH1 ADC (DAR 4) were 79 ± 2.1%, 80.5 ± 1.8%, and 87.7 ± 1.0% at 21 days and 83.3 ± 2.4%, 78.5 ± 3.2%, and 90.3 ± 1.8% at 41 days, respectively. At these times, the TGI associated with the Trop2 PH1 ADC (DAR 4) arm was significantly different from the Trop2 PH1 ADC (DAR2) and Trodelvy® arms ($p<0.05$) and is indicated in the table.



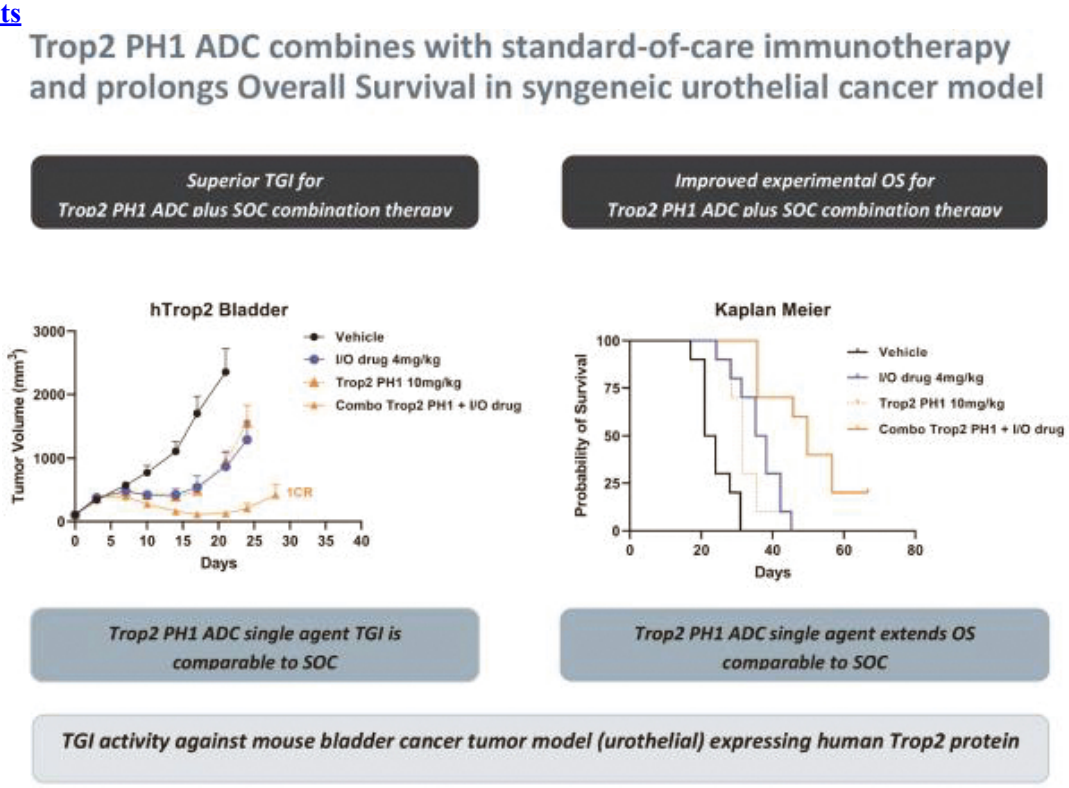
		At DAR4- tumor regression in 50% of treated mice over a period of ~5 months		At DAR2- Stable disease in 50% of treated mice over a period of ~5 months	
Model: Nude mice bearing human gastric tumors Horizontal dotted line indicates mean tumor volume of 200 mm3 size at which treatment was initiated.	***Group***	***TGI ± Std Err (Day 20)***	***p Value vs Trop2 PH1 (DAR4) (Day 20)***	***TGI ± Std Err (Day 41)***	***p Value vs Trop2 PH1 (DAR4) (Day 41)***
Tumor shrinkage below this line was considered regression	***Trop2 PH1 (DAR 4)***	**87.7 ± 1.0**		**90.3 ± 1.8**	
Dosing regimen: Two doses in the first week	***Trop2 PH1 (DAR 2)***	**80.5 ± 1.8**	**1.40e-04**	**78.5 ± 3.2**	**1.42e-03**
TR= tumor regression	***Trodelvy***				
TGI= tumor growth inhibition	***(DAR 7.6)***	**79.0 ± 2.1**	**2.79e-05**	**83.3 ± 2.4**	**3.54e-02**

Upon extended observation, some tumors from each arm rebounded across all treatment groups, Trodelvy® and Trop2 PH1 ADCs. Around 2 months after treatment, 80% of Trodelvy®-treated tumors rebounded, until finally, only 20% of the mice showed significant tumor regression at 5+ months. 50% of Trop2 PH1 ADC (DAR4) showed tumor regression at 5+ months and 50% of Trop2 PH1 ADC (DAR2) showed stable disease in the same time frame with their tumors failing to grow past 400 mm3.

We conclude that Trop2 PH1 ADC has effective TGI at low DAR and dose even without PH1's immunostimulatory MoA. Tumor cells that escape treatment tend to rebound. This is why we had envisioned the second immunostimulatory MoA when we conceptualized PH1.

To determine whether Trop2 PH1 ADC had retained the immunostimulatory activity characterized previously on PH1 payload alone or demonstrated by our POC Tras PH1 ADC, we evaluated the combination of the DAR4 Trop2 PH1 ADC with checkpoint inhibitor therapy against a syngeneic bladder cancer (urothelial) mouse model.

First-line checkpoint inhibitor therapy is standard-of-care (SOC) for platinum-ineligible patients that have recurrent, resistant, or metastatic urothelial cancer. Also, Trodelvy® is approved for treatment of metastatic urothelial cancers. Therefore, we used a urothelial model that was sensitive to checkpoint blockade and evaluated whether Trop2 PH1 ADC combination would result in an improvement upon SOC in this syngeneic mouse model.



In these studies, Trop2 PH1 ADC showed single agent tumor growth inhibition that was equivalent to SOC for bladder cancer. At day 14, the combination was significantly superior in terms of TGI (p=0.01) and prolonged overall survival (OS) (p=0.013). Therefore, like the POC Tras PH1 ADC, our Trop2 PH1 ADC retained the ability to combine with checkpoint inhibitors and prolong OS.

To further de-risk our program, we performed toxicology studies in non-human primate model and determined the tolerability of our Trop2 PH1 ADC in NHP. We evaluated our ADCs at DARs of 2 and 4 and performed a repeat-dose study wherein three ADC doses were intravenously administered every 3 weeks followed by a 3-week recovery period. For an idea of maximal cumulative effects, animals were evaluated 2 days after receiving all 3 doses. Reversibility was addressed in another set of animals that received all 3 doses but were allowed a 3-week recovery period. As Trop2 PH1 ADC was a likely candidate for pipeline nomination, histopathology was performed unilaterally for all tissues in both sets of animals.

3 x 6 mg/kg Q3W doses of both DAR2 and DAR4 Trop2 PH1 ADCs were well tolerated without clinical signs or body weight loss. In these treatment groups, a mild increase in liver enzymes and mild decrease in platelets were noted that reset to baseline within 7-10 days of administration of each dose. Histological evaluation of the bone marrow revealed no evidence of reduced cellularity (no bone marrow toxicity), although an altered myeloid:erythroid ratio was noted. The latter finding was probably due to the MoA of PH1 that induces an anti-tumor myeloid response. There were no other histologic findings below MTD.

At the >MTD of 18 mg/kg for Trop2 PH1 ADC, we did not observe the pathologies associated with other Trop2 ADCs in the clinic- e.g., neutropenia, gastrointestinal-, oral (stomatitis)- or lung- lesions with fibrotic or cellular infiltrates indicative of ILD were characteristically absent from our findings. Our NHP data suggests our Trop2 ADC is likely to be differentiated from a toxicology standpoint, in addition to pharmacology.

Unmet need and epidemiology

There is significant unmet need in Trop2-expressing cancers as is illustrated in the table below. Currently, the Trop2 ADC Trodelvy® has been only approved in TNBC and bladder cancer DS-1062 is currently in phase 1b clinical trial in NSCLC patients. Restricting ourselves to current indications in which Trop2 ADCs have FDA approvals (Trodelvy®) or have advanced phase 1 data in (DS-1062), the number of annual deaths worldwide and in USA alone account for 1.8 million and 134,500 patients, respectively (assuming 15% of all breast cancers are TNBC and 84% of all lung cancers are NSCLC in the table below). Prior to Trodelvy's® approval in 2020, these patients did not benefit from standard-of-care in these indications. Therefore, there is significant unmet need in Trop2-expressing cancers based on these three indications alone.

Since Trop2 expression is elevated in multiple solid tumors, there is untapped clinical and market potential of expanding the scope of Trop2 ADC therapies to reach a wide number of cancer indications. We cannot predict the total number of patients current and future Trop2 ADC therapies may expand to; however, at maximum, Trop2 ADCs may have the potential to impact the lives of 13 million cancer patients annually.

Table 4: New cases and deaths for Trop2-relevant cancers (worldwide and USA statistics)

	Globocan Statistics for 2020 tracking 36 cancers in 185 Countries		American cancer society Statistics for 2021 (USA only)	
Cancer type	**New cases**	**New Deaths**	**Estimated New cases**	**Estimated New Deaths**
Female breast	2,261,419	684,996	281,550	43,600
Lung	2,206,771	1,796,144	235,760	131,880
Prostate	1,414,259	375,304	248,530	34,130
Stomach	1,089,103	768,793	26,560	11,180
Colon	1,148,515	576,858	104,270	52,980
Rectum	732,210	339,022	45,230	*
Cervical	604,127	341,831	14,480	4,290
Esophagus	604,100	544,076	19,260	15,530
Thyroid	586,202	43,646	44,280	2,200
Bladder	573,278	212,536	83,730	17,200
Non-Hodgkin lymphoma	544,352	259,793	81,560	20,720
Pancreas	495,773	466,003	60,430	48,220
Chronic lymphocytic leukemia	**	**	21,250	4,320
Uterine	417,367	97,370	66,570	12,940
Lip, oral cavity	377,713	177,757	54,010	10,850
Ovary	313,959	207,252	21,410	13,770
*Brain, nervous system****	308,102	251,329	24,530	18,600
Gallbladder	115,949	84,695	11,980	4,310
All patients across all sites	19,292,789	9,958,133	****	****
Annual patient pool that may be impacted by Trop2 therapy (maximum)	13,793,199	7,227,405	1,445,390	446,720

Globocan stats cited from Hyuna Sung et al https://doi.org/10.3322/caac.21660
Estimated new cases are based on 2003-2017 incidence data reported by the North American Association of Central Cancer Registries (NAACCR).
Estimated deaths are based on 2004-2018 US mortality data, National Center for Health Statistics, Centers for Disease Control and Prevention.
*In US stats, rectal cancer deaths are not separated from colon cancer deaths
** In Globocan data, all leukemias are grouped together
*** Includes all brain cancers, not just gliomas
**** Data not provided

Our Preclinical Development Programs

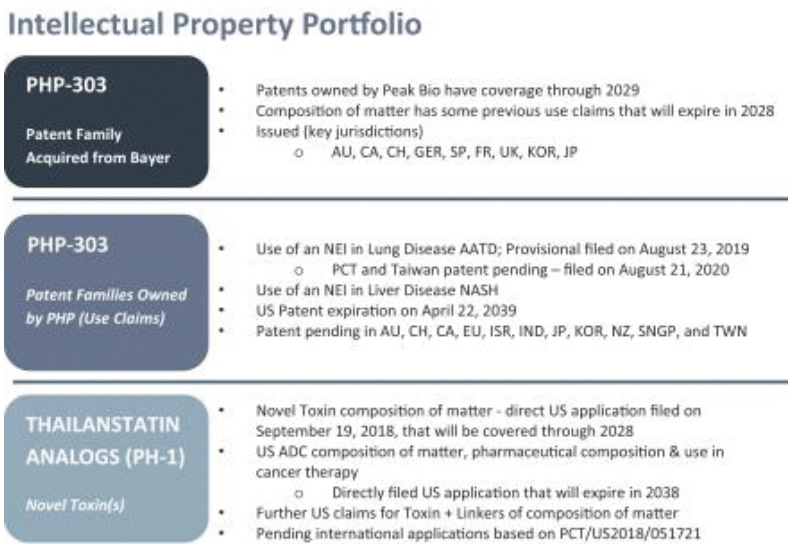
We have evaluated multiple targets for our second candidate PH1 ADC. We are currently performing target validation for an ADC2 program against target M5. We may generate our own proprietary mAb against target M5 in humanized mice.

We are also in the process of evaluating the first Generation of two new research-stage toxins PH5 and PH6. These platforms may need optimization and need further structure-activity-relationship (SAR) studies requiring a second or third generation to be viable payloads for the Peak Bio pipeline.

Time and resource- permitting, we have identified additional opportunities utilizing our teams' expertise to expand our portfolio by developing other modalities such as bispecifics and antibody-PROTACs. These are currently in early validation stages.

Intellectual Property:

IP Summary:



Oncology Platform PH-1 & PHP-303 Patent Status

Programs	Type	PCT	Global		Total
			applied	granted	
PHP-303	material 1	1	8	79	87
	material 2	1	0	9	9
	material 3	1	0	10	10
	material 4	1	0	11	11
	crystal form	1	7	2	9
	use Behcet's	1	4	0	4
	use NASH	1	12	1	13
	use AATD	1	1	0	1
ADC	material PH-1	1	17	2	19
Total		9	49	114	163

Peak Bio (Previously pH Pharma) secured patent protection for PH-1 & PHP-303 with over 114 patents granted in over 70 countries worldwide.

PH-1 & PHP-303 Patent Classes

Type	Content	Status
Material 1	Material patent of 4-(4-Cyano-2-Thioaryl) Dihydropyrimidinones including PHP-303	Granted in 79 countries including KR, US, EU, JP
Material 2	Material patent of PHP-303 analogues (1,4-diaryl-pyrimidopyridazine-2,5-diones)	Granted in 9 countries including US, EU, JP
Material 3	Material patent of PHP-303 analogues (Triazolo and tetrazolo pyrimidine derivatives)	Granted in 10 countries including US, EU, JP
Material 4	Material patent of PHP-303 analogues (Sulfonic amide and sulfoximine-substituted diaryl-dihydropyrimidinones)	Granted in 11 countries including US, EU, JP
Crystal form	Crystal form (A) of PHP-303 and method for producing PHP-303	Application in 7 countries including KR, EU, JP; granted in US
Use	PHP-303 and its analogues for treating Bechet's disease	Application in 7 countries including KR, US, EU, HK
	PHP-303 use in liver diseases as a NHE inhibitors	Application in 7 countries including KR, EU, JP; granted in US
	PHP-303 use in lung disease including AATD as a NHE inhibitors	PCT application including US, Taiwan

PHP-303 Patent Status

As of March 1, 2022, our patent portfolio relating to our product candidate PHP-303 consisted of five issued U.S. patents and 114 issued foreign patents, and three pending patent applications. The patent of PHP-303 for its crystalline form (A) applicable to actual clinical trials has been registered in the United States and its screening is ongoing in other countries. The crystalline form patent will not expire earlier than 2036.

Peak Bio acquired full rights to patents from Bayer in 2017. We have global patent protection on 9 inventions on the compound that include the following:

- For AATD, use patent application in 2020 in the US and global with IP coverage through 2040
- For NASH, crystalline form (A) & use patents granted in the US and under review globally. IP coverage through 2036
- Data exclusivity and pediatric extension possible in major markets including US, EU, and JP

We have acquired or exclusively licensed a comprehensive intellectual property portfolio from Bayer. We strive to protect and enhance the proprietary technologies, inventions, and improvements that we believe are important to our business, including seeking, maintaining, and defending patent rights, whether developed internally or acquired or licensed from third parties. Our policy is to seek to protect our proprietary position by, among other methods, pursuing and obtaining patent protection in the United States and in jurisdictions outside of the United States related to our proprietary technology, inventions, improvements, platforms, and our product candidates that are important to the development and implementation of our business.

PH-1 Patent Status

- Peak Bio created and generated our toxin program (PH-1) developed in-house with full rights to patents.
- The PH-1 toxin patent applied has a protection period of 20 years with IP coverage through at least 2038.

- We are planning to file composition of matter patents for newly developed novel ADCs covering the Trop2 antibody, Trop2-indications, and combinations with standards-of-care therapies.
- Peak Bio will continue to create novel composition of matter patents to cover new ADCs not limited to new usage of Linkers, formulations, CMC process, cancer indications and/or SOC combination patents to secure additional protection period after the PH-1 toxin patent expires.

MANAGEMENT

Management and Board of Directors

The following table sets forth certain information regarding our directors and executive officers who are responsible for overseeing the management of our business.

For biographical information concerning the executive officers and directors, see below.

Name	Age	Position
Hoyoung Huh, MD, PhD	53	Class II Director
Stephen LaMond, PharmD, MBA	60	Interim Chief Executive Officer, Chief Operating Officer and Secretary and Class II Director
Timothy Cunningham, MBA, CPA	60	Acting Chief Financial Officer
Satyajit Mitra, PhD	49	Executive Director, Head of Oncology
Nevan Charles Elam, JD	54	Class I Director (Lead Independent Director)
James Neal, MS, MBA	67	Class I Director
David Rosenberg	49	Class III Director
Brad Stevens, CPWA®, CEPA®	37	Class III Director

Executive Officers

Hoyoung Huh, MD, PhD, is the founder of Peak Bio Co., Ltd. (f/k/a pH Pharma) and has held positions of Chief Executive Officer and Board Chairman since founding pH Pharma in 2015. He currently serves as a director on the board of directors (the "Board") of the Company. Dr. Huh is a Silicon Valley-based entrepreneur and investor in healthcare and technology-based businesses and has served as Lead Director of Pliant Therapeutics since December 2017. Dr. Huh was a Managing Director of Konus Advisory Group, Inc. from January 2012 to September 2014. Prior to founding Konus Advisory Group, Inc., Dr. Huh was Chief Executive Officer and Chairman of the board of directors of BiPar Sciences, Inc. from February 2008 until December 2010. In addition, Dr. Huh has been involved in the formation, management and board positions of multiple biotechnology and innovation-based companies. He previously served as the Chairman of the board of directors of Geron Corporation from September 2011 to December 2018, and CytomX Therapeutics, Inc. from February 2012 to December 2018, a member of the board of directors of Rezolute, Inc. (f/k/a AntriaBio, Inc.) from 2013 to January 2019, the Chairman of the board of directors of Epizyme, Inc. from October 2009 to February 2012, and as a member of the board of directors of Facet Biotech Corporation, Nektar Therapeutics, Inc., Addex Therapeutics Ltd. and EOS, S.p.A (Milano, Italy). Earlier in his career, Dr. Huh was a partner at McKinsey & Company. He holds A.B. in Biochemistry from Dartmouth College, an M.D. from Cornell University Medical College and a Ph.D. in Cell Biology and Genetics from Cornell University Sloan Kettering Institute. We believe Dr. Huh's extensive management and operational experience as President and Chief Executive Officer of numerous biotechnology companies and his significant knowledge and expertise of biotechnology and pharmaceutical collaborations, qualifies Dr. Huh to serve as a director and Chairman of the Board of Peak Bio.

Stephen LaMond, PharmD, MBA, has been the Chief Operating Officer and Secretary of Peak Bio Co., Ltd. since March 1, 2022. He currently serves as Interim Chief Executive Officer and as a director of the Company. Prior to his current role, Dr. LaMond has been both an employee and independent consultant to Peak Bio (f/k/a pH Pharma). Peak Bio consists of the merged entity of Ignyte and the selected assets from pH Pharma. Dr. LaMond served as both a consultant and one of the original executives with pH Pharma and its affiliated companies serving in corporate and business development roles in addition to serving in a clinical program management capacity. Dr. LaMond has been directly involved with pH Pharma in both the U.S. and Korea and now at Peak Bio since 2016. Dr. LaMond has previously held management and executive roles in marketing, new product planning, corporate and business development at numerous companies including Tria Beauty, Corium International, Zoll Medical, GE Healthcare, Nektar Therapeutics and Pfizer Inc. across multiple therapeutic areas and has worked on some of the most innovative products over his tenure. Dr. LaMond received his PharmD and

Executive MBA degrees from the University of Michigan, Ann Arbor and has executive finance training from Columbia and Stanford Universities. We believe Dr. LaMond's extensive experience in operations, business development, corporate development, marketing, regulatory and market access with biopharmaceutical and biotechnology companies qualifies him to serve on the Board.

Timothy Cunningham, MBA, CPA, serves as the Acting Chief Financial Officer of the Company following the closing of the Business Combination. He brings more than 30 years of finance and operations leadership experience in the life sciences and technology industries with a proven track record of driving growth. He is currently Chief Financial Officer at Danforth Advisors, a company that provides strategic and operational finance and accounting support for life science companies. Prior to joining Danforth, Mr. Cunningham served as Chief Financial Officer at Organogenesis, where he took the company public and raised over $250M in equity and debt financing to facilitate the company's growth. Earlier, he held leadership positions with DialogTech, GFI Software SA, Metatomix, Mediabridge, IBM, PWC, and KPMG. Tim holds an MBA from Boston University, a BS in Accounting from Boston College and is a CPA in the state of Florida.

Satyajit Mitra, PhD, is the Executive Director and Head of Oncology for Peak Bio. As the Head of Oncology, he has been responsible for Peak Bio Co., Ltd.'s preclinical research activities at our CA research sites since January 2021. Dr. Mitra heads up a team of talented research associates, scientists, consultants, CROs and CDMOs and has been instrumental in advancing our novel toxin platform and ADC pipeline. From March 2019 to December 2020, Dr. Mitra headed up Cancer Biology at Peak Bio Co., Ltd. and was responsible for in vivo and pharmacology functions that led to the nomination of the current Peak Bio lead toxin (PH1), which then led to Peak Bio's initial proof-of-concept (POC) efforts for an ADC. These POC efforts led to the nomination of Peak Bio's first ADC pipeline candidate targeting Trop2. He previously served as a Senior Scientist, at VasGene Therapeutics, and was involved with IND-enabling studies for novel antibody targets. Dr. Mitra's initial corporate scientific experience was at OncoMed Pharmaceuticals for 5 years where he worked on Target Validation. He was instrumental in identifying the first-in-class Wnt-pathway biologics, advancing these projects from early stage to an IND. In addition to Dr. Mitra's oncology company experiences, he also previously worked as a research scientist at the University of Southern California in Los Angeles. He completed his postdoctoral fellowship at the Department of Immunology at Scripps Research Institute at La Jolla, California. He obtained his Ph.D. from the Centre for Cellular and Molecular Biology at Hyderabad, India an institute affiliated with the Jawaharlal Nehru University (JNU), New Delhi, India.

Non-Employee Directors

Nevan Charles Elam, JD, serves as a director on the Board of the Company. Mr. Elam currently serves as a director and as the Chief Executive Officer of Rezolute, Inc. Prior to Mr. Elam's service with Rezolute, he has served various leadership roles throughout his career including as Chief Executive Officer of a European medical device company, co-founder and Chief Financial Officer of a software company, as well as a Senior Vice President at Nektar Therapeutics. Earlier in his career, Mr. Elam was a corporate partner in the law firm of Wilson Sonsini Goodrich & Rosati. He serves as a director of Savara, Inc. and Softhale in Belgium. Mr. Elam received his B.A. from Howard University and his J.D. from Harvard Law School. We believe that Mr. Elam's experience advising pharmaceutical companies of their unique legal and regulatory obligations qualifies him to serve on our board of directors.

James Neal, MS, MBA serves as a director on the Board of the Company. He comes to Peak Bio's board of directors as an experienced business professional serving as XOMA Corporation's Chief Executive Officer and Chairman of the Board, joining that company in 2009. Mr. Neal brings more than 25 years' experience in forming and maximizing business and technology collaborations globally and in bringing novel products and technologies to market. Prior to XOMA, Mr. Neal was Acting Chief Executive Officer of Entelos, Inc., a leading biosimulation company that acquired Iconix Biosciences, a privately held company where Mr. Neal was Chief Executive Officer. At Iconix, Mr. Neal established multi-year collaborations with Bristol-Myers Squibb, Abbott Labs, Eli Lilly and the U.S. Food and Drug Administration. From, 1999-2002, he was Executive Vice President of Incyte Genomics, leading the global commercial activities with pharmaceutical company collaborators and

partners including Pfizer, Aventis and Schering-Plough, as well as sales, marketing and business development activities for the company. Earlier, he was associated with Monsanto Company in positions of increasing responsibility. Mr. Neal earned his B.S. in Biology and his M.S. in Genetics and Plant Breeding from the University of Manitoba, Canada, and holds an Executive MBA degree from Washington University in St. Louis, Missouri. We believe Mr. Neal's significant experience with biopharmaceutical companies, including as a board member and CEO, qualifies him to serve on our board of directors.

David Rosenberg has been Ignyte's Chairman of the Board and co-Chief Executive Officer since its formation. Mr. Rosenberg serves as a director on the Board of the Company. Mr. Rosenberg brings over 20 years of investment banking experience focused on growth companies. Since December 2011, Mr. Rosenberg has been Co-President and Co-Chief Executive Officer of Ladenburg Thalmann & Co. Inc., a leading underwriter of blank check companies or SPACs. Mr. Rosenberg is also a member of Board of Directors of Ladenburg Thalmann & Co. Inc. From 2006 to 2011, Mr. Rosenberg was a Managing Director and Co-Chief Operating Officer of Ladenburg Thalmann & Co. Inc. Since joining Ladenburg Thalmann in 2006, Mr. Rosenberg has managed more than 1,000 public offerings including but not limited to initial public offerings and follow on offerings raising in excess of $75 billion for small and mid-cap companies, as well as advising on numerous merger and acquisition transactions. Mr. Rosenberg also serves as member of the Board of Directors of Dianomi Therapeutics. Prior to joining Ladenburg Thalmann, from 2004 to 2006, Mr. Rosenberg was co-founder and Chief Executive Officer of BroadWall Capital, LLC, an investment banking firm. Mr. Rosenberg received a B.A. from the University of Wisconsin-Madison. We believe Mr. Rosenberg is well qualified to serve on our board of directors because of his significant investment banking, equity capital markets and executive management experience.

Brad Stevens CPWA®, CEPA® serves as director on the Board of the Company. Brad is an advisor and founder of Knight Family Wealth, based in the Tampa Bay Florida Area and is dedicated to bringing ultra-high-net-worth individuals and families simplicity through accountability and transparency. Inspired to streamline their increasingly complex lives, Brad founded Knight Family Wealth in 2019 after 10+ years of strategic business and financial consultancy experience. As the firm's visionary, Brad is dedicated to bringing big picture strategies and solutions to clients. Brad leads a team of professionals with Accounting and Legal backgrounds, dedicated to bringing unmatched industry expertise. Brad is a Certified Private Wealth Advisor®, an advanced credential created specifically for wealth managers working with high-net-worth clients. His licenses include Series 63 (Uniform Securities Agent State Law Exam) and Series 65 (Uniform Investment Adviser Law Exam). He's also completed HS 321 Income Taxation and HS330 Fundamentals of Estate Planning courses through the American College. Brad holds his Life, Health, Property and Casualty licenses and is a member of Investments and Wealth Institute. Prior to founding Knight Family Wealth, Brad served as Personal CFO at JarredBunch Consulting, an independent Registered Investment Advisory firm. Prior to that, he held financial-focused consulting positions at global financial services firms. Brad earned a Bachelor of Science in Finance from Chicago's DePaul University. We believe Mr. Stevens is well qualified to serve on our board of directors because of his significant investment, money management, skills coupled with his certified credentials.

Number and Terms of Office of Officers and Directors of Peak Bio

Our Board is divided into three classes with only one class of directors being elected in each year and each class serving a three-year term. The term of office of the first class of directors, consisting of Nevan Charles Elam and James Neal, will expire at our first annual meeting of stockholders. The term of office of the second class of directors, consisting of Hoyoung Huh and Stephen LaMond, will expire at the second annual meeting. The term of office of the third class of directors, consisting of David Rosenberg and Brad Stevens, will expire at the third annual meeting.

Our officers are appointed by the board of directors and serve at the discretion of the board of directors, rather than for specific terms of office. Our board of directors is authorized to appoint persons to the offices set forth in our bylaws as it deems appropriate. Our bylaws provide that our officers may consist of a Chairman of the Board, one or more Chief Executive Officers, Chief Financial Officer, President, Vice Presidents, Secretary, Treasurer, Assistant Secretaries and such other offices as may be determined by the board of directors.

Committees of the Board of Directors

The standing committees of our board of directors include an audit committee, a compensation committee and a nominating and corporate governance committee. Each of the committees report to board of directors as they deem appropriate and as the board of directors may request. The composition, duties and responsibilities of these committees are set forth below.

Audit Committee

The principal functions of the audit committee include, among other things:

- reviewing and discussing with management and the independent auditor the annual audited financial statements, and recommending to the board whether the audited financial statements should be included in our Form 10-K;
- discussing with management and the independent auditor significant financial reporting issues and judgments made in connection with the preparation of our financial statements;
- discussing with management major risk assessment and risk management policies;
- monitoring the independence of the independent auditor;
- verifying the rotation of the lead (or coordinating) audit partner having primary responsibility for the audit and the audit partner responsible for reviewing the audit as required by law;
- reviewing and approving all related-party transactions;
- inquiring and discussing with management our compliance with applicable laws and regulations;
- pre-approving all audit services and permitted non-audit services to be performed by our independent auditor, including the fees and terms of the services to be performed;
- appointing or replacing the independent auditor;
- determining the compensation and oversight of the work of the independent auditor (including resolution of disagreements between management and the independent auditor regarding financial reporting) for the purpose of preparing or issuing an audit report or related work; and
- establishing procedures for the receipt, retention and treatment of complaints received by us regarding accounting, internal accounting controls or reports which raise material issues regarding our financial statements or accounting policies.

Our audit committee consists of Nevan Elam, James Neal and Brad Stevens, with Nevan Elam serving as the chair of the audit committee. Each of Messrs. Elam, Neal and Stevens will qualify as independent directors according to the rules and regulations of the SEC and Nasdaq with respect to audit committee membership. Mr. Elam qualifies as our "audit committee financial expert," as that term is defined in Item 401(h) of Regulation S-K. Our board of directors has adopted a written charter for the Audit Committee, which is available free of charge on our corporate website. The information on our website is not part of this registration statement.

Compensation Committee

The principal functions of the compensation committee include, among other things:

- reviewing and approving on an annual basis the corporate goals and objectives relevant to our Chief Executive Officer's compensation, evaluating our Chief Executive Officer's performance in light of such goals and objectives and determining and approving the remuneration (if any) of our Chief Executive Officer based on such evaluation;
- reviewing and approving the compensation of all of our other executive officers;
- reviewing our executive compensation policies and plans;
- implementing and administering our incentive compensation equity-based remuneration plans;

- assisting management in complying with our proxy statement and annual report disclosure requirements;
- approving all special perquisites, special cash payments and other special compensation and benefit arrangements for our executive officers and employees;
- if required, producing a report on executive compensation to be included in our annual proxy statement; and
- reviewing, evaluating and recommending changes, if appropriate, to the remuneration for directors.

Our compensation committee consists of James Neal, Nevan Elam and Brad Stevens, with Mr. Neal serving as the chair of the compensation committee. Each of Messrs. Neal, Elam and Stevens qualify as independent directors according to the rules and regulations of the SEC and Nasdaq with respect to compensation committee membership. Our board of directors has adopted a written charter for the compensation committee, which is available free of charge on our corporate website. The information on our website is not part of this registration statement.

Nominating Committee

The principal functions of the nominating committee include, among other things:

- should have demonstrated notable or significant achievements in business, education or public service;
- should possess the requisite intelligence, education and experience to make a significant contribution to the board of directors and bring a range of skills, diverse perspectives and backgrounds to its deliberations; and
- should have the highest ethical standards, a strong sense of professionalism and intense dedication to serving the interests of the stockholders.

The Nominating Committee will consider a number of qualifications relating to management and leadership experience, background and integrity and professionalism in evaluating a person's candidacy for membership on the board of directors. The nominating committee may require certain skills or attributes, such as financial or accounting experience, to meet specific board needs that arise from time to time and will also consider the overall experience and makeup of its members to obtain a broad and diverse mix of board members. The nominating committee does not distinguish among nominees recommended by stockholders and other persons.

Our Nominating Committee consists of Nevan Elam and James Neal, with Mr. Elam serving as the chair of the Nominating Committee. We expect that our board of directors will adopt a written charter for the Nominating Committee, which is available free of charge on our corporate website. The information on our website is not part of this registration statement.

Code of Ethics

We have adopted a Code of Ethics applicable to our directors, executive officers and employees that complies with the rules and regulations of Nasdaq. Our code of business conduct and ethics is available free of charge on our corporate website. In addition, we intend to post on our website all disclosures that are required by law or the listing standards of concerning any amendments to, or waivers from, any provision of the code. References to our website address does not constitute incorporation by reference of the information contained at or available through our website, and such information should not be considered to be a part of this registration statement. We also intend to disclose any amendments to or waivers of certain provisions of our Code of Ethics in a Current Report on Form 8-K. You may review these documents by accessing public filings at the SEC's web site at www.sec.gov.

EXECUTIVE AND DIRECTOR COMPENSATION

This section discusses the material components of the executive compensation program for Peak Bio Co., Ltd.'s named executive officers who are identified in the 2021 Summary Compensation Table below. This discussion may contain forward-looking statements that are based on Peak Bio's current plans, considerations, expectations and determinations regarding future compensation programs.

Overview

This section discusses the material components of the executive compensation program for Peak Bio Co., Ltd.'s executive officers who are named in the "2021 Summary Compensation Table" (the "named executive officers"). As an emerging growth company, Peak Bio complies with the executive compensation disclosure rules applicable to "smaller reporting companies," as such term is defined in the rules promulgated under the Securities Act. Peak Bio Co., Ltd.'s named executive officers for fiscal year 2021 were as follows:

- Hoyoung Huh, M.D., Ph.D., Chief Executive Officer[3];
- Stephen LaMond, PharmD, Chief Operating Officer;
- Satyajit Mitra, Ph.D., Executive Director, Head of Oncology;
- Sanjeev Satyal, Ph.D., was Vice President of Research & Development of pH Pharma, Inc. until February 2021; and
- Jaesoon Kim, M.S., was President of pH Pharma Co., Ltd. at the end of 2021 and effective March 1, 2022, he is now CEO, President of SpinCo in Korea and will not be part of Peak Bio moving forward.

We expect that our executive compensation program will evolve to reflect its status as a newly publicly traded company, while still supporting our overall business and compensation objectives, including attracting, retaining and incentivizing our talent.

2021 Compensation of Named Executive Officers

Summary Compensation Table

The following table presents information regarding the total compensation awarded to, earned by, and paid to Peak Bio Co., Ltd.'s named executive officers for the fiscal year ended December 31, 2021.

Name and Principal Position	Fiscal Year	Salary ($)(1)	Bonus ($)	Stock Awards ($)	Option Awards ($)	Non-Equity Incentive Plan Compensation ($)	Change in Pension Value and Nonqualified Deferred Compensation Earnings ($)	All Other Compensation ($)(2)	Total ($)
Hoyoung Huh,	2021	216,113	—	—	—	—	—	10,029	226,142
Chief Executive Officer	2020	246,738	—	—	—	—	—	9,801	256,540
Stephen LaMond,	2021	93,408	—	—	—	—	—	161,170	254,578
Chief Operating Officer	2020	111,154	—	—	—	—	—	100,000	211,154
Satyajit Mitra,	2021	179,956	15,925	—	—	—	—	—	195,881
Executive Director, Head of Oncology	2020	159,250	—	—	—	—	—	—	159,250
Sanjeev Satyal,	2021	30,248	—	—	—	—	—	193,000	223,248
Former Vice President of R&D at pH Pharma, Inc.(3)	2020	238,697	—	—	—	—	—	—	238,697
Jaesoon Kim,	2021	222,185	—	—	—	—	—	14,313	236,498
Former President of Peak Bio Co., Ltd.(3)	2020	187,606	—	—	—	—	—	—	187,606

3 Dr. LaMond will serve as Interim Chief Executive Officer of Peak Bio while Dr. Huh is taking a leave of absence during the pendency of a personal legal proceeding.

(1) Salary for Dr. Huh does not include $1,524,852 in forwent salary for which his employment agreement, updated as of January 10, 2022, provides for reimbursement.

(2) All other compensation amounts consist of car allowances for Dr. Huh for 2021 and 2020, severance of $81,650 for Dr. LaMond for 2021, consultant compensation of $79,520 and $100,000 for Dr. LaMond for 2021 and 2020, respectively, severance for Dr. Satyal for 2021, and a car allowance for Mr. Kim for 2021.

(3) Dr. Satyal previously served as the Vice President of Research and Development, pH Pharma, Inc., and Mr. Kim is the current Chief Executive Officer of pH Pharma Co., Ltd. Neither will be a named executive officer for Peak Bio, Inc.

2021 outstanding equity awards at fiscal year-end

The following table presents, for each of our named executive officers, information regarding outstanding stock options as of December 31, 2021.

	Option Awards[1]				
Name	Number of Securities Underlying Unexercised Options (#) Exercisable[2]	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price (₩)[3]	Option Expiration Date
Hoyoung Huh, *Chief Executive Officer*	—	—	—	—	—
Stephen LaMond, *Chief Operating Officer*	—	—	—	—	—
Satyajit Mitra, *Executive Director, Head of Oncology*					
June 2019	10,000	—	—	17,800	June 11, 2026
Sanjeev Satyal, *Former Vice President of R&D at pH Pharma, Inc.*					
February 2016	60,000	—	—	1,500	February 18, 2023
April 2018	60,000	—	—	17,800	April 10, 2025
Jaesoon Kim, *Chief Executive Officer of pH Pharma, Co., Ltd.*					
April 2018	80,000	—	—	17,800	April 10, 2025
March 2019	80,000	—	—	17,800	March 28, 2026

(1) There were no outstanding stock awards as of the end of fiscal year 2021

(2) Stock options in Peak Bio Co., Ltd. were converted to stock options in Ignyte at the Exchange Ratio set forth in the Business Combination Agreement

(3) Denominated in Korean won. The exercise price will be converted by dividing the exercise price (in U.S. dollars determined at the time of closing of the Business Combination) by the Exchange Ratio set forth in the Business Combination Agreement

Equity compensation

Peak Bio Co., Ltd. previously granted, and Peak Bio, Inc. will from time to time grant equity awards to its named executive officers, which are generally subject to vesting based on each named executive officer's continued service. Each of Peak Bio Co., Ltd.'s named executive officers currently holds outstanding options to purchase shares of common stock that were granted under Peak Bio Co., Ltd.'s form of stock option agreements issued in accordance with Korean law. Information on Peak Bio Co., Ltd.'s named executive officer's equity awards is set forth in the table above titled "*2021 Outstanding Equity Awards at Fiscal Year-End*."

Director Compensation

For fiscal year 2021, we did not provide director compensation to our non-employee directors. However, all of our non-employee directors are reimbursed for their reasonable out-of-pocket expenses related to their services as a member of our board of directors. In connection with the Business Combination, we intend to approve and implement a non-employee director compensation policy.

Potential payments upon termination or change of control

Employment Agreements

Dr. Huh's employment agreement, updated as of January 10, 2022, provides for Dr. Huh to serve as Peak Bio's Chief Executive Officer.[4] The employment agreement terms, which were subject to completion of the Business Combination, provide for Dr. Huh to receive an annual base salary and to participate in a cash bonus plan with a target of up to 65% of base salary based on annual performance standards to be established by the board of directors. In addition, the employment agreement provides for repayment to Dr. Huh of backpay for years of forwent salary in the amount of $1,524,852 and repayment of an outstanding loan in the amount of $1,500,000 made by Dr. Huh to Peak Bio Co, Ltd. Further, the employment agreement provides for the payment of success fees in connection with future business or corporate development transactions (licensing, product development and acquisitions).

If Dr. Huh's employment is terminated due to his death or disability, the employment agreement provides that Peak Bio will pay to Dr. Huh or Dr. Huh's estate or designated beneficiary his accrued and unpaid salary plus his accrued and unused vacation pay.

If Dr. Huh's employment is terminated by him for "good reason" or if Peak Bio terminates his employment without "cause," then Peak Bio will pay to Dr. Huh his accrued and unpaid salary, his accrued and unused vacation pay, and continuation of his base salary for twelve months. For purposes hereof, "good reason" means, the occurrence of any of the following events: (i) the failure of Peak Bio or applicable subsidiary to pay any wages, or provide any benefits due to Dr. Huh within five (5) days after written notice thereof from Dr. Huh; (ii) a material change in Dr. Huh's responsibilities, duties, reporting relationships or authorities as an employee of Peak Bio as they existed prior to such change; or (iii) a move of Dr. Huh's principal place of work to a location more than fifty (50) miles distant therefrom. Termination with "cause" shall be deemed to exist if Dr. Huh engages in the following: (i) theft, dishonesty, misconduct or falsification of Peak Bio's or its successor's records or property; (ii) unauthorized use or disclosure of Peak Bio's or its successor's confidential or proprietary information or trade secrets; (iii) substantial negligence or misconduct; (iv) failure to perform such assigned duties and responsibilities as shall be consistent with the duties and responsibilities of an employee of Peak Bio in a similar job position after receipt of a written notice of specific deficiencies and failure to cure any such deficiencies within fifteen (15) days after the receipt of such notice; (v) a material breach by Dr. Huh of any agreement between Dr. Huh and Peak Bio, and such breach has not been cured by you within fifteen days

[4] Dr. LaMond will serve as Interim Chief Executive Officer of Peak Bio while Dr. Huh is taking a leave of absence during the pendency of a personal legal proceeding.

(15) after written notice of breach by Peak Bio; (vi) commission of a felony or other crime involving moral turpitude; or (vii) Dr. Huh's failure to cooperate in good faith with a governmental investigation of Peak Bio or its directors, officers or employees, if Peak Bio has requested his cooperation.

Dr. LaMond's employment agreement, updated as of March 1, 2022, provides for Dr. LaMond to serve as Peak Bio 's Chief Operating Officer. The employment agreement terms, which were subject to completion of the Business Combination, provide for Dr. LaMond to receive an annual base salary and to participate in a cash bonus plan with a target of up to 55% of base salary based on annual performance standards to be established by the board of directors. In addition, the employment agreement provides for confirmation of Peak Bio's previously agreed upon success fee payment to Dr. LaMond upon consummation of the Business Combination in the amount of $250,000. Further, the employment agreement provides for the payment of success fees in connection with future business or corporate development transactions (licensing, product development and acquisitions).

Dr. LaMond is also eligible to participate in Peak Bio's Long-Term Incentive Plan with a target recommended grant of 1.25% or greater of the outstanding shares of Peak Bio's stock, subject to approval of Peak Bio's board of directors.

The employment agreement permits Dr. LaMond to serve on up to three (3) outside boards of directors at the discretion of Peak Bio's board of directors and to provide limited consulting services to non-affiliated third parties provided they are not in direct conflict with Peak Bio's business activities.

If Dr. LaMond's employment is terminated by Peak Bio without "cause," then Peak Bio will pay to Dr. LaMond his accrued and unpaid salary and continuation of his base salary for twelve months.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Certain Relationships and Related Person Transactions — Peak Bio

Other than compensation arrangements for our directors and executive officers, which are described elsewhere in this prospectus, the following describes transactions since January 1, 2021, and each currently proposed transaction in which:

- We have been or is to be a participant;
- the amount involved exceeded or will exceed $120,000; and
- any of our directors or executive officers that are expected to continue as directors or executive officers following the Merger or holders of more than 5% of our capital stock, or any immediate family member of, or person sharing the household with, any of these individuals, had or will have a direct or material interest.

Sponsor Share Purchase Agreement

On November 1, 2022, Ignyte Sponsor LLC, a Delaware limited liability company (the "Sponsor") entered into a share purchase agreement with Knight Family Management, LLC ("Knight Family"), whereby the Sponsor agreed to transfer 20,167 shares of Common Stock held by it to Knight Family in consideration for Knight Family's services arranging for the commitment by certain other investors to fund the aggregate purchase price of $3,025,000 pursuant to the Warrant Share PIPE Subscription Agreements. Brad Stevens, a current director on our Board, is the managing member of Knight Family.

Registration Rights Agreement

In connection with the Closing, Peak Bio, the Sponsor and certain stockholders of Peak Bio Co., Ltd. (collectively, with each other person who has executed and delivered a joinder thereto, the "RRA Parties"), entered into a Registration Rights Agreement (the "Registration Rights Agreement"), pursuant to which, among other things, the Sponsor and the stockholders of Peak Bio Co., Ltd. will be granted certain customary registration rights, demand rights and piggyback rights with respect to their respective shares of Ignyte Common Stock. The Registration Rights Agreement requires us to, among other things, file a resale registration statement on behalf of the RRA Parties as soon as practicable but no later than 45 days after the Closing. The Registration Rights Agreement also provides certain demand rights and piggyback rights to the RRA Parties, in each case subject to certain offering thresholds, applicable lock-up restrictions, issuer suspension periods and certain other conditions. The Registration Rights Agreement includes customary indemnification provisions. We agreed to pay certain fees and expenses relating to registrations under the Registration Rights Agreement.

Lock-Up Agreement and Key Company Stockholder Lock-Up Agreement

In connection with the Closing, we and certain stockholders of Peak Bio Co., Ltd. entered into a lock-up agreement (the "Lock-Up Agreement") providing for certain restrictions on transfer applicable to our Common Stock (the "Lock-Up Shares"). Generally, the Lock-Up Agreement prohibits stockholders from (i) selling, offering to sell, contracting or agreeing to sell, hypothecating, pledging, granting any option to purchase or otherwise disposing of or agreeing to dispose of, directly or indirectly, or establishing or increasing a put equivalent position or liquidating or decreasing a call equivalent position within the meaning of Section 16 of the Exchange Act of 1943, as amended, and the rules and regulations of the SEC promulgated thereunder with respect to the Lock-Up Shares, (ii) entering into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any of the Lock-Up Shares, whether any such transaction is to be settled by delivery of Lock-Up Shares or other securities, in cash or otherwise, or (iii) publicly announcing any intention to effect any transaction specified in the immediately preceding

subsections (i) or (ii), subject to certain limited exceptions set forth in the Lock-Up Agreement. The lock-up period under the Lock-Up Agreement lasts until the date that is 180 days from the Closing Date (as defined in the Business Combination Agreement).

In connection with the Closing, we and Hoyoung Huh (the "Key Company Stockholder") entered into a separate Lock-Up Agreement (the "Key Company Stockholder Lock-Up Agreement") on substantially the same terms as the Lock-Up Agreement with certain exceptions for the transactions contemplated by that certain Key Company Stockholder Forward Purchase Agreement, entered into as of April 28, 2022 by Hoyoung Huh and Ignyte.

Indemnification Agreements

In connection with the consummation of the Business Combination, we entered into indemnification agreements with our directors and executive officers. Those indemnification agreements and the Amended and Restated Bylaws require us to indemnify all directors and officers to the fullest extent permitted by Delaware law against any and all expenses, judgments, liabilities, fines, penalties, and amounts paid in settlement of any claims. The indemnification agreements also provide for the advancement or payment of all expenses to the indemnitee and for reimbursement to us if it is found that such indemnitee is not entitled to such indemnification under applicable law.

Founder Shares

On August 12, 2020, the Sponsor paid $25,000, or approximately $0.02 per share, to cover certain offering costs in consideration for 1,437,500 shares of Ignyte common stock, par value $0.0001 (the "Founder Shares"). Up to 187,500 Founder Shares were subject to forfeiture by the Sponsor depending on the extent to which the underwriters' over-allotment option is exercised. On February 2, 2021, the underwriter exercised its over-allotment option in full, hence, the 187,500 Founder Shares were no longer subject to forfeiture since then.

The Founder Shares were placed into an escrow account maintained in New York, New York by Continental, acting as escrow agent. Subject to certain limited exceptions, these shares will not be transferred, assigned, sold or released from escrow (subject to certain limited exceptions set forth below) (i) with respect to 50% of such shares, for a period ending on the earlier of the one-year anniversary of the date of the consummation of the initial Business Combination and the date on which the closing price of our Common Stock equals or exceeds $12.50 per share (as adjusted for share splits, share dividends, reorganizations and recapitalizations) for any 20 trading days within a 30-trading day period following the consummation of the initial Business Combination and (ii) with respect to the remaining 50% of such shares, for a period ending on the one-year anniversary of the date of the consummation of the initial Business Combination, or earlier, in either case, if, subsequent to the initial Business Combination, we consummate a liquidation, merger, stock exchange or other similar transaction which results in all of our stockholders having the right to exchange their shares of common stock for cash, securities or other property.

Promissory Note — Related Party

On November 20, 2020, Ignyte's executive officers loaned Ignyte an aggregate of $80,000 to be used for a portion of the expenses of the IPO. These loans are non-interest bearing, unsecured and are due at the earlier of June 30, 2021 or the closing of the IPO. As of February 1, 2021, Ignyte repaid the note in full. On March 21, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of $300,000 to Ignyte as required.

Due to Related Party

As of December 31, 2021, the amount due to related party is $111,953 which represents the accrual of administrative service fee from February 1, 2021 to December 31, 2021 of $111,643 and formation cost of $310 paid by David Rosenberg (the "Officer). As of December 31, 2020, the amount due to related party is $310 which represents the formation cost of $310 paid by the Officer.

Related Party Loans

In order to meet Ignyte's working capital needs following the consummation of the IPO, the Sponsor, officers, directors, the initial stockholders or their affiliates may, but are not obligated to, loan the Company funds ("Working Capital Loans"), from time to time or at any time, in whatever amount they deem reasonable in their sole discretion. Each loan would be evidenced by a promissory note. The notes would either be paid upon consummation of the initial Business Combination, without interest, or, at holder's discretion, up to $1,500,000 of the notes may be converted into warrants at a price of $1.00 per warrant. The warrants would be identical to the Private Placement Warrants.

Administrative Service Fee

Ignyte has agreed, commencing on the date of the securities of Ignyte are first listed on The Nasdaq Capital Market (the "Listing Date"), to pay the Sponsor $10,000 per month for office space, utilities and secretarial support. Upon completion of the Business Combination, Ignyte will cease paying these monthly fees. Ignyte accrued $111,643 for the administrative service fee for the period from the Listing Date to December 31, 2021.

Working Capital Loans

On March 21, 2022 and September 20, 2022, respectively, we issued unsecured promissory notes (collectively, the "Working Capital Notes") in the aggregate principal amount of $300,000 and $100,000, respectively, to our Sponsor. Sponsor is an entity affiliated with our executive officers, directors and our other advisors and is our largest stockholder. We issued the Working Capital Notes in consideration for loans from our Sponsor to fund our working capital requirements between now and November 1, 2022, which is the period of time that we have available to complete our initial business combination. The Working Capital Notes were issued to provide us with additional working capital and will not be deposited into our trust account.

The Working Capital Notes bear no interest and were repayable in cash upon the consummation of the Business Combination. In lieu of repayment of the aggregate principal amount of Working Capital Notes, the Sponsor received 77,200 shares of Common Stock as consideration for the Working Capital Notes at the Closing.

Certain Relationships and Related Person Transactions — Peak Bio Co., Ltd.

Related Party Loans

In August 2021, Peak Bio Co., Ltd. received proceeds from a loan in the amount of approximately $1.5 million from its chairman and founding chief executive officer, Dr. Huh. The loan matures on July 31, 2022 and bears interest at a rate of 1.0% per annum. The loan is evidenced by a promissory note dated August 6, 2021, which contains customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. The loan may be prepaid by the Company at any time prior to maturity with no prepayment penalties. At September 30, 2022, there was approximately $1.5 million outstanding under this loan.

On September 21, 2022, BRS Capital, LLC, a company controlled by Brad Stevens, loaned Peak Bio Co., Ltd. $500,000 pursuant to a promissory note carrying an interest rate of 5% per annum and with a maturity date of September 21, 2024. For more information, see "*Note 13 – Debt*" of Peak Bio's *Carve-out Condensed Consolidated Financial Statements as of and for the nine months ended September 30, 2022 and 2021 (Unaudited)*, contained elsewhere in this registration statement

On March 1, 2022, Peak Bio Co., Ltd. and pH Pharma Ltd entered into an administrative services and facilities agreement whereby pH Pharma Ltd will perform services, functions and responsibilities for Peak Bio Co., Ltd.. Under the agreement, Peak Bio Co., Ltd. will pay pH Pharma Ltd $100,000 per month through August 30, 2022 and $15,000 from September 1, 2022 through February 28, 2023 based on the estimated value of the level of service to be performed. Additionally, Peak Bio Co., Ltd. will pay pH Pharma Ltd $3,000 per month in lease payments. At September 30, 2022 Peak Bio Co., Ltd. recorded a liability to accounts payable of $498,000 related to this agreement.

In April 2022, Dr. Huh made a payment on behalf of Peak Bio Co., Ltd. to VennDC LLC in the amount of $400,000 in connection with an upfront payment made under a Collaboration and License Agreement dated December 15, 2019 between Peak Bio Co., Ltd. and VennDC LLC. Per the agreement, Peak Bio Co., Ltd. agreed to repay $400,000, with interest to accrue on the unpaid principal balance at the rate of 1% per annum. The timing of the repayment will be determined and pursuant to the discretion of Peak Bio's board of directors. At September 30, 2022, Peak Bio Co., Ltd. recorded a liability to related party loans of $400,000 related to this payment.

In May 2022, Peak Bio Co., Ltd. received proceeds from a loan in the amount of approximately $23,000 from an employee of the Company to settle certain payables of the Company. The loan accrues interest at 4% per annum and is to be repaid on October 31, 2022.

Procedures with Respect to Review and Approval of Related Person Transactions

Upon consummation of the Merger, our board of directors adopted a written related person transaction policy that sets forth the following policies and procedures for the review and approval or ratification of related person transactions.

A "Related Person Transaction" is a transaction, arrangement or relationship in which we or any of our subsidiaries was, is or will be a participant, the amount of which involved exceeds $120,000, and in which any related person had, has or will have a direct or indirect material interest. A "Related Person" means:

- any person who is, or at any time during the applicable period was, one of our executive officers or a member of our board of directors;
- any person who is known by us to be the beneficial owner of more than five percent (5%) of our voting stock;
- any immediate family member of any of the foregoing persons, which means any child, stepchild, parent, stepparent, spouse, sibling, mother-in-law, father-in-law, daughter-in-law, brother-in-law or sister-in-law of a director, officer or a beneficial owner of more than five percent (5%) of our voting stock, and any person (other than a tenant or employee) sharing the household of such director, executive officer or beneficial owner of more than five percent (5%) of our voting stock; and
- any firm, corporation or other entity in which any of the foregoing persons is a partner or principal or in a similar position or in which such person has a 10 percent (10%) or greater beneficial ownership interest.

We also adopted policies and procedures designed to minimize potential conflicts of interest arising from any dealings it may have with its affiliates and to provide appropriate procedures for the disclosure of any real or potential conflicts of interest that may exist from time to time. Specifically, pursuant to our audit committee charter, the audit committee will have the responsibility to review related person transactions.

PRINCIPAL SECURITYHOLDERS

The following table sets forth information known to us regarding the beneficial ownership of our Common Stock as of November 1, 2022, after giving effect to the Closing, by:

- each person who is known by us to be the beneficial owner of more than five percent (5%) of the outstanding shares of any class of our Common Stock;
- each of our current executive officers and directors; and
- all of our current executive officers and directors, as a group.

Beneficial ownership for the purposes of the following table is determined in accordance with the rules and regulations of the SEC. A person is a "beneficial owner" of a security if that person has or shares "voting power," which includes the power to vote or to direct the voting of the security, or "investment power", which includes the power to dispose of or to direct the disposition of the security or has the right to acquire such powers within 60 days.

The beneficial ownership percentages set forth in the table below are based on 20,058,486 shares of Common Stock issued and outstanding as of November 1 2021 and do not take into account the issuance of any shares of Common Stock upon the exercise of warrants to purchase up to 5,820,545 shares of Common Stock that remain outstanding.

Unless otherwise noted in the footnotes to the following table, and subject to applicable community property laws, the persons and entities named in the table have sole voting and investment power with respect to their beneficially owned common stock.

Name of Beneficial Owners[1]	Number of Shares of Common Stock Beneficially Owned	Percentage of Outstanding Common Stock	
5% Stockholders:			
Ignyte Sponsor LLC	1,514,700	7.6	%
IKBC-SBI Bio Fund I [6]	3,034,872	15.1	%
Executive Officers and Directors:			
Hoyoung Huh[2]	6,800,349	33.9	%
Stephen LaMond	—	—	
Timothy Cunningham	—	—	
Satyajit Mitra[3]	18,647		*
James Neal	—	—	
David I. Rosenberg [4]	1,117,755	5.4	%
Brad Stevens [5]	97,027		*
All directors and executive officers as a group (7 individuals)	8,430,723	40.4	%

* Indicates less than 1 percent

(1) Unless otherwise indicated, the business address of each of the individuals is c/o Peak Bio, Inc., 3350 W Bayshore Rd, Suite 100, Palo Alto, CA 94303.

(2) Includes 6,427,409 shares of Common Stock held by Hoyoung Huh and 372,940 shares of Common Stock held by Hannol Ventures LLC of which Mr. Huh is the sole member and who has voting and dispositive power over such shares.

(3) Includes 18,647 shares underlying options to purchase Common Stock that are fully vested and currently exercisable.

(4) Includes 389,630 shares of Common Stock and 728,125 Private Warrants previously held by the Sponsor, of which David Rosenberg is a managing member.

(5) Includes 50,273 shares of Common Stock and 46,754 warrants issued to BRS Capital Holdings LLC ("BRS") pursuant to a Bridge Loan PIPE Subscription Agreement. Mr. Stevens is the Manager of BRS and may share voting and dispositive power over such shares. The business address of BRS is 4221 W. Boy Scout Blvd., Suite 300, Tampa, Florida 33607. Mr. Stevens disclaims any beneficial ownership of the reported shares of BRS other than to the extent of any pecuniary interest he may have therein, directly or indirectly. Excludes 20,167 shares of Common Stock transferred to Knight Family Management, LLC ("Knight Family") by the Sponsor. For more information, see "Certain Relationships and Related Person Transactions–Peak Bio–Sponsor Share Purchase Agreement." Mr. Stevens is the managing member of Knight Family. The business address of Knight Family is 4221 W. Boy Scout Blvd., Suite 300, Tampa, Florida 33607.

(6) Includes 1,599,829 shares of Common Stock held by IBKC-SBI Bio Fund 1 ("IBKC"), 251,223 shares of Common Stock held by SBI Cross-border Advantage Fund, an affiliate of IBKC, 598,739 shares of Common Stock held by SBI Healthcare Fund 1, an affiliate of IBKC, 319,959 shares of Common Stock held by SBI Investment, an affiliate of IBKC, 83,735 shares Common Stock held by SBI KIS 2016-1 Fund, an affiliate of IBKC, 167,470 shares of Common Stock held 2014 KIF -SBI IT Investment Fund, an affiliate of IKBC and 418,693 shares of Common Stock held by Global Gateway Fund 1, an affiliate of IKBC. The business address of IBKC is 14th FL., NC Tower, 509, Teheran-ro, Gangnam-gu, Seoul, Korea.

SELLING SECURITYHOLDERS (OTHER THAN WHITE LION)

The Selling Securityholders listed in the table below may from time to time offer and sell any or all of the shares of Common Stock and Private Placement Warrants set forth below pursuant to this prospectus. When we refer to the "Selling Securityholders" in this Section and the Plan of Distribution Section of this prospectus, we refer to the persons listed in the table below. Otherwise, when we refer to "Selling Securityholders" in this prospectus, we refer to the persons listed in the table below and White Lion. Further, in each case, we also include in such references, and the pledgees, donees, transferees, assignees, successors and other permitted transferees that hold any of the Selling Securityholders' interest in the shares of Common Stock or the Private Warrants after the date of this prospectus.

The following table sets forth information concerning the shares of Common Stock and Private Warrants that may be offered from time to time by each Selling Securityholder (other than White Lion). The 2,945,545 shares of Common Stock issuable upon exercise of the Private Warrants are not included in the table below.

We cannot advise you as to whether the Selling Securityholders will in fact sell any or all of such shares of Common Stock. In particular, the Selling Securityholders identified below may have sold, transferred or otherwise disposed of all or a portion of their securities after the date on which they provided us with information regarding their securities. Any changed or new information given to us by the Selling Securityholders, including regarding the identity of, and the securities held by, each Selling Securityholder, will be set forth in a prospectus supplement or amendments to the registration statement of which this prospectus is a part, if and when necessary.

Our registration of the shares of Common Stock does not necessarily mean that the Selling Securityholders will sell all or any of such Common Stock or Private Warrants. The following table sets forth certain information provided by or on behalf of the Selling Securityholders as of November 1, 2022 concerning the Common Stock and Private Placement Warrants that may be offered from time to time by each Selling Securityholder with this prospectus. A Selling Securityholder may sell all, some or none of such securities in this offering. See "Plan of Distribution."

	Before the Offering				After the Offering		
Name and Address of Selling Securityholder	Common Stock Beneficially Owned Prior to the Offering	Private Warrants Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Being Offered	Number of Private Warrants Being Offered	Number of Shares of Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	Percentage of Outstanding Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	Number of Private Warrants Beneficially Owned After the Offered Private Warrants are Sold
PIPE Investors							
BRS Capital Holdings LLC[2]	50,273	46,754	50,273	46,754	—	—	—
Ramchandra Jakhotia and Rashmi Jakhotia Trust[3]	20,260	18,842	20,260	18,842	—	—	—
James D. Kollefrath Revocable Trust[4]	300,632	279,588	300,632	279,588	—	—	—
Cohen Revocable Trust dated April 21, 2020[5]	15,055	14,001	15,055	14,001	—	—	—
Kristin Cartwright[6]	30,121	28,013	30,121	28,013	—	—	—

Name and Address of Selling Securityholder	Before the Offering: Common Stock Beneficially Owned Prior to the Offering	Before the Offering: Private Warrants Beneficially Owned Prior to the Offering	Before the Offering: Number of Shares of Common Stock Being Offered	Before the Offering: Number of Private Warrants Being Offered	After the Offering: Number of Shares of Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Percentage of Outstanding Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Number of Private Warrants Beneficially Owned After the Offered Private Warrants are Sold
Urquhart Revocable Trust[7]	10,121	9,413	10,121	9,413	—	—	—
Matthew R. Joyce Revocable Trust[8]	30,067	27,962	30,067	27,962	—	—	—
Zachary Burch Williams Malone Revocable Trust[9]	12,550	11,672	12,550	11,672	—	—	—
Madavese Capital Partners[10]	10,000	9,300	10,000	9,300	—	—	—
Palo Alto Korea Fund, L.P.[11]	50,000	—	50,000	—	—	—	—

Name and Address of Selling Securityholder	Before the Offering: Common Stock Beneficially Owned Prior to the Offering	Before the Offering: Private Warrants Beneficially Owned Prior to the Offering	Before the Offering: Number of Shares of Common Stock Being Offered	Before the Offering: Number of Private Warrants Being Offered	After the Offering: Number of Shares of Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Percentage of Outstanding Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Number of Private Warrants Beneficially Owned After the Offered Private Placement Warrants are Sold
Sponsor Investors							
Richard J. Rosenstock[12]	66,755	125,000	66,755	125,000	—	—	—
David Thalheim[13]	26,703	50,000	26,703	50,000	—	—	—
Robert Glick[14]	12,573	25,000	12,573	25,000	—	—	—
David J. Strupp, Jr.[15]	444,927	833,125	444,927	833,125	10,000	*	—
Michael Friedman[16]	18,692	35,000	18,692	35,000	—	—	—
Frank Romano[17]	13,351	25,000	13,351	25,000	—	—	—
Vladlen Ivanov[18]	8,011	15,000	8,011	15,000	—	—	—
Richard Page[19]	7,544	15,000	7,544	15,000	—	—	—
Zachary Kahn[20]	2,631	5,000	2,631	5,000	—	—	—
Steven N. Kaplan[21]	134,474	251,875	134,474	251,875	—	—	—
Peter Blum[22]	134,474	251,875	134,474	251,875	—	—	—
Jeffrey Caliva[23]	45,395	85,000	45,395	85,000	—	—	—
George Mangione[24]	10,682	20,000	10,682	20,000	—	—	—
William Clark[25]	5,340	10,000	5,340	10,000	—	—	—
Matthew Kaplan[26]	13,351	25,000	13,351	25,000	—	—	—
Frost Gamma Investments Trust[27]	100,000	—	100,000	—	—	—	—

Name and Address of Selling Securityholder	Before the Offering: Common Stock Beneficially Owned Prior to the Offering	Before the Offering: Private Warrants Beneficially Owned Prior to the Offering	Before the Offering: Number of Shares of Common Stock Being Offered	Before the Offering: Number of Private Warrants Being Offered	After the Offering: Number of Shares of Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Percentage of Outstanding Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Number of Private Warrants Beneficially Owned After the Offered Private Placement Warrants are Sold
Cheryl L. Cohen[28]	20,000	—	20,000	—	—	—	—
John Andrew Boockvar, M.D.[29]	20,000	—	20,000	—	—	—	—
Charles Wilson, Ph.D.[30]	20,000	—	20,000	—	—	—	—

Name and Address of Selling Securityholder	Before the Offering: Common Stock Beneficially Owned Prior to the Offering	Before the Offering: Private Warrants Beneficially Owned Prior to the Offering	Before the Offering: Number of Shares of Common Stock Being Offered	Before the Offering: Number of Private Warrants Being Offered	After the Offering: Number of Shares of Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Percentage of Outstanding Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Number of Private Warrants Beneficially Owned After the Offered Private Placement Warrants are Sold
Directors and Officers[1]							
Hoyoung Huh[31]	6,800,349	—	6,800,349	—	—	—	—
Stephen LaMond	—	—	—	—	—	—	—
Timothy Cunningham	—	—	—	—	—	—	—
Satyajit Mitra[32]	18,647	—	—	—	18,647	*	—
Nevan Charles Elam	—	—	—	—	—	—	—
James Neal	—	—	—	—	—	—	—
David I. Rosenberg[33]	389,630	728,125	389,630	728,125	—	—	389,630
Brad Stevens[34]	70,440	46,754	70,440	46,754	—	—	—
Peak Bio Co., Ltd. Stockholders							
IBKC-SBI Bio Fund 1[35]	3,034,872	—	3,034,872	—	—	—	—
Palo Alto Korea Fund, L.P.[11]	447,528	—	447,528	—	—	—	—
K.Run Global Bio Project Fund 1[36]	505,464	—	505,464	—	—	—	—
K.Run Hi Expert Investment Fund[37]	83,800	—	83,800	—	—	—	—
Aion Board Hiltygrease Investment Fund 1[38]	333,408	—	333,408	—	—	—	—
Magna 3 Rising Star Fund[39]	300,925	—	300,925	—	—	—	—

Name and Address of Selling Securityholder	Before the Offering: Common Stock Beneficially Owned Prior to the Offering	Before the Offering: Private Warrants Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Being Offered	Number of Private Warrants Being Offered	After the Offering: Number of Shares of Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Percentage of Outstanding Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Number of Private Warrants Beneficially Owned After the Offered Private Placement Warrants are Sold
Magna 3 Bit Ga Ram Fund[40]	300,925	—	300,925	—	—	—	—
PranaBio Investments, LLC[41]	273,372	—	273,372	—	—	—	—
Youngae Seok[42]	186,470	—	186,470	—	—	—	—
Aju Pharm[43]	167,823	—	167,823	—	—	—	—
Korea Investment (Aion Investment-Shinhan Bank) [44]	46,618	—	46,618	—	—	—	—
SGI First Penguin Startup Fund[45]	156,635	—	156,635	—	—	—	—
Chae Eun Lee[46]	149,176	—	149,176	—	—	—	—
MGI Bio New Growth Investment Fund 1[47]	119,080	—	119,080	—	—	—	—
MGI Secondary Investment Fund 2[48]	119,080	—	119,080	—	—	—	—
Korea Investment[49]	119,061	—	119,061	—	—	—	—
Kim Hyun Joon H. [50]	111,882	—	111,882	—	—	—	—
Satyal Sanjeev Kumar Hiranand[51]	111,882	—	111,882	—	—	—	—
William A. Holodnak[52]	94,727	—	94,727	—	—	—	—
Youngjin Kim[53]							
Duksoo Chang[54]	82,047	—	82,047	—	—	—	—
KB Securities[55]	79,381	—	79,381	—	—	—	—
SGI Unicorn Startup Investment Fund[56]	79,362	—	79,362	—	—	—	—
Oryong Kwon[57]	26,759	—	26,759	—	—	—	—
Sangsun Lee[58]	38,507	—	38,507	—	—	—	—
Uhyeon Park[59]	74,588	—	74,588	—	—	—	—
Hyewon Yoon[60]	149,176	—	149,176	—	—	—	—
Davis Island Ventures, LLC[61]	68,891	—	68,891	—	—	—	—
QuestBio[62]	67,735	—	67,735	—	—	—	—
Innovative LifeSci Investments, LLC[63]	47,364	—	47,364	—	—	—	—
SPV Investments, LLC[64]	47,364	—	47,364	—	—	—	—

Name and Address of Selling Securityholder	Before the Offering: Common Stock Beneficially Owned Prior to the Offering	Before the Offering: Private Warrants Beneficially Owned Prior to the Offering	Before the Offering: Number of Shares of Common Stock Being Offered	Before the Offering: Number of Private Warrants Being Offered	After the Offering: Number of Shares of Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Percentage of Outstanding Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Number of Private Warrants Beneficially Owned After the Offered Private Placement Warrants are Sold
KB Securities (Aion Investment-Shinhan Bank) (65)	37,294	—	37,294	—	—	—	—
Jaesik Kim(66)	39,681	—	39,681	—	—	—	—
Quintessa Investment Co., Ltd.(67)	37,294	—	37,294	—	—	—	—
Sejin Park(68)	17,715	—	17,715	—	—	—	—
Wondae Na(69)	36,362	—	36,362	—	—	—	—
Cheolbeom Ji(70)	27,971	—	27,971	—	—	—	—
Sunwon Kwon(71)	9,324	—	9,324	—	—	—	—
Junggil Kim(72)	25,174	—	25,174	—	—	—	—
Stowe Capital, LLC(73)	23,682	—	23,682	—	—	—	—
Seonggu Kim(74)	16,783	—	16,783	—	—	—	—
Heewon Lee(75)	16,783	—	16,783	—	—	—	—
Edward M. Cluss, Jr.(76)	11,841	—	11,841	—	—	—	—
Patricia A. Cluss(77)	11,841	—	11,841	—	—	—	—
The Alpha-1 Project, Inc. (78)	8,951	—	8,951	—	—	—	—
Bongsuk Kim(79)	8,392	—	8,392	—	—	—	—
Jaehui Kim(80)	8,392	—	8,392	—	—	—	—
Taehoon Kim(81)	8,392	—	8,392	—	—	—	—
Sanghun Paik(82)	7,938	—	7,938	—	—	—	—
Samsung Securities (Timefolio-Hana Bank) (83)	251,418	—	251,418	—	—	—	—
Premier Global Innovation 1 Investment Fund(84)	251,418	—	251,418	—	—	—	—
Meritz Securities(85)	79,381	—	79,381	—	—	—	—
Daejun Song(86)	39,159	—	39,159	—	—	—	—
Seongmun Park(87)	23,589	—	23,589	—	—	—	—
Uk Jeong(88)	1,865	—	1,865	—	—	—	—
Sangyun Lee(89)	2,574	—	2,574	—	—	—	—
Chaeyong Lee(90)	2,965	—	2,965	—	—	—	—
Sumi Choi(91)	1,772	—	1,772	—	—	—	—
Eugene Securities(92)	79,381	—	79,381	—	—	—	—
Seoul Investment New Ventures Fund(93)	79,381	—	79,381	—	—	—	—

Name and Address of Selling Securityholder	Before the Offering: Common Stock Beneficially Owned Prior to the Offering	Before the Offering: Private Warrants Beneficially Owned Prior to the Offering	Before the Offering: Number of Shares of Common Stock Being Offered	Before the Offering: Number of Private Warrants Being Offered	After the Offering: Number of Shares of Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Percentage of Outstanding Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Number of Private Warrants Beneficially Owned After the Offered Private Placement Warrants are Sold
SIP-KIS 2019 Investment Fund(94)	79,381	—	79,381	—	—	—	—
CHNP Private Investment Fund(95)	45,499	—	45,499	—	—	—	—
UTC Bio Healthcare 2 Investment Fund(96)	55,566	—	55,566	—	—	—	—
UTC Bio Healthcare 5 Investment Fund(97)	23,813	—	23,813	—	—	—	—
IBK (TL Investment Fund) (98)	47,631	—	47,631	—	—	—	—
KB-UTC New Technology Venture Capital Investment Fund(99)	317,529	—	317,529	—	—	—	—
Daeshin Securities(100)	44,791	—	44,791	—	—	—	—
Estech Pharma(101)	44,791	—	44,791	—	—	—	—
Beno Holdings(102)	268,763	—	268,763	—	—	—	—
UN Green Synergy Investment Fund(103)	89,589	—	89,589	—	—	—	—
Korea Development Bank Capital Corp. (104)	89,589	—	89,589	—	—	—	—
Sinsaegae Signite Investment(105)	132,303	—	132,303	—	—	—	—
Other Selling Securityholders							
Ingalls & Snyder LLC(106)	28,950	—	28,950	—	—	—	—
Jillian Carter(107)	1,500	—	1,500	—	—	—	—
Jacqueline Chang(108)	500	—	500	—	—	—	—
Gleeson Cox(109)	1,000	—	1,000	—	—	—	—
Tracy Fezza(110)	1,000	—	1,000	—	—	—	—
Robert Gladstone(111)	2,000	—	2,000	—	—	—	—

Name and Address of Selling Securityholder	Before the Offering: Common Stock Beneficially Owned Prior to the Offering	Before the Offering: Private Warrants Beneficially Owned Prior to the Offering	Before the Offering: Number of Shares of Common Stock Being Offered	Before the Offering: Number of Private Warrants Being Offered	After the Offering: Number of Shares of Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Percentage of Outstanding Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	After the Offering: Number of Private Warrants Beneficially Owned After the Offered Private Placement Warrants are Sold
Amy Kaufmann[112]	1,500	—	1,500	—	—	—	—
Edward Kovary Jr. [113]	4,000	—	4,000	—	—	—	—
Steven Levine[114]	15,000	—	15,000	—	—	—	—
Coleen McGlynn[115]	1,000	—	1,000	—	—	—	—
Joe Mongiello[116]	500	—	500	—	—	—	—
Eileen Moore[117]	1,000	—	1,000	—	—	—	—
David Nussbaum[118]	15,000	—	15,000	—	—	—	—
Richard M. Powell[119]	4,000	—	4,000	—	—	—	—
Marc Van Tricht[120]	2,000	—	2,000	—	—	—	—
EarlyBirdCapital, Inc.[121]	50,000	—	50,000	—	—	—	—
Total Securities (excluding White Lion)	19,496,420	2,945,545	19,467,773	2,945,545	28,647	*	—

* Less than one percent.

(1) Unless otherwise noted, the business address of each director and officer of the Company is c/o Peak Bio, Inc., 3350 W Bayshore Rd., Suite 100, Palo Alto, CA 94303.

(2) Brad Stevens, a director serving on the Board of the Company, is the manager of the Selling Securityholder. Mr. Stevens disclaims beneficial ownership of the securities held by the Selling Securityholder other than to the extent of any pecuniary interest he may have therein, directly or indirectly. The business address of the Selling Securityholder is 4221 W. Boy Scout Blvd #300, Tampa, FL 33607.

(3) The business address of the Selling Securityholder is c/o Deepak Jakhotia, Mid-Century Insurance Group, 4221 W. Boy Scout Blvd #300, Tampa, FL 33607.

(4) The business address of the Selling Securityholder is c/o Caroline Nyberg, Trust Officer of Meristem Trust Company, LLC, 212 S Main Ave., Ste. 131, Sioux Falls, SD 57104. Ms. Nyberg and Alyssa Rosendahl, as trust officers of the Selling Securityholder, share voting and dipositive power over the shares held by the Selling Securityholder.

(5) The address of the Selling Securityholder is 3601 E Royal Palm Cir., Tampa, FL 33629.

(6) The address of the Selling Securityholder is 5071 Post Oak Lane, Naples, FL 34105.

(7) The address of the Selling Securityholder is c/o Craig Urquhart, 1910 Haven Bend, Tampa, FL 33613. Mr. Urquhart holds voting and dispositive power over the shares held by the Selling Securityholder.

(8) The address of the Selling Securityholder is c/o Matthew Joyce, 554 W. Davis Blvd., Tampa, FL 33606. Mr. Joyce holds voting and dispositive power over the shares held by the Selling Securityholder.

(9) The address of the Selling Securityholder is c/o Zachary Malone, 3901 W. Granada St., Tampa, FL 33629. Mr. Malone holds voting and dispositive power over the shares held by the Selling Securityholder.

(10) The address of the Selling Securityholder is c/o Stephen Madaffarri, 351 North Roscoe Blvd., Ponte Vedra Beach, FL 32082. Mr. Madaffarri holds voting and dispositive power over the shares held by the Selling Securityholder.

(11) The business address of the Selling Securityholder is c/o Angela Nguyen-Dinh, 470 University Avenue, Palo Alto, CA 93401. Patrick Lee is the managing member of PAI LLC, the sole general partner of the Selling Securityholder and may share voting and dispositive power over the shares held by the Selling Securityholder.

(12) The business address of the Selling Securityholder is 7763 W. Glades Road, Boca Raton, FL 33434.

(13) The address of the Selling Securityholder is 500 SE 5th Ave., Boca Raton, FL 33487.

(14) The address of the Selling Securityholder is 17053 Brookwood Dr., Boca Raton, FL 33496.

(15) The business address of the Selling Securityholder is 640 Fifth Ave., 4th Floor, New York, NY 10128.

(16) The business address of the Selling Securityholder is 640 Fifth Ave., 4th Floor, New York, NY 10128.

(17) The business address of the Selling Securityholder is 640 Fifth Ave., 4th Floor, New York, NY 10128.

(18) The business address of the Selling Securityholder is 640 Fifth Ave., 4th Floor, New York, NY 10128.

(19) The business address of the Selling Securityholder is 640 Fifth Ave., 4th Floor, New York, NY 10128.

(20) The address of the Selling Securityholder is 5 Tudor City Place, New York, NY 10017.

(21) The business address of the Selling Securityholder is 7763 W. Glades Road, Boca Raton, FL 33434.

(22) The business address of the Selling Securityholder is 640 Fifth Ave., 4th Floor, New York, NY 10128.

(23) The business address of the Selling Securityholder is 640 Fifth Ave., 4th Floor, New York, NY 10128.

(24) The business address of the Selling Securityholder is 58 South Service Rd., Suite 160, Melville, NY 11747.

(25) The business address of the Selling Securityholder is 640 Fifth Ave., 4th Floor, New York, NY 10128.

(26) The business address of the Selling Securityholder is 640 Fifth Ave., 4th Floor, New York, NY 10128.

(27) Phillip Frost is the trustee of the Selling Securityholder and holds voting and dispositive power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 4400 Biscayne Blvd., Miami FL 33137.

(28) The business address of the Selling Securityholder is 640 Fifth Ave., 4th Floor, New York, NY 10128.

(29) The business address of the Selling Securityholder is 130 East 77th Street, New York, NY 10065.

(30) The business address of the Selling Securityholder is 640 Fifth Ave., 4th Floor, New York, NY 10128.

(31) Includes 6,427,409 shares of Common Stock held by Hoyoung Huh and 372,940 shares of Common Stock held by Hannol Ventures LLC of which Mr. Huh is the sole member and who has voting and dispositive power over such shares.

(32) Includes 18,647 shares underlying options to purchase Common Stock that are fully vested and currently exercisable.

(33) The shares of Common Stock and Private Warrants were previously held by the Sponsor. Mr. Rosenberg is a managing member of the Sponsor.

(34) Includes 50,273 shares of Common Stock and 46,754 warrants issued to BRS Capital Holdings LLC ("BRS") pursuant to a Bridge Loan PIPE Subscription Agreement. Brad Stevens, one of our directors, is the Manager of BRS and may share voting and dispositive power over such shares. The business address of BRS is 4221 W. Boy Scout Blvd., Suite 300, Tampa, Florida 33607. Mr. Stevens disclaims any beneficial ownership of the reported shares of BRS other than to the extent of any pecuniary interest he may have therein, directly or indirectly. Includes 20,167 shares of Common Stock transferred to Knight Family Management, LLC ("Knight Family") by the Sponsor. For more information, see "Certain Relationships and Related Person Transactions–Peak Bio–Sponsor Share Purchase Agreement." Mr. Stevens is the managing member of Knight Family. The business address of Knight Family is 4221 W. Boy Scout Blvd., Suite 300, Tampa, Florida 33607.

(35) Includes 1,601,067 shares of Common Stock held by IBKC-SBI Bio Fund 1 ("IBKC"), 251,418 shares of Common Stock held by SBI Cross-border Advantage Fund, an affiliate of IBKC, 599,202 shares of Common Stock held by SBI Healthcare Fund 1, an affiliate of IBKC, 320,206 shares of Common Stock held by SBI Investment, an affiliate of IBKC, 83,800 shares Common Stock held by SBI KIS 2016-1 Fund, an affiliate of IBKC, 167,600 shares of Common Stock held 2014 KIF -SBI IT Investment Fund, an affiliate of IKBC, 419,017 shares of Common Stock held by Global Gateway Fund 1, an affiliate of IKBC and 179,179 shares of Common Stock held by 2019 SBI Job Creation Fund, an affiliate of IKBC. The business address of IBKC is 14th FL., NC Tower, 509, Teheran-ro, Gangnam-gu, Seoul, Korea.

(36) Jinho Kim is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 15, Teheran-ro 98-gil, Gangnam-gu, Seoul, Korea.

(37) Jinho Kim is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 15, Teheran-ro 98-gil, Gangnam-gu, Seoul, Korea.

(38) Byung Hee Shim and Seok Won Yoon are the CEOs of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 616, Yeongdong-daero, Gangnam-gu, Seoul, Korea.

(39) Keele Park is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 15, Teheran-ro 98-gil, Gangnam-gu, Seoul, Korea.

(40) Keele Park is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 15, Teheran-ro 98-gil, Gangnam-gu, Seoul, Korea.

(41) Samir Patel is the Managing Member of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 1701 Chicon St, Austin, Texas 78702.

(42) The address of the Selling Securityholder is 183, Naedong-ro, Yeongheung-myeon, Incheon, Korea.

(43) The address of the Selling Securityholder is Aju Builiding, 600, Gyeongin-ro, Guro-gu, Seoul, Korea.

(44) Il-Mun Jung is the President of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 88, Uisadang-daero, Yeongdeungpo-gu, Seoul, Korea.

(45) Soo-Bong Cho is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 120, Hyoryeong-ro, Seocho-gu, Seoul, Korea.

(46) The address of the Selling Securityholder is 29, Seocho-daero 33-gil, Seocho-gu, Seoul, Korea.

(47) Kyung Soon Yoon is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 8, Teheran-ro 8-gil, Gangnam-gu, Seoul, Korea.

(48) Kyung Soon Yoon is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 8, Teheran-ro 8-gil, Gangnam-gu, Seoul, Korea.

(49) Il-Mun Jung is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 88, Uisadang-daero, Yeongdeungpo-gu, Seoul, Korea.

(50) The address of the Selling Securityholder is 213, Yeouidong-ro, Yeongdeungpo-gu, Seoul, Korea.

(51) The address of the Selling Securityholder is 965 Buckland Ave., San Carlos, CA 94070.

(52) The address of the Selling Securityholder is 145 Hudson Street, Unit 9A, New York, NY 10013.

(53) The address of the Selling Securityholder is 132, Teheran-ro, Gangnam-gu, Seoul, Korea.

(54) The address of the Selling Securityholder is 183, Naedong-ro, Yeongheung-myeon, Incheon, Korea.

(55) Sun Hyun Kim is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 50, Yeouinaru-ro, Yeongdeungpo-gu, Seoul, Korea.

(56) Soo-Bong Cho is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 120, Hyoryeong-ro, Seocho-gu, Seoul, Korea.

(57) The address of the Selling Securityholder is 55-6, Cheonghak-ro, Osan-si, Gyeonggi-do, Korea.

(58) The address of the Selling Securityholder is 55-6, Cheonghak-ro, Osan-si, Gyeonggi-do, Korea.

(59) The address of the Selling Securityholder is 101-dong, 218, Dokseodang-ro, Seoul, Korea.

(60) The address of the Selling Securityholder is 6, Seolleung-ro 126-gil, Gangnam-gu, Seoul, Korea.

(61) Sandip I. Patel is the Managing Member of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 4221 W Boy Scout BLVD, Suite 300, Tampa, FL 33607.

(62) Sandip I. Patel is the Managing Member of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 1101 N. Ward St, Suite 200, Tampa, FL 33607.

(63) Sandip I. Patel is the Managing Member of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 4905 W Laurel St. Suite 100, Tampa, FL 33607.

(64) Amelia Renkert-Thomas is the Director of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is P.O. Box 1029, Menlo Park, CA 94026.

(65) Sung Hyun Kim is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 50, Yeouinaru-ro, Yeongdeungpo-gu, Seoul, Korea.

(66) The address of the Selling Securityholder is 181, Seohyeon-ro, Bundang-gu, Seoungnam, Korea.

(67) Hyun-Joon Kim is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 3Fl,15, Jahamun-ro 6-gil, Jongno-gu, Seoul, Korea.

(68) The address of the Selling Securityholder is 26-1005,113, Apgujeong-ro, Gangnam-gu, Seoul, Korea.

(69) The address of the Selling Securityholder is 206-301,111, Hi park 3-ro, Ilsanseo-gu, Seoul, Korea.

(70) The address of the Selling Securityholder is 586, Anaji-ro, Gyeyang-gu, Incheon, Korea.

(71) The address of the Selling Securityholder is 103-2404,11, Anaji-ro 299 beon-gil, Incheon, Korea.

(72) The address of the Selling Securityholder is 640, Yeongdong-daero, Gangnam-gu, Seoul, Korea.

(73) Peter W. Bell is the Managing Director of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 285 Catalpa Dr, Atherton, CA 94027.

(74) The address of the Selling Securityholder is 32-14, Seoulsup 2-gil, Seongdong-gu, Seoul, Korea.

(75) The address of the Selling Securityholder is 640, Yeongdong-daero, Gangnam-gu, Seoul, Korea.

(76) The address of the Selling Securityholder is 345 Selby Lane, Atherton, CA 94027.

(77) The address of the Selling Securityholder is 345 Selby Lane, Atherton, CA 94027.

(78) Mark Delvaux is the CFO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 3300 Ponce de Leon Boulevard, Coral Gables, FL 33134.

(79) The address of the Selling Securityholder is 102-dong, 85, Wangsimni-ro, Seoul, Korea.

(80) The address of the Selling Securityholder is 640, Yeongdong-daero, Gangnam-gu, Seoul, Korea.

(81) The address of the Selling Securityholder is 103-dong, 19, Sinbanpo-ro 15-gil, Seoul, Korea.

(82) The address of the Selling Securityholder is 72, Sinbong 2-ro, Suji-gu, Seoul, Korea.

(83) Sukhoon Chang is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 19Fl, 24, Gukjegeumyung-ro 2-gil, Seoul, Korea.

(84) Jay Song is the Representative Director of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 2F, 416, Yeongdong-daero, Gangnam-gu, Seoul, Korea.

(85) Himoon Choi is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is Three IFC, 10, Gukjegeumyung-ro, Seoul, Korea.

(86) The address of the Selling Securityholder is 15, Art center-daero 97 beon-gil, Incheon, Korea.

(87) The address of the Selling Securityholder is 12-1, Seocho-daero, Seocho-gu, Seoul, Korea.

(88) The address of the Selling Securityholder is 66-11, Byeoryang-ro, Gwacheon, Korea.

(89) The address of the Selling Securityholder is 921, Gyeongchung-daero, Chowol-eup, Gwangju, Korea.

(90) The address of the Selling Securityholder is 29, Manseok-ro, Jangan-gu, Seoul, Korea.

(91) The address of the Selling Securityholder is 68, Imok-ro, Jangan-gu, Suwon, Korea.

(92) Kyeongmo Koh is the Representative of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 8F, 24, Gukjegeumyung-ro, Seoul, Korea.

(93) Dongjun Maeng is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 4F, 601, Yeoksam-ro, Gangnam-gu, Seoul, Korea.

(94) Dongjun Maeng is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 4F, 602, Yeoksam-ro, Gangnam-gu, Seoul, Korea.

(95) Sang Woon Choi is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 5F,16, Dosan-daero 90-gil, Gangnam-gu, Seoul, Korea.

(96) Geunyong Park is the CEOof the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 2F,111, Yeouigongwon-ro, Yeongdeungpo-gu, Seoul, Korea.

(97) Geunyong Park is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 2F,111, Yeouigongwon-ro, Yeongdeungpo-gu, Seoul, Korea.

(98) Jong-won Yoon is the Trustee General Manager of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 521,11, Gukjegeumyung-ro 8-gil, Seoul, Korea.

(99) Geunyong Park is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 11F, 50, Yeouinaru-ro, Yeongdeungpo-gu, Seoul, Korea.

(100) Ik Keun Oh is the Representative Director of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 343, Samil-daero, Jung-gu, Seoul, Korea.

(101) Jaecheol Kim is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 6F, 56, Baumoe-ro 37-gil, Seocho-gu, Seoul, Korea.

(102) Jiphoon Chung is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 6F,4, Eonju-ro 134-gil, Gangnam-gu, Seoul, Korea.

(103) Seyeon Kim and Yongseon Chung are the CEOs of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 2F, 111, Yeouigongwon-ro, Seoul, Korea.

(104) Keon Yeol Kim is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 22, Eunhaeng-ro, Yeongdeungpo-gu, Seoul, Korea.

(105) Sung Wook Moon is the CEO of the Selling Securityholder and may share dispositive and voting power over the shares held by the Selling Securityholder. The business address of the Selling Securityholder is 12F, 449, Dosan-daero, Gangnam-gu, Seoul, Korea.

(106) Includes shares issued by the Company to the Selling Securityholder pursuant to that certain Payment Agreement, dated as of November 1, 2022. The business address of the Selling Securityholder is 1325 Avenue of the Americas, New York, NY 10019.

(107) The address of the Selling Securityholder is 110 West 26th Street, New York, NY 10001.

(108) The address of the Selling Securityholder is 137-11 223rd Street, Laurelton, NY 11413.

(109) The address of the Selling Securityholder is 139 Jennings Rd., Cold Spring Harbor, NY 11724.

(110) The address of the Selling Securityholder is 28 Tooker Ave., Oyster Bay, NY 11771.

(111) The address of the Selling Securityholder is 3 Lea Ct., Syosset, NY 11791.

(112) The address of the Selling Securityholder is 26 Horton Dr., South Huntington, NY 11746.
(113) The address of the Selling Securityholder is 366 Madison Ave., New York, NY 10017.
(114) The address of the Selling Securityholder is c/o EarlyBird One Town Center Ste 550, Boca Raton, FL 33486.
(115) The address of the Selling Securityholder is 15 Van Burnt Road, Broad Chanel, NY 11693.
(116) The address of the Selling Securityholder is c/o EarlyBird One Town Center Ste 550, Boca Raton, FL 33486.
(117) The address of the Selling Securityholder is 13 The Promenade, Glen Head, NY 11545.
(118) The address of the Selling Securityholder is c/o EarlyBird One Town Center Ste 550, Boca Raton, FL 33486.
(119) The address of the Selling Securityholder is 29 Guinea Rd., Greenwich, CT 06830.
(120) The address of the Selling Securityholder is 366 Madison Avenue, 8th Floor, New York, NY 10017.
(121) The business address of the Selling Securityholder is 366 Madison Avenue, 8th Floor, New York, NY 10017.

SELLING SECURITYHOLDERS (WHITE LION)

White Lion (as a Selling Securityholder) as listed in the table below may from time to time offer and sell any or all of the Purchase Notice Shares of Common Stock that may be issued by us to White Lion under the White Lion Purchase Agreement. We are registering the shares of Common Stock pursuant to the provisions of the White Lion RRA in order to permit White Lion to offer the shares for resale from time to time. Except for the transactions contemplated by the White Lion Purchase Agreement and the White Lion RRA, White Lion Capital has not had any material relationship with us within the past three years. Except where otherwise provided, as used in this prospectus, the term "Selling Securityholder" includes White Lion.

The table below presents information regarding White Lion (as a Selling Securityholder) and the shares of Common Stock that it may offer from time to time under this prospectus. This table is prepared based on information supplied to us by White Lion, and reflects holdings as of December 2, 2022. The number of shares in the column "Maximum Number of Shares of Common Stock to be Offered Pursuant to this Prospectus" represents all of the shares of Common Stock that White Lion may offer under this prospectus.

Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the Exchange Act, and includes shares of Common Stock with respect to which the Selling Securityholder has voting and investment power. The percentage of shares of Common Stock beneficially owned by the Selling Securityholder prior to the offering shown in the table below is based on an aggregate of 20,058,486 shares of our Common Stock outstanding on November 21, 2022. Because the purchase price of the shares of Common Stock issuable under the White Lion Purchase Agreement is determined on the Purchase Settlement Date with respect to each purchase, the number of shares that may actually be sold by the Company under the White Lion Purchase Agreement may be fewer than the number of shares being offered by this prospectus. The fourth column assumes the sale of all of the shares offered by the selling stockholder pursuant to this prospectus.

Name of Selling Stockholder	Number of Shares of Common Stock Owned Prior to Offering		Maximum Number of Shares of Common Stock to be Offered Pursuant to this Prospectus	Number of Shares of Common Stock Owned After Offering	
	Number[1]	Percent[2]		Number[3]	Percent[2]
White Lion Capital, LLC[4]	50,200	*	4,000,000	4,000,000	16.6 %

* Represents beneficial ownership of less than 1% of the outstanding shares of our common stock.

(1) In accordance with Rule 13d-3(d) under the Exchange Act, we have excluded from the number of shares beneficially owned prior to the offering all of the shares that White Lion may be required to purchase under the Purchase Agreement, because the issuance of such shares is solely at our discretion and is subject to conditions contained in the White Lion Purchase Agreement, the satisfaction of which are entirely outside of White Lion's control, including the registration statement that includes this prospectus becoming and remaining effective. Furthermore, the purchase of Common Stock is subject to certain agreed upon maximum amount limitations set forth in the White Lion Purchase Agreement. Also, the White Lion Purchase Agreement prohibits us from issuing and selling any shares of our Common Stock to White Lion Capital to the extent such shares, when aggregated with all other shares of our common stock then beneficially owned by White Lion, would cause White Lion's beneficial ownership of our common stock to exceed the 9.99% Beneficial Ownership Cap. The Purchase Agreement also prohibits us from issuing or selling shares of our Common Stock under the White Lion Purchase Agreement in excess of the 19.99% Exchange Cap, unless we obtain stockholder approval to do so, or unless sales of Common Stock are made at a price equal to or greater than as required under applicable Nasdaq rules. Neither the Beneficial Ownership Limitation nor the Exchange Cap (to the extent applicable under Nasdaq rules) may be amended or waived under the White Lion Purchase Agreement.

(2) Applicable percentage ownership is based on 20,058,486 shares of our Common Stock outstanding as of November 21, 2022.

(3) Assumes the sale of all shares being offered pursuant to this prospectus.

(4) The business address of White Lion Capital, LLC ("WLC") is 17631 Ventura Blvd., Suite 1008, Encino, CA 91316. WLC's principal business is that of a private investor. Dmitriy Slobodskiy Jr., Yash Thukral, SamYaffa, and Nathan Yee are the managing principals of WLC. Therefore, each of Slobodskiy Jr., Thukral, Yaffa, and Yee may be deemed to have sole voting control and investment discretion over securities beneficially owned directly by WLC and, indirectly, by WLC. We have been advised that WLC is not a member of the Financial Industry Regulatory Authority, or FINRA, or an independent broker-dealer. The foregoing should not be construed in and of itself as an admission by Slobodskiy Jr., Thukral, Yaffa, and Yee as to beneficial ownership of the securities beneficially owned directly by WLC and, indirectly, by WLC.

DESCRIPTION OF SECURITIES

The following summary of the material terms of our securities is not intended to be a complete summary of the rights and preferences of such securities, and is qualified by reference to our Amended and Restated Charter, our Amended and Restated Bylaws and the warrant-related documents described herein, which are exhibits to the registration statement of which this prospectus is a part. We urge to you reach each of the Amended and Restated Charter, the Amended and Restated Bylaws and the warrant-related documents described herein in their entirety for a complete description of the rights and preferences of our securities.

General

Our authorized capital stock consists of 60 million shares of common stock, par value $0.0001 per share, and 10 million shares of preferred stock, par value $0.0001 per share. As of November 21, 2022, we had 20,058,486 shares of Common Stock outstanding and no shares of preferred stock were outstanding.

Common Stock

Dividend Rights

Subject to applicable law and the rights, if any, of the holders of any outstanding series of preferred stock, the holders of outstanding shares of Common Stock will be entitled to receive dividends and other distributions out of assets legally available at the times and in the amounts as our board of directors may determine from time to time.

Voting Rights

Each outstanding share of Common Stock are entitled to one vote on all matters submitted to a vote of stockholders. Holders of shares of Common Stock shall have no cumulative voting rights.

Preemptive Rights

Our Common Stock are not entitled to preemptive or other similar subscription rights to purchase any of our securities.

Conversion or Redemption Rights

Our Common Stock is neither convertible nor redeemable.

Liquidation Rights

Subject to applicable law and the rights, if any, of the holders of any outstanding series of preferred stock, in the event of any voluntary or involuntary liquidation, dissolution or winding up of Peak Bio, the holders of our Common Stock will be entitled to receive all the remaining assets of Peak Bio available for distribution to stockholders, after payment or provision for payment of the debts and other liabilities of Peak Bio.

Preferred Stock

Our board of directors is expressly authorized to provide, out of the unissued shares of preferred stock for one or more series of preferred stock, and to establish from time to time the number of shares to be included in each such series and to fix the voting rights, if any, designations, powers, preferences and relative, participating, optional, special and other rights, if any, of each such series and any qualifications, limitations and restrictions thereof, as shall be stated in the resolution or resolutions adopted by the board of directors providing for the issuance of such series and included in a certificate of designation filed pursuant to the DGCL, and the board of directors is expressly vested with the authority to the full extent provided by law, to adopt any such resolution or resolutions.

Warrants

Each whole Warrant will automatically entitle the registered holder to purchase one whole share of our Common Stock at a price of $11.50 per share for the Public Warrants and Private Placement Warrants and $0.01 per share for the PIPE Warrants, subject to adjustment as discussed below, at any time commencing on the date that is 30 days after the closing of the Business Combination. Pursuant to the warrant agreement, a warrantholder may exercise its warrants only for a whole number of shares of our Common Stock. This means that only a whole Warrant may be exercised at any given time by a warrantholder. The Public Warrants and Private Placement Warrants will expire five years after the completion of the Business Combination and the PIPE Warrants will expire one year after the completion of the Business Combination, at 5:00 p.m., New York City Time, respectively, or earlier upon redemption or liquidation.

We will not be obligated to deliver any shares of our Common Stock pursuant to the exercise for cash of a Warrant and will have no obligation to settle such warrant exercise unless a registration statement under the Securities Act with respect to the shares of our Common Stock underlying the warrants is then effective and a prospectus relating thereto is current, subject to our satisfying our obligations described below with respect to registration. No Warrant will be exercisable and we will not be obligated to issue shares of our Common Stock upon exercise of a Warrant unless our Common Stock issuable upon such warrant exercise has been registered, qualified or deemed to be exempt from the registration or qualifications requirements of the securities laws of the state of residence of the registered holder of the Warrants.

Notwithstanding the foregoing, if a registration statement covering the shares of common stock issuable upon exercise of the Public Warrants is not effective within a specified period following the consummation of the Business Combination, warrant holders may, until such time as there is an effective registration statement and during any period when we shall have failed to maintain an effective registration statement, exercise warrants on a cashless basis pursuant to the exemption provided by Section 3(a)(9) of the Securities Act, provided that such exemption is available. If that exemption, or another exemption, is not available, holders will not be able to exercise their warrants on a cashless basis. In the event of such cashless exercise, each holder would pay the exercise price by surrendering the warrants for that number of shares of common stock equal to the quotient obtained by dividing (x) the product of the number of shares of common stock underlying the warrants, multiplied by the difference between the exercise price of the warrants and the “fair market value” (defined below) by (y) the fair market value. The “fair market value” for this purpose will mean the average reported last sale price of the shares of common stock for the 5 trading days ending on the trading day prior to the date of exercise.

The Private Warrants are identical to the Public Warrants except that such warrants will be exercisable for cash or on a cashless basis, at the holder’s option, and will not be redeemable by us, in each case so long as they are still held by the Sponsor or its permitted transferees.

We may call the warrants for redemption (excluding the Private Warrants), in whole and not in part, at a price of $0.01 per warrant,

- at any time after the warrants become exercisable;
- upon not less than 30 days’ prior written notice of redemption to each warrant holder;
- if, and only if, the reported last sale price of the shares of common stock equals or exceeds $18.00 per share (as adjusted for stock splits, stock dividends, reorganizations and recapitalizations), for any 20 trading days within a 30 trading day period commencing at any time after the warrants become exercisable and ending on the third business day prior to the notice of redemption to warrant holders; and
- if, and only if, there is a current registration statement in effect with respect to the shares of common stock underlying such warrants.

The right to exercise will be forfeited unless the warrants are exercised prior to the date specified in the notice of redemption. On and after the redemption date, a record holder of a warrant will have no further rights except to receive the redemption price for such holder's warrant upon surrender of such warrant.

The redemption criteria for our Warrants have been established at a price which is intended to provide warrant holders a reasonable premium to the initial exercise price and provide a sufficient differential between the then-prevailing share price and the warrant exercise price so that if the share price declines as a result of our redemption call, the redemption will not cause the share price to drop below the exercise price of the Warrants.

If we call the Warrants for redemption as described above, our management will have the option to require all holders that wish to exercise warrants to do so on a "cashless basis." In such event, each holder would pay the exercise price by surrendering the Warrants for that number of shares of Common Stock equal to the quotient obtained by dividing (x) the product of the number of shares of Common Stock underlying the Warrants, multiplied by the difference between the exercise price of the Warrants and the "fair market value" (defined below) by (y) the fair market value. The "fair market value" for this purpose shall mean the average reported last sale price of the shares of common stock for the 5 trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders of Warrants.

The Warrants have been issued in registered form under a warrant agreement between Continental Stock Transfer & Trust Company, as warrant agent, and us. The warrant agreement provides that the terms of the warrants may be amended without the consent of any holder to cure any ambiguity or correct any defective provision, but requires the approval, by written consent or vote, of the holders of at least a majority of the then outstanding public warrants in order to make any change that adversely affects the interests of the registered holders. The exercise price and number of shares of common stock issuable on exercise of the Warrants may be adjusted in certain circumstances including in the event of a stock dividend, extraordinary dividend or our recapitalization, reorganization, merger or consolidation. However, except as described below, the warrants will not be adjusted for issuances of shares of Common Stock at a price below their respective exercise prices.

In addition, if (x) we issued additional shares of Common Stock or equity-linked securities for capital raising purposes in connection with the closing of the Business Combination at an issue price or effective issue price of less than $9.20 per share of common stock (with such issue price or effective issue price to be determined in good faith by our board of directors, and in the case of any such issuance to our sponsor, initial stockholders or their affiliates, without taking into account any founders' shares held by them prior to such issuance), (y) the aggregate gross proceeds from such issuances represent more than 60% of the total equity proceeds, and interest thereon, available for the funding of the Business Combination on the date of the consummation of the Business Combination (net of redemptions), and (z) the Market Value (as defined in the warrant agreement) is below $9.20 per share, the exercise price of the Warrants will be adjusted (to the nearest cent) to be equal to 115% of the greater of (i) the Market Value or (ii) the price at which we issue the additional shares of Common Stock or equity-linked securities.

The Warrants may be exercised upon surrender of the warrant certificate on or prior to the expiration date at the offices of the warrant agent, with the exercise form on the reverse side of the warrant certificate completed and executed as indicated, accompanied by full payment of the exercise price, by certified or official bank check payable to us, for the number of Warrants being exercised. The warrant holders do not have the rights or privileges of holders of shares of Common Stock and any voting rights until they exercise their warrants and receive shares of Common Stock. After the issuance of shares of Common Stock upon exercise of the Warrants, each holder will be entitled to one vote for each share held of record on all matters to be voted on by stockholders.

Warrant holders may elect to be subject to a restriction on the exercise of their warrants such that an electing warrant holder would not be able to exercise their warrants to the extent that, after giving effect to such exercise, such holder would beneficially own in excess of 9.8% of the shares of common stock outstanding.

No fractional shares will be issued upon exercise of the warrants. If, upon exercise of the Warrants, a holder would be entitled to receive a fractional interest in a share, we will, upon exercise, round up to the nearest whole number the number of shares of Common Stock to be issued to the warrant holder.

Anti-Takeover Effects of Our Certificate of Incorporation and Bylaws

Our Amended and Restated Charter, Amended and Restated Bylaws and the DGCL contain provisions, which are summarized in the following paragraphs, that are intended to enhance the likelihood of continuity and stability in the composition of our board of directors. These provisions are intended to avoid costly takeover battles, reduce our vulnerability to a hostile change of control and enhance the ability of our board of directors to maximize stockholder value in connection with any unsolicited offer to acquire us. However, these provisions may have an anti-takeover effect and may delay, deter or prevent a merger or acquisition of Peak Bio by means of a tender offer, a proxy contest or other takeover attempt that a stockholder might consider in its best interest, including those attempts that might result in a premium over the prevailing market price for the Common Stock held by stockholders.

Classified Board

Our Amended and Restated Charter will be divided into three classes of directors, divided further into classes of two, two and three directors, and with the directors serving three-year terms. As a result, approximately one-third of our board of directors will be elected each year. The classification of directors will have the effect of making it more difficult for stockholders to change the composition of our board of directors. Our Amended and Restated Charter also provides that, subject to any rights of holders of preferred stock to elect additional directors under specified circumstances, the number of directors will be fixed exclusively pursuant to a resolution adopted by our board of directors.

Stockholder Action by Written Consent

Our Amended and Restated Charter provide that except as otherwise expressly provided for pursuant to any Certificate of Designation permitting the holders of one or more series of preferred stock to act by written consent, any action required or permitted to be taken by our stockholders must be effected by a duly called annual or special meeting of such stockholders and may not be effected by written consent.

Special Meetings of Stockholders

Our Amended and Restated Charter provides that, subject to the rights, if any, of the holders of any outstanding series of preferred stock, and to the requirements of applicable law, special meetings of stockholders may be called only by the Chairman of the Board, the Chief Executive Officer of Peak Bio or the board of directors pursuant to a resolution adopted by a majority of the board of directors. Our Amended and Restated Bylaws prohibit the conduct of any business at a special meeting other than as specified in the notice for such meeting. These provisions may have the effect of deferring, delaying or discouraging hostile takeovers, or changes in control or management of Peak Bio.

Advance Notice Procedures

Our Amended and Restated Bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors. Stockholders at an annual meeting will only be able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors or by a stockholder who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given our Secretary timely written notice, in proper form, of the stockholder's intention to bring that business before the meeting. Although our Amended and Restated Bylaws does not give our board of

directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting, the bylaws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of Peak Bio.

Removal of Directors; Vacancies

Our Amended and Restated Charter provides that directors may be removed only with cause upon the affirmative vote of holders of a majority of the voting power of all then outstanding shares of stock entitled to vote generally in the election of directors, voting together as a single class. In addition, our Amended and Restated Charter provides that, subject to the rights granted to one or more series of preferred stock then outstanding, any newly created directorship on our board of directors that results from an increase in the number of directors and any vacancies on our board of directors will be filled only by the affirmative vote of a majority of the remaining directors, even if less than a quorum, or by a sole remaining director.

Amendments to Bylaws and Certificate of Incorporation

Our Amended and Restated Charter and Amended and Restated Bylaws provides that our board of directors is expressly authorized to adopt, amend, alter or repeal our Amended and Restated Bylaws without a stockholder vote. Any adoption, amendment, alteration or repeal of our Amended and Restated Bylaws by our stockholders will require the affirmative vote of holders of at least a majority of the voting power of all then outstanding shares of our capital stock entitled to vote generally in the election of directors, voting together as a single class.

The DGCL provides generally that the affirmative vote of a majority of the outstanding shares entitled to vote thereon, voting together as a single class, is required to amend a corporation's certificate of incorporation, unless the certificate of incorporation requires a greater percentage.

The combination of the classification of our board of directors and the lack of cumulative voting will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Because our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management.

Authorized but Unissued Shares

Our authorized but unissued shares of common stock and preferred stock will be available for future issuance without stockholder approval, subject to stock exchange rules. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. One of the effects of the existence of authorized but unissued common stock or preferred stock may be to enable our board of directors to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of Peak Bio by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of our management and possibly deprive our stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.

Business Combinations

Upon completion of the Business Combination, we are now subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that the person becomes an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes, among other things, a merger, asset or stock sale or other transaction resulting in a

financial benefit to the interested stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns, or did own within three years prior to the determination of interested stockholder status, 15% or more of the corporation's voting stock.

Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions: (1) before the stockholder became an interested stockholder, the board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder; (2) upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances; or (3) at or after the time the stockholder became an interested stockholder, the business combination was approved by the board of directors and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds (2/3) of the outstanding voting stock which is not owned by the interested stockholder.

A Delaware corporation may "opt out" of these provisions with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares.

We have not opted out of Section 203.

Under certain circumstances, this provision will make it more difficult for a person who would be an "interested stockholder" to effect various business combinations with us for a three-year period. This provision may encourage companies interested in acquiring us to negotiate in advance with our board of directors because the stockholder approval requirement would be avoided if our board of directors approves either the business combination or the transaction which results in the stockholder becoming an interested stockholder. These provisions also may have the effect of preventing changes in our board of directors and may make it more difficult to accomplish transactions which stockholders may otherwise deem to be in their best interests.

Dissenters' Rights of Appraisal and Payment

Under the DGCL, with certain exceptions, our stockholders will have appraisal rights in connection with a merger or consolidation of us. Pursuant to the DGCL, stockholders who properly request and perfect appraisal rights in connection with such merger or consolidation will have the right to receive payment of the fair value of their shares as determined by the Delaware Court of Chancery.

Stockholders' Derivative Actions

Under the DGCL, any of our stockholders may bring an action in our name to procure a judgment in our favor, also known as a derivative action, provided that the stockholder bringing the action is a holder of our shares at the time of the transaction to which the action relates or such stockholder's stock thereafter devolved by operation of law.

Exclusive Forum

Our Amended and Restated Charter provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have subject matter jurisdiction, any state court located in Delaware, or if all such state courts lack subject matter jurisdiction, the United States District Court for the District of Delaware) will be the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (3) any action

asserting a claim against us or any director, officer or other employee arising pursuant to any provision of the DGCL, our Amended and Restated Charter or our Amended and Restated Bylaws, (4) any action asserting a claim against us or any director, officer or employee that is governed by the internal affairs doctrine or (5) any action asserting an "internal corporate claim" as such term is defined in Section 115 of the DGCL; provided that for the avoidance of doubt, the forum selection provision that identifies the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation, including any "derivative action", will not apply to suits to enforce a duty or liability created by the Securities Act, the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Section 22 of the Securities Act creates concurrent jurisdiction for state and federal courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to the provisions of our Amended and Restated Charter described above. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers.

Conflicts of Interest

Delaware law permits corporations to adopt provisions renouncing any interest or expectancy in certain opportunities that are presented to the corporation or its officers, directors or stockholders. Our Amended and Restated Charter, to the extent permitted by Delaware law, renounces any interest or expectancy that we have in, or right to be offered an opportunity to participate in, specified business opportunities that are from time to time presented to certain of our officers, directors or stockholders. Our Amended and Restated Charter does not renounce our interest in any business opportunity that is expressly offered to a director or officer solely in his or her capacity as a director or officer of Peak Bio. To the fullest extent permitted by law, no business opportunity will be deemed to be a potential corporate opportunity for us unless we would be permitted to undertake the opportunity under our Amended and Restated Charter, and the opportunity would be in line with our business.

Limitations on Liability and Indemnification of Officers and Directors

The DGCL authorizes corporations to limit or eliminate the personal liability of directors to corporations and their stockholders for monetary damages for breaches of directors' fiduciary duties, subject to certain exceptions. Our Amended and Restated Charter includes a provision that eliminates the personal liability of directors for monetary damages for any breach of fiduciary duty as a director, except to the extent such exemption from liability or limitation thereof is not permitted under the DGCL. The effect of these provisions will be to eliminate the rights of us and our stockholders, through stockholders' derivative suits on our behalf, to recover monetary damages from a director for breach of fiduciary duty as a director. However, exculpation will not apply to any director if the director has acted in bad faith, knowingly or intentionally violated the law, authorized unlawful payments of dividends, stock purchases or redemptions, or derived an improper personal benefit from his or her actions as a director.

Our Amended and Restated Bylaws provide that we must indemnify and advance expenses to our directors and officers to the fullest extent authorized by the DGCL. We are also expressly authorized to carry directors' and officers' liability insurance providing indemnification for our directors, officers and certain employees for some liabilities. We believe that these indemnification and advancement provisions and insurance will be useful to attract and retain qualified directors and officers.

The limitation of liability, indemnification and advancement provisions that are included in Our Amended and Restated Charter and Amended and Restated Bylaws may discourage stockholders from bringing a lawsuit against directors for breaches of their fiduciary duty. These provisions also may have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might

otherwise benefit us and our stockholders. In addition, your investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Transfer Agent and Registrar

The transfer agent and registrar for our shares of Common Stock and Warrants is Continental Stock Transfer & Trust Company. The transfer agent's address is 1 State Street, 30th Floor, New York, NY 10004.

PLAN OF DISTRIBUTION

We are registering (i) up to 23,467,773 shares of Common Stock for possible disposition by the Selling Securityholders from time to time, including up to 4,000,000 shares of Common Stock that may be resold by White Lion following issuance by us to White Lion pursuant to the White Lion Purchase Agreement (the "White Lion Shares"), (ii) up to 2,945,545 Private Warrants for possible sale by the Selling Securityholders from time to time and (iii) up to 2,945,545 shares of Common Stock that are issuable upon the exercise of the Private Warrants by the holders thereof. We are required to pay all fees and expenses incident to the registration of the shares of our Common Stock and Warrants to be offered and sold pursuant to this prospectus. The Selling Securityholders will bear all commissions and discounts, if any, attributable to their sale of shares of our Common Stock or Private Warrants.

Plan of Distribution by Selling Securityholders Other than White Lion:

The following Section describes the Plan of Distribution with respect to the Selling Securityholders other than White Lion:

We will not receive any of the proceeds from the sale of the securities by the Selling Securityholders (other than White Lion). We will receive proceeds from Warrants exercised in the event that such Warrants are exercised for cash. The aggregate proceeds to the Selling Securityholders will be the purchase price of the securities less any discounts and commissions borne by the Selling Securityholders.

The shares of Common Stock beneficially owned by the Selling Securityholders (other than White Lion) covered by this prospectus may be offered, sold, distributed, transferred or otherwise disposed of from time to time by such Selling Securityholders. The term "Selling Securityholders" includes assignees, distributees, donees, pledgees, transferees or other successors in interest selling securities received after the date of this prospectus from a Selling Securityholder as a gift, pledge, partnership distribution or other transfer. Such Selling Securityholders will act independently of us in making decisions with respect to the timing, manner and size of each disposition. Such dispositions may be made on one or more exchanges or in the over-the-counter market or otherwise, at prices and under terms then prevailing or at prices related to the then current market price or at negotiated prices. Such Selling Securityholders may dispose of their shares of Common Stock or Private Warrants by one or more of, or a combination of, the following methods:

- purchases by a broker-dealer as principal and resale by such broker-dealer for its own account pursuant to this prospectus;
- ordinary brokerage transactions and transactions in which the broker solicits purchasers;
- block trades in which the broker-dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- an over-the-counter distribution in accordance with the rules of Nasdaq;
- through trading plans entered into by a Selling Securityholder pursuant to Rule 10b5-1 under the Exchange Act, that are in place at the time of an offering pursuant to this prospectus and any applicable prospectus supplement hereto that provide for periodic sales of their securities on the basis of parameters described in such trading plans;
- an exchange distribution and/or secondary distribution in accordance with the rules of the applicable exchange;
- distributions to their shareholders, partners, members or other affiliates;
- to or through underwriters or broker-dealers;
- in "at the market" offerings, as defined in Rule 415 under the Securities Act, at negotiated prices, at prices prevailing at the time of sale or at prices related to such prevailing market prices, including sales made directly on a national securities exchange or sales made through a market maker other than on an exchange or other similar offerings through sales agents;

- in privately negotiated transactions;
- in options transactions;
- through a combination of any of the above methods of sale; or
- any other method permitted pursuant to applicable law.

In addition, a Selling Securityholder (or its ultimate parent) that is an entity may elect to make a pro rata in-kind distribution of securities to its shareholders, partners, members or affiliates pursuant to the registration statement of which this prospectus is a part by delivering a prospectus with a plan of distribution. Such shareholders, members, partners or affiliates would thereby receive freely tradeable securities pursuant to the distribution through a registration statement. To the extent a distributee is an affiliate of ours (or to the extent otherwise required by law), we may file a prospectus supplement in order to permit the distributees to use the prospectus to resell the securities acquired in the distribution.

There can be no assurance that the Selling Securityholders will sell all or any of the securities offered by this prospectus. In addition, the Selling Securityholders may also sell securities under Rule 144 under the Securities Act, if available, or in other transactions exempt from registration, rather than under this prospectus. The Selling Securityholders have the sole and absolute discretion not to accept any purchase offer or make any sale of securities if they deem the purchase price to be unsatisfactory at any particular time.

The Selling Securityholders also may transfer the securities in other circumstances, in which case the pledgees, donees, transferees, assignees, successors and other permitted transferees will be the selling beneficial owners for purposes of this prospectus. Upon being notified by a Selling Securityholders that pledgees, donees, transferees, assignees, successors and other permitted transferees intends to sell our securities, we will, to the extent required, promptly file a supplement to this prospectus to name specifically such person as a Selling Securityholders.

With respect to a particular offering of the securities held by the Selling Securityholders, to the extent required, an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement of which this prospectus is part, will be prepared and will set forth the following information:

- the specific securities to be offered and sold;
- the names of the Selling Securityholders;
- the respective purchase prices and public offering prices, the proceeds to be received from the sale, if any, and other material terms of the offering;
- settlement of short sales entered into after the date of this prospectus;
- the names of any participating agents, broker-dealers or underwriters; and
- any applicable commissions, discounts, concessions and other items constituting compensation from the Selling Securityholders.

To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution. In connection with distributions of the shares or otherwise, the Selling Securityholders may enter into hedging transactions with broker-dealers or other financial institutions. In connection with such transactions, broker-dealers or other financial institutions may engage in short sales of shares of Common Stock in the course of hedging transactions, broker-dealers or other financial institutions may engage in short sales of shares of Common Stock in the course of hedging the positions they assume with Selling Securityholders. The Selling Securityholders may also sell shares of Common Stock short and redeliver the shares to close out such short positions. The Selling Securityholders may also enter into option or other

transactions with broker-dealers or other financial institutions which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker- dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction). The Selling Securityholders may also pledge shares to a broker-dealer or other financial institution, and, upon a default, such broker-dealer or other financial institution, may effect sales of the pledged shares pursuant to this prospectus (as supplemented or amended to reflect such transaction).

In order to facilitate the offering of the securities, any underwriters or agents, as the case may be, involved in the offering of such securities may engage in transactions that stabilize, maintain or otherwise affect the price of our securities. Specifically, the underwriters or agents, as the case may be, may overallot in connection with the offering, creating a short position in our securities for their own account. In addition, to cover overallotments or to stabilize the price of our securities, the underwriters or agents, as the case may be, may bid for, and purchase, such securities in the open market. Finally, in any offering of securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allotted to an underwriter or a broker-dealer for distributing such securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. The underwriters or agents, as the case may be, are not required to engage in these activities, and may end any of these activities at any time.

The Selling Securityholders may solicit offers to purchase the securities directly from, and may sell such securities directly to, institutional investors or others. In this case, no underwriters or agents would be involved. The terms of any of those sales, including the terms of any bidding or auction process, if utilized, will be described in the applicable prospectus supplement.

A Selling Securityholder may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions at negotiated prices. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by any Selling Securityholder or borrowed from any Selling Securityholder or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from any Selling Securityholder in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement (or a post-effective amendment). In addition, any Selling Securityholder may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

In effecting sales, broker-dealers or agents engaged by the Selling Securityholders may arrange for other broker-dealers to participate. Broker-dealers or agents may receive commissions, discounts or concessions from the Selling Securityholders in amounts to be negotiated immediately prior to the sale.

In offering the shares covered by this prospectus, the Selling Securityholders and any broker-dealers who execute sales for the Selling Securityholders may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. Any profits realized by the Selling Securityholders and the compensation of any broker-dealer may be deemed to be underwriting discounts and commissions.

In order to comply with the securities laws of certain states, if applicable, the shares must be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

We have advised the Selling Securityholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the Selling Securityholders and their affiliates. In addition, we will make copies of this prospectus available to the Selling Securityholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The Selling Securityholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

At the time a particular offer of shares is made, if required, a prospectus supplement will be distributed that will set forth the number of shares being offered and the terms of the offering, including the name of any underwriter, dealer or agent, the purchase price paid by any underwriter, any discount, commission and other item constituting compensation, any discount, commission or concession allowed or reallowed or paid to any dealer, and the proposed selling price to the public.

A holder of Warrants may exercise its Warrants in accordance with the Warrant Agreement on or before the expiration date set forth therein by surrendering, at the office of the warrant agent, Continental Stock Transfer & Trust Company, the certificate evidencing such Warrant, with the form of election to purchase set forth thereon, properly completed and duly executed, accompanied by full payment of the exercise price and any and all applicable taxes due in connection with the exercise of the Warrant, subject to any applicable provisions relating to cashless exercises in accordance with the Warrant Agreement.

Plan of Distribution by White Lion:

The following Section describes the Plan of Distribution with respect to White Lion:

4,000,000 shares of Common Stock offered by this prospectus are being offered by the selling stockholder, White Lion Capital. These shares may be sold or distributed from time to time by the White Lion directly to one or more purchasers or through brokers, dealers, or underwriters who may act solely as agents at market prices prevailing at the time of sale, at prices related to the prevailing market prices, at negotiated prices, or at fixed prices, which may be changed. The sale of such shares of our Common Stock could be effected in one or more of the following methods:

- ordinary brokers' transactions;
- transactions involving cross or block trades;
- through brokers, dealers, or underwriters who may act solely as agents;
- "at the market" into an existing market for our common stock;
- in other ways not involving market makers or established business markets, including direct sales to purchasers or sales effected through agents;
- in privately negotiated transactions; or
- any combination of the foregoing.

In order to comply with the securities laws of certain states, if applicable, the shares may be sold only through registered or licensed brokers or dealers. In addition, in certain states, the shares may not be sold unless they have been registered or qualified for sale in the state or an exemption from the state's registration or qualification requirement is available and complied with.

White Lion is an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act.

White Lion has informed us that it intends to use one or more registered broker-dealers (one of which is an affiliate of White Lion) to effectuate all sales, if any, of our Common Stock that it may acquire from us pursuant

to the White Lion Purchase Agreement. Such sales will be made at prices and at terms then prevailing or at prices related to the then current market price. Each such registered broker-dealer will be an underwriter within the meaning of Section 2(a)(11) of the Securities Act. White Lion has informed us that each such broker-dealer may receive commissions from White Lion and, if so, such commissions will not exceed customary brokerage commissions.

Brokers, dealers, underwriters or agents participating in the distribution of such shares of our Common Stock offered by White Lion may receive compensation in the form of commissions, discounts, or concessions from the purchasers, for whom the broker-dealers may act as agent, of the shares sold by White Lion through this prospectus. The compensation paid to any such particular broker-dealer by any such purchasers of shares of our Common Stock sold by White Lion may be less than or in excess of customary commissions. Neither we nor White Lion can presently estimate the amount of compensation that any agent will receive from any purchasers of shares of our Common Stock sold by White Lion.

We know of no existing arrangements between White Lion or any other stockholder, broker, dealer, underwriter or agent relating to the sale or distribution of the shares of our Common Stock offered by this prospectus.

We may from time to time file with the SEC one or more supplements to this prospectus or amendments to the registration statement of which this prospectus forms a part to amend, supplement or update information contained in this prospectus, including, if and when required under the Securities Act, to disclose certain information relating to a particular sale of shares offered by this prospectus by White Lion, including the names of any brokers, dealers, underwriters or agents participating in the distribution of such shares by White Lion, any compensation paid by the White Lion to any such brokers, dealers, underwriters or agents, and any other required information.

As consideration for its irrevocable commitment to purchase our Common Stock under the White Lion Purchase Agreement, we issued to White Lion Capital shares of Common Stock as Commitment Shares equal to the quotient obtained by dividing (i) $250,000 and (ii) the Closing Sale Price of our Common Stock two Trading Days prior to the filing of the Initial Registration Statement. The Company issued Initial Commitment Shares of 50,200 shares of Common Stock to White Lion, based upon the Closing Sale Price of our Common Stock of $4.98 per share on November 30, 2022.

We also have agreed to indemnify White Lion and certain other persons against certain liabilities in connection with the offering of shares of our Common Stock offered hereby, including liabilities arising under the Securities Act or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. White Lion has agreed to indemnify us against liabilities under the Securities Act that may arise from certain written information furnished to us by White Lion specifically for use in this prospectus or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and controlling persons, we have been advised that in the opinion of the SEC this indemnification is against public policy as expressed in the Securities Act and is therefore, unenforceable.

We estimate that the total expenses for the offering will be approximately $30,000.

White Lion has represented to us that at no time prior to the date of the White Lion Purchase Agreement has White Lion, any of its affiliates or any entity managed or controlled by White Lion engaged in or effected, directly or indirectly, for its own principal account, any short sale (as such term is defined in Rule 200 of Regulation SHO of the Exchange Act) of our Common Stock that establishes a net short position with respect to our Common Stock. White Lion has agreed that during the term of the White Lion Purchase Agreement, none of White Lion, any of its affiliates nor any entity managed or controlled by White Lion will enter into or effect, directly or indirectly, any of the foregoing transactions for its own principal account or for the principal account of any other such entity.

We have advised White Lion that it is required to comply with Regulation M promulgated under the Exchange Act. With certain exceptions, Regulation M precludes White Lion, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the securities offered by this prospectus.

This offering will terminate on the date that all shares of our Common Stock offered by this prospectus have been sold by White Lion.

Restrictions to Sell

Pursuant to the Lock-Up Agreements the restricted stockholders agreed not to dispose of or hedge any of their Common Stock or securities convertible into or exchangeable for shares of Common Stock during the period 180 days after the Closing Date.

MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following is a summary of material United States federal income tax consequences of the purchase, ownership and disposition of our Common Stock as of the date hereof. This discussion is limited to non-U.S. holders (as defined below) who purchase our common stock pursuant to this offering and who hold our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment).

A "non-U.S. holder" means a beneficial owner of our common stock (other than an entity treated as a partnership for United States federal income tax purposes) that is not, for United States federal income tax purposes, any of the following:

- an individual citizen or resident of the United States;
- a corporation (or any other entity treated as a corporation for United States federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate the income of which is subject to United States federal income taxation regardless of its source; or
- a trust if it (1) is subject to the primary supervision of a court within the United States and one or more United States persons have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable United States Treasury regulations to be treated as a United States person.

This summary is based upon provisions of the Internal Revenue Code of 1986, as amended (the "Code"), and regulations, rulings and judicial decisions as of the date hereof. Those authorities are subject to different interpretations and may be changed, perhaps retroactively, so as to result in United States federal income tax consequences different from those summarized below. This summary does not address all aspects of United States federal income taxes and does not deal with any estate or gift tax consequences or any foreign, state, local or other tax considerations that may be relevant to non-U.S. holders in light of their particular circumstances. In addition, it does not represent a detailed description of the United States federal income tax consequences applicable to you if you are subject to special treatment under the United States federal income tax laws (including if you are a former citizen or long-term resident of the United States, foreign pension fund, tax qualified retirement plan, bank, financial institution, insurance company, investment fund, tax-exempt organization, governmental organization, trader, broker or dealer in securities "controlled foreign corporation," "passive foreign investment company," a partnership or other pass-through entity for United States federal income tax purposes (or an investor in such a pass-through entity), person subject to the alternative minimum tax, person that owns, or has owned, actually or constructively, more than 5% of our common stock, person who has elected to mark securities to market, person who acquired shares of our common stock as compensation or otherwise in connection with the performance of services, person who has acquired shares of our common stock as part of a straddle, hedge, conversion transaction or other integrated investment or an accrual-method taxpayer subject to special tax accounting rules under Section 451(b) of the Code). We cannot assure you that a change in law will not alter significantly the tax considerations that we describe in this summary.

If a partnership (or other entity treated as a partnership for United States federal income tax purposes) holds our common stock, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partnership (or other entity treated as a partnership for United States federal income tax purposes) or partner of a partnership holding our common stock, you should consult your tax advisors.

IF YOU ARE CONSIDERING THE PURCHASE OF OUR COMMON STOCK, YOU SHOULD CONSULT YOUR OWN TAX ADVISORS CONCERNING THE PARTICULAR UNITED STATES

FEDERAL INCOME TAX CONSEQUENCES TO YOU OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK, AS WELL AS THE CONSEQUENCES TO YOU ARISING UNDER OTHER UNITED STATES FEDERAL TAX LAWS, THE LAWS OF ANY OTHER TAXING JURISDICTION, OR AN APPLICABLE TAX TREATY. IN ADDITION, YOU SHOULD CONSULT WITH YOUR TAX ADVISOR WITH RESPECT TO POTENTIAL CHANGES IN UNITED STATES FEDERAL TAX LAW AS WELL AS POTENTIAL CHANGES IN STATE, LOCAL OR FOREIGN TAX LAWS.

Dividends

In the event that we make a distribution of cash or other property (other than certain pro rata distributions of our stock) in respect of our common stock, the distribution generally will be treated as a dividend for United States federal income tax purposes to the extent it is paid from our current or accumulated earnings and profits, as determined under United States federal income tax principles. Any portion of a distribution that exceeds our current and accumulated earnings and profits generally will be treated first as a tax-free return of capital, causing a reduction in the adjusted tax basis of a non-U.S. holder's common stock, and to the extent the amount of the distribution exceeds a non-U.S. holder's adjusted tax basis in our common stock, the excess will be treated as gain from the disposition of our common stock (the tax treatment of which is discussed below under " — Gain on Disposition of Common Stock").

Subject to the discussions below regarding effectively connected income, backup withholding and Sections 1471 through 1474 of the Code (such Sections commonly referred to as "FATCA"), dividends paid to a non-U.S. holder generally will be subject to withholding of United States federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. A non-U.S. holder who wishes to claim the benefit of an applicable treaty rate and avoid backup withholding, as discussed below, for dividends will be required (a) to provide the applicable withholding agent with a properly executed Internal Revenue Service ("IRS") Form W-BEN or Form W- 8BEN-E (or other applicable form) certifying under penalty of perjury that such holder is not a United States person as defined under the Code and is eligible for treaty benefits or (b) if our common stock is held through certain foreign intermediaries, to satisfy the relevant certification requirements of applicable United States Treasury regulations. Special certification and other requirements apply to certain non-U.S. holders that are pass-through entities rather than corporations or individuals. A non-U.S. holder eligible for a reduced rate of United States federal withholding tax pursuant to an income tax treaty may be eligible to obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

Dividends that are effectively connected with the conduct of a trade or business by the non-U.S. holder within the United States (and, if required by an applicable income tax treaty, are attributable to a United States permanent establishment) are not subject to the withholding tax. To claim the exemption, the non-U.S. holder must generally furnish a valid IRS Form W-8ECI (or applicable successor form) to the applicable withholding agent certifying eligibility for exemption. However, any such effectively connected dividends paid on our common stock generally will be subject to United States federal income tax on a net income basis in the same manner as if the non-U.S. holder were a United States person as defined under the Code. Any such effectively connected dividends received by a foreign corporation may be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty.

Gain on Disposition of Common Stock

Subject to the discussion of backup withholding and FATCA below, any gain realized by a non-U.S. holder on the sale or other disposition of our common stock generally will not be subject to United States federal income tax unless:

- the gain is effectively connected with a trade or business of the non-U.S. holder in the United States (and, if required by an applicable income tax treaty, is attributable to a United States permanent establishment of the non-U.S. holder);

- the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of that disposition, and certain other conditions are met; or
- we are or have been a "United States real property holding corporation" for United States federal income tax purposes at any time within the shorter of the five-year period preceding the disposition or the non-U.S. holder's holding period for our common stock, and our common stock is not regularly traded on an established securities market during the calendar year in which the sale or other disposition occurs.

A non-U.S. holder described in the first bullet point immediately above will be subject to tax on the gain derived from the sale or other disposition in the same manner as if the non-U.S. holder were a United States person as defined under the Code. In addition, if any non-U.S. holder described in the first bullet point immediately above is a foreign corporation, the gain realized by such non-U.S. holder may be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. An individual non-U.S. holder described in the second bullet point immediately above will be subject to a 30% (or such lower rate as may be specified by an applicable income tax treaty) tax on the gain derived from the sale or other disposition, which gain may be offset by United States source capital losses even though the individual is not considered a resident of the United States, provided that the non-U.S. holder has timely filed United States federal income tax returns with respect to such losses.

Generally, a corporation is a "United States real property holding corporation" if the fair market value of its United States real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests and its other assets used or held for use in a trade or business (all as determined for United States federal income tax purposes). We believe we are not and do not anticipate becoming a "United States real property holding corporation" for United States federal income tax purposes.

Non-U.S. holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Annual reports are required to be filed with the IRS and provided to each non-U.S. holder indicating the amount of distributions on our common stock paid to such holder and the amount of any tax withheld with respect to such distributions. These information reporting requirements apply even if no withholding was required because the distributions were effectively connected with the non-U.S. holder's conduct of a United States trade or business, or withholding was reduced or eliminated by an applicable income tax treaty. Copies of the information returns reporting such distributions and any withholding may also be made available to the tax authorities in the country in which the non-U.S. holder resides under the provisions of an applicable income tax treaty.

A non-U.S. holder will not be subject to backup withholding on dividends received if such holder certifies under penalty of perjury that it is a non-U.S. holder (and the payor does not have actual knowledge or reason to know that such holder is a United States person as defined under the Code), including by providing a valid IRS Form W-8BEN, IRS Form W-8BEN-E or IRS Form W-8ECI, or such holder otherwise establishes an exemption.

Information reporting and backup withholding generally are not required with respect to the amount of any proceeds from the sale or other disposition of our common stock by a non-U.S. holder outside the United States through a foreign office of a foreign broker that does not have certain specified connections to the United States. However, if a non-U.S. holder sells or otherwise disposes of its shares of common stock through a United States broker or the United States offices of a foreign broker, the broker will generally be required to report the amount of proceeds paid to the non-U.S. holder to the IRS and also backup withhold on that amount unless such non-U.S. holder provides appropriate certification to the broker of its status as a non-U.S. holder (and the payor does not have actual knowledge or reason to know that such holder is a United States person) or otherwise establishes an

exemption. Information reporting will also apply if a non-U.S. holder sells its shares of common stock through a foreign broker deriving more than a specified percentage of its income from United States sources or having certain other connections to the United States, unless such broker has documentary evidence in its records that such non-U.S. holder is a non-U.S. holder (and the payor does not have actual knowledge or reason to know that such holder is a United States person) and certain other conditions are met, or such non-U.S. holder otherwise establishes an exemption.

Backup withholding is not an additional tax and any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against a non-U.S. holder's United States federal income tax liability provided the required information is timely furnished to the IRS.

Additional Withholding Requirements

Under FATCA, a 30% United States federal withholding tax may apply to any dividends paid on our common stock paid to (i) a "foreign financial institution" (as specifically defined in the Code) which does not provide sufficient documentation, typically on IRS Form W-8BEN-E, evidencing either (x) an exemption from FATCA, or (y) its compliance (or deemed compliance) with FATCA (which may alternatively be in the form of compliance with an intergovernmental agreement with the United States) in a manner which avoids withholding, or (ii) a "non-financial foreign entity" (as specifically defined in the Code) which does not provide sufficient documentation, typically on IRS Form W-8BEN-E, evidencing either (x) an exemption from FATCA, or (y) adequate information regarding certain substantial United States beneficial owners of such entity (if any). If a dividend payment is both subject to withholding under FATCA and subject to the withholding tax discussed above under "— Dividends," the withholding under FATCA may be credited against, and therefore reduce, such other withholding tax. An intergovernmental agreement between the United States and an applicable foreign country may modify these requirements. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. FATCA currently applies to dividends paid on our common stock. The Treasury Secretary has issued proposed regulations providing that the withholding provisions under FATCA do not apply with respect to gross proceeds from a sale or other disposition of our common stock, which may be relied upon by taxpayers until final regulations are issued. You should consult your own tax advisors regarding these requirements and whether they may be relevant to your ownership and disposition of our Common Stock.

LEGAL MATTERS

The validity of the securities offered by this prospectus has been passed upon for us by DLA Piper LLP (US). If the validity of any securities is also passed upon by counsel for the underwriters, dealers or agents of an offering of those securities, that counsel will be named in the applicable prospectus supplement.

EXPERTS

The financial statements of Ignyte Acquisition Corp. as of December 31, 2021 and 2020, for the year ended December 31, 2021 and for the period from August 6, 2020 (inception) through December 31, 2020, included in this prospectus have been so included in reliance on the report (which includes an explanatory paragraph about the ability of the company to continue as a going concern) of Marcum LLP, an independent registered public accounting firm, appearing elsewhere herein and are included in reliance on the report of such firm given upon the authority of such firm as experts in auditing and accounting.

The carve-out consolidated financial statements of Peak Bio Co., Ltd. as of and for the years ended December 31, 2021 and 2020, included in this prospectus, have been audited by Mayer Hoffman McCann P.C., independent registered public accounting firm, as set forth in their report (which report includes an explanatory paragraph regarding the existence of substantial doubt about our ability to continue as a going concern), appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing, in giving said reports.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the securities offered by this prospectus. This prospectus, which forms a part of such registration statement, does not contain all of the information included in the registration statement. For further information pertaining to us and our securities, you should refer to the registration statement and to its exhibits. The registration statement has been filed electronically and may be obtained in any manner listed below. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement or a report we file under the Exchange Act, you should refer to the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit to a registration statement or report is qualified in all respects by the filed exhibit.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the internet at the SEC's website at *www.sec.gov* and on our website, free of charge, at *www.peak-bio.com*. The information found on, or that can be accessed from or that is hyperlinked to, our website is not part of this prospectus. You may inspect a copy of the registration statement through the SEC's website, as provided herein.

INDEX TO FINANCIAL STATEMENTS

PEAK BIO, INC. (F/K/A IGNYTE ACQUISITION CORP.)

PEAK BIO CO., LTD. (PEAK BIO)
Carve-out Consolidated Financial Statements
As of and for the Years Ended December 31, 2021 and 2020

PEAK BIO CO., LTD. (PEAK BIO)
Carve-out Condensed Consolidated Financial Statements
As of and for the Nine Months Ended September 30, 2022 and 2021
(Unaudited)

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM (PCAOB ID 688)

To the Shareholders and Board of Directors of
Ignyte Acquisition Corp.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Ignyte Acquisition Corp. (the "Company") as of December 31, 2021 and 2020, the related statements of operations, shareholders' (deficit) and cash flows for the year ended December 31, 2021 and for the period from August 6, 2020 (inception) through December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for the year ended December 31, 2021 and for the period from August 6, 2020 (inception) through December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Explanatory Paragraph — Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As more fully described in Note 1, the Company has until November 2, 2022 to consummate a Business Combination. If a Business Combination is not consummated by the required date, then the Company will cease all operations except for the purpose of liquidating. The Company has limited capital resources and will need additional financing to sustain operations for a reasonable period of time, which is considered to be on year from the issuance date of the financial statements. These conditions raise substantial doubt about the Company's ability to continue as a going concern. Management's plans with regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Marcum LLP

Marcum LLP

We have served as the Company's auditor since 2020.

New York, NY
March 30, 2022

IGNYTE ACQUISITION CORP.
BALANCE SHEETS

	December 31, 2021	December 31, 2020
Assets		
Cash	$ 329,192	$ 25,425
Prepaid expense and other current assets	71,319	—
Total current assets	400,511	25,425
Deferred offering costs	—	81,575
Marketable securities held in Trust Account	57,506,299	—
Total Assets	$57,906,810	$ 107,000
Liabilities, Redeemable Common Stocks and Stockholders' Equity		
Current liabilities:		
Accrued expenses	$ 325,641	$ —
Due to related party	111,953	310
Promissory note — related party	—	80,000
Total current liabilities	437,594	80,310
Warrant liabilities	1,975,000	—
Total liabilities	2,412,594	80,310
Commitments and Contingencies (See Note 7)		
Common stock subject to possible redemption, 5,750,000 shares at redemption value	57,500,000	—
Stockholders' Equity (Deficit):		
Preferred stock, $0.0001 par value; 1,000,000 shares authorized; none issued and outstanding	—	—
Common stock, $0.0001 par value; 50,000,000 shares authorized; 1,537,500 shares and 0 shares issued and outstanding (excluding 5,750,000 shares and 0 stocks subject to possible redemption) at December 31, 2021 and 2020, respectively	154	154
Additional paid-in capital	—	26,846
Accumulated deficit	(2,005,938)	(310)
Total stockholders' equity (deficit)	(2,005,784)	26,690
Total Liabilities, Redeemable Common Stocks and Stockholders' Equity (Deficit)	$57,906,810	$ 107,000

The accompanying notes are an integral part of these financial statements.

IGNYTE ACQUISITION CORP.
STATEMENTS OF OPERATIONS

	For the year ended December 31, 2021	For the period from August 6, 2020 (inception) through December 31, 2020
Formation and operating costs	$ 969,288	$ 310
Loss from operations	(969,288)	(310)
Other income		
Change in fair value of warrants	475,000	—
Trust interest income	6,299	—
Total other income	481,299	—
Net loss	$ (487,989)	$ (310)
Basic and diluted weighted average shares outstanding, common stock subject to possible redemption	5,259,589	—
Basic and diluted net loss per share	$ (0.07)	$ —
Basic and diluted weighted average shares outstanding, common stock	1,537,500	1,537,500
Basic and diluted net loss per share	$ (0.07)	$ (0.00)

The accompanying notes are an integral part of these financial statements.

IGNYTE ACQUISITION CORP.
STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (DEFICIT)

	Common Stock		Additional Paid-in Capital	Retained Earnings (Accumulated Deficit)	Total Stockholders' Equity (Deficit)
	Shares	Amount			
Balance as of August 6, 2020 (inception)	—	$ —	$ —	$ —	$ —
Common Stocks issued to Sponsor	1,437,500	144	24,856	—	25,000
Issuance of representative shares	100,000	10	1,990	—	2,000
Net loss	—	—	—	(310)	(310)
Balance as of December 31, 2020	**1,537,500**	**$ 154**	**$ 26,846**	**$ (310)**	**$ 26,690**
Sale of 5,000,000 and 750,000 Units on February 1, 2021 and February 2, 2021 through IPO and over-allotment, respectively	5,750,000	575	57,499,425	—	57,500,000
Sale of 2,350,000 and 150,000 Placement Warrants on February 1, 2021 and February 2, 2021, respectively, net of fair value of warrant liabilities	—	—	50,000	—	50,000
Underwriting fee	—	—	(1,150,000)	—	(1,150,000)
Other offering expenses	—	—	(444,485)	—	(444,485)
Net loss	—	—	—	(487,989)	(487,989)
Common stock subject to possible redemption, as restated	(5,750,000)	(575)	(55,981,786)	(1,517,639)	(57,500,000)
Balance as of December 31, 2021	**1,537,500**	**$ 154**	**$ —**	**$(2,005,938)**	**$ (2,005,784)**

The accompanying notes are an integral part of these financial statements.

IGNYTE ACQUISITION CORP.
STATEMENTS OF CASH FLOWS

	For the Year Ended December 31, 2021	For The Period From August 6, 2020 (inception) To December 31, 2020
Cash flows from Operating Activities:		
Net loss	$ (487,989)	$ (310)
Formation costs paid by related party	—	310
Adjustments to reconcile net loss to net cash used in operating activities:		
Decrease in fair value of warrants	(475,000)	—
Interest earned on marketable securities held in Trust Account	(6,299)	—
Changes in current assets and current liabilities:		
Prepaid expenses	(71,319)	—
Accrued offering costs and expenses	325,641	—
Due to related party	111,643	—
Net cash used in operating activities	(603,323)	—
Cash Flows from Investing Activities:		
Purchase of investment held in Trust Account	(57,500,000)	—
Net cash used in investing activities	(57,500,000)	—
Cash flows from Financing Activities:		
Proceeds from Initial Public Offering, net of underwriters' fees	56,350,000	—
Proceeds from private placement	2,500,000	—
Proceeds from issuance of promissory note to related party	—	80,000
Repayment of promissory note to related party	(80,000)	—
Payments of offering costs	(362,910)	(54,575)
Net cash provided by financing activities	58,407,090	25,425
Net change in cash	303,767	25,425
Cash, beginning of the period	25,425	—
Cash, end of the period	$ 329,192	$ 25,425
Supplemental disclosure of noncash investing and financing activities:		
Deferred offering costs paid by Sponsor in exchange for issuance of Common Stocks	$ —	$ 25,000
Fair value of representative shares included in deferred offering costs	$ —	$ 2,000
Initial value of Common stock subject to possible redemption	$ 50,150,000	$ —
Remeasurement in value of Common stock subject to possible redemption	$ 7,350,000	$ —
Initial fair value of warrant liabilities	$ 2,450,000	$ —

The accompanying notes are an integral part of these financial statements.

IGNYTE ACQUISITION CORP.

NOTES TO FINANCIAL STATEMENTS

Note 1 — Organization and Business Operations

Organization and General

Ignyte Acquisition Corp. (the "Company") is a blank check company incorporated as a Delaware corporation on August 6, 2020. The Company was incorporated for the purpose of effecting a merger, stock exchange, asset acquisition, stock purchase, reorganization or other similar business combination with one or more businesses (the "Business Combination").

The Company is an early stage and emerging growth company and, as such, the Company is subject to all of the risks associated with early stage and emerging growth companies.

As of December 31, 2021, the Company had not commenced any operations. All activity for the period from August 6, 2020 (inception) through December 31, 2021 relates to the Company's formation and the initial public offering ("IPO"), which is described below and, since the closing of the IPO, a search for a Business Combination candidate. The Company will not generate any operating revenues until after the completion of its initial Business Combination, at the earliest. The Company will generate non-operating income in the form of interest income on cash and cash equivalents from the proceeds derived from the IPO.

The Company's sponsor is Ignyte Sponsor LLC (the "Sponsor"), a Delaware limited liability company (the "Sponsor").

Financing

The registration statement for the Company's IPO was declared effective on January 27, 2021 (the "Effective Date"). On February 1, 2021, the Company consummated the IPO of 5,000,000 units (the "Units" and, with respect to the shares of common stock included in the Units being offered, the "Public Shares"), at $10.00 per Unit, generating gross proceeds of $50,000,000, which is discussed in Note 3.

Simultaneously with the closing of the IPO, the Company consummated the sale of 2,350,000 Private Placement Warrants (the "Private Placement Warrants") at a price of $1.00 per Private Placement Warrant in a private placement to the Sponsor, generating total gross proceeds of $2,350,000.

On February 2, 2021, the underwriters purchased an additional 750,000 Units to exercise its over-allotment option in full at a purchase price of $10.00 per Unit, generating gross proceeds of $7,500,000. Simultaneously with the closing of the full exercise of the over-allotment option, the Company completed the private sale of an aggregate of 150,000 Private Placement Warrants to the Sponsor, at a purchase price of $1.00 per Private Placement Warrant, generating gross proceeds of $150,000. A total of $7,500,000 was placed in the Trust Account after the payment of $150,000 underwriting discount.

Transaction costs amounted to $1,594,485 consisting of $1,150,000 of underwriting discount and $444,485 of other offering costs. In addition, $975,465 of cash was held outside of the Trust Account (as defined below) and has been available for working capital purposes.

Trust Account

Following the closing of the IPO, on February 1, 2021, $50,000,000 ($10.00 per Unit) from the net proceeds of the sale of the Units in the IPO and the sale of the Private Placement Warrants was held in a Trust Account ("Trust Account"), and has been invested, and will only be invested in U.S. government securities, within the

meaning set forth in Section 2(a)(16) of the Investment Company Act, having a maturity of 185 days or less or in money market funds meeting certain conditions under Rule 2a-7 promulgated under the Investment Company Act which invest only in direct U.S. government treasury obligations. Except with respect to interest earned on the funds held in the Trust Account that may be released to the Company to pay income tax obligations, the proceeds from the IPO will not be released from the Trust Account until the earlier of the completion of a Business Combination or the Company's redemption of 100% of the outstanding Public Shares if it has not completed a Business Combination in the required time period. The proceeds held in the Trust Account may be used as consideration to pay the sellers of a target business with which the Company completes a Business Combination. Any amounts not paid as consideration to the sellers of the target business may be used to finance operations of the target business.

Initial Business Combination

In connection with any proposed Business Combination, the Company will either (1) seek stockholders approval of the initial Business Combination at a meeting called for such purpose at which stockholders may seek to convert their shares, regardless of whether they vote for or against the proposed Business Combination or don't vote at all, into their pro rata share of the aggregate amount then on deposit in the Trust Account (net of taxes payable), or (2) provide its stockholders with the opportunity to sell their shares to the Company by means of a tender offer (and thereby avoid the need for a stockholder vote) for an amount equal to their pro rata share of the aggregate amount then on deposit in the Trust Account (net of taxes payable), in each case subject to the limitations described herein. The decision as to whether the Company will seek stockholders' approval of a proposed Business Combination or will allow stockholders to sell their shares to the Company in a tender offer will be made by the Company, solely in its discretion.

The shares of Common Stock subject to redemption will be recorded at a redemption value and classified as temporary equity upon the completion of the IPO, in accordance with Accounting Standards Codification ("ASC") Topic 480 "Distinguishing Liabilities from Equity." In such case, the Company will proceed with a Business Combination if the Company has net tangible assets of at least $5,000,001 upon such consummation of a Business Combination and, if the Company seeks stockholder approval, a majority of the issued and outstanding shares voted are voted in favor of the Business Combination.

The Company will have 21 months from the closing of the IPO to complete the initial Business Combination (the "Combination Period"). However, if the Company is unable to complete the initial Business Combination within the Combination Period, the Company will (i) cease all operations except for the purpose of winding up, (ii) as promptly as reasonably possible but not more than ten business days thereafter, redeem 100% of the outstanding public shares, at a per-share price, payable in cash, equal to the aggregate amount then on deposit in the Trust Account, including interest earned on the funds held in the Trust Account and not previously released to the Company but net of taxes payable (and less up to $50,000 of interest to pay dissolution expenses), divided by the number of then outstanding public shares, which redemption will completely extinguish public stockholders' rights as stockholders (including the right to receive further liquidation distributions, if any), subject to applicable law, and (iii) as promptly as reasonably possible following such redemption, subject to the approval of the Company's remaining stockholders and the Company's board of directors, liquidate and dissolve, subject (in the case of (ii) and (iii) above) to the Company's obligations under Delaware law to provide for claims of creditors and the requirements of other applicable law.

The Sponsor, officers and directors have agreed (i) to vote any shares owned by them in favor of any proposed Business Combination, (ii) not to convert any shares in connection with a stockholder vote to approve a proposed initial Business Combination or sell any shares to the Company in a tender offer in connection with a proposed initial Business Combination, (iii) that the founders' shares will not participate in any liquidating distributions from the Company's Trust Account upon winding up if a Business Combination is not consummated.

The Sponsor has agreed that it will be liable to ensure that the proceeds in the Trust Account are not reduced below $10.00 per share by the claims of target businesses or claims of vendors or other entities that are owed

money by the Company for services rendered or contracted for or products sold to the Company. The agreement entered into by the Sponsor specifically provides for two exceptions to the indemnity it has given: it will have no liability (1) as to any claimed amounts owed to a target business or vendor or other entity who has executed an agreement with the Company waiving any right, title, interest or claim of any kind they may have in or to any monies held in the Trust Account, or (2) as to any claims for indemnification by the underwriters of the Proposed Public Offering against certain liabilities, including liabilities under the Securities Act. However, the Company has not asked its Sponsor to reserve for such indemnification obligations, nor has it independently verified whether the Sponsor has sufficient funds to satisfy its indemnity obligations and believe that the Sponsor's only assets are securities of the Company. Therefore, the Company believes it is unlikely that the Sponsor will be able to satisfy its indemnification obligations if it is required to do so.

Liquidity and Capital Resources

As of December 31, 2021, the Company had $329,192 in its operating bank account, and working capital of $125,317.

Prior to the completion of the Initial Public Offering, the Company's liquidity needs had been satisfied through a payment from the Sponsor of $25,000 (see Note 5) for the Founder Shares to cover certain offering costs, the loan under an unsecured promissory note from the Sponsor of $80,000 (see Note 5), and the net proceeds from the consummation of the Private Placement not held in the Trust Account. In addition, in order to finance transaction costs in connection with a Business Combination, the Company's Sponsor or an affiliate of the Sponsor or the Company's officers and directors or their affiliates may, but are not obligated to, provide the Company Working Capital Loans (see Note 5). On March 21, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of $300,000 to the Company as required. At December 31, 2021, no amounts of Working Capital Loans were outstanding.

Going Concern

In connection with the Company's assessment of going concern considerations in accordance with Financial Accounting Standard Board's Accounting Standards Update ("ASU") 2014-15, "Disclosures of Uncertainties about an Entity's Ability to Continue as a Going Concern," the Company has until November 2, 2022 to consummate the proposed Business Combination. It is uncertain that the Company will be able to consummate the proposed Business Combination by this time. If a Business Combination is not consummated by this date, there will be a mandatory liquidation and subsequent dissolution of the Company. Management has determined that the mandatory liquidation, should a business combination not occur, and potential subsequent dissolution, raises substantial doubt about the Company's ability to continue as a going concern. No adjustments have been made to the carrying amounts of assets or liabilities should the Company be required to liquidate after November 2, 2022. The Company intends to complete the proposed Business Combination before the mandatory liquidation date. However, there can be no assurance that the Company will be able to consummate any business combination by November 2, 2022.

Note 2 — Summary of Significant Accounting Policies

Basis of Presentation

The accompanying financial statements of the Company are presented in U.S. dollars in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") and pursuant to the rules and regulations of the SEC. In the opinion of management, all adjustments (consisting of normal recurring adjustments) have been made that are necessary to present fairly the financial position, and the results of its operations and its cash flows.

Emerging Growth Company

The Company is an "emerging growth company," as defined in Section 2(a) of the Securities Act of 1933, as amended, (the "Securities Act"), as modified by the Jumpstart our Business Startups Act of 2012, (the "JOBS

Act"), and it may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. The Company has elected not to opt out of such extended transition period which means that when a standard is issued or revised and it has different application dates for public or private companies, the Company, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of the Company's financial statement with another public company which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.

Use of Estimates

The preparation of audited financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the audited financial statements and the reported amounts of expenses during the reporting period. Making estimates requires management to exercise significant judgment. It is at least reasonably possible that the estimate of the effect of a condition, situation or set of circumstances that existed at the date of the audited financial statements, which management considered in formulating its estimate, could change in the near term due to one or more future confirming events. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all short-term investments with an original maturity of three months or less when purchased to be cash equivalents. The Company has $329,192 of cash held outside of the Trust Account as of December 31, 2021 and $0 as of December 31, 2020. The Company did not have any cash equivalents as of December 31, 2021 and 2020.

Marketable Securities Held in Trust Account

At December 31, 2021, the assets held in the Trust Account were invested in money market funds.

Fair Value Measurements

FASB ASC Topic 820 "Fair Value Measurements and Disclosures" ("ASC 820") defines fair value, the methods used to measure fair value and the expanded disclosures about fair value measurements. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between the buyer and the seller at the measurement date. In determining fair value, the valuation techniques consistent with the market approach, income approach and cost approach shall be used to measure fair value. ASC 820 establishes a fair value hierarchy for inputs, which represent the assumptions used by the buyer and seller in pricing the asset or liability. These inputs are further defined as observable and unobservable inputs. Observable inputs are those that buyer and seller would use in pricing the asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs reflect the Company's assumptions about the inputs that the buyer and seller would use in pricing the asset or liability developed based on the best information available in the circumstances.

The fair value hierarchy is categorized into three levels based on the inputs as follows:

Level 1 — Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access. Valuation adjustments and block discounts are not being applied. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of these securities does not entail a significant degree of judgment.

Level 2 — Valuations based on (i) quoted prices in active markets for similar assets and liabilities, (ii) quoted prices in markets that are not active for identical or similar assets, (iii) inputs other than quoted prices for the assets or liabilities, or (iv) inputs that are derived principally from or corroborated by market through correlation or other means.

Level 3 — Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

The fair value of the Company's certain assets and liabilities, which qualify as financial instruments under ASC 820, "Fair Value Measurements and Disclosures," approximates the carrying amounts represented in the balance sheet. The fair values of cash, prepaid assets, and accounts payable are estimated to approximate the carrying values as of December 31, 2021 due to the short maturities of such instruments.

The Company's warrant liabilities are based on a valuation model utilizing management judgment and pricing inputs from observable and unobservable markets with less volume and transaction frequency than active markets. Significant deviations from these estimates and inputs could result in a material change in fair value. In some circumstances, the inputs used to measure fair value might be categorized within different levels of the fair value hierarchy. In those instances, the fair value measurement is categorized in its entirety in the fair value hierarchy based on the lowest level input that is significant to the fair value measurement. See Note 6 for additional information on assets and liabilities measured at fair value.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist of a cash account in a financial institution, which, at times, may exceed the Federal Depository Insurance Coverage of $250,000. At December 31, 2021 and 2020, the Company has not experienced losses on this account and management believes the Company is not exposed to significant risks on such account.

Common Stock Subject to Possible Redemption

All of the 5,750,000 shares of common stock sold as part of the Units in the IPO contain a redemption feature which allows for the redemption of such public shares in connection with the Company's liquidation, if there is a stockholder vote or tender offer in connection with the Business Combination and in connection with certain amendments to the Company's amended and restated certificate of incorporation. In accordance with SEC and its staff's guidance on redeemable equity instruments, which has been codified in ASC 480-10-S99, redemption provisions not solely within the control of the Company require common stock subject to redemption to be classified outside of permanent equity. Therefore, all common stock, excluding the founder shares, has been classified outside of permanent equity.

The Company recognizes changes in redemption value immediately as they occur and adjusts the carrying value of redeemable common stock to equal the redemption value at the end of each reporting period. Increases or decreases in the carrying amount of redeemable common stock are affected by charges against additional paid in capital and accumulated deficit.

Net Loss Per Common Stock

The Company recognizes two classes of shares for EPS purposes, which are referred to as redeemable common stock and outstanding common stock. Earnings and losses are shared pro rata between the two classes of shares. The 5,750,000 potential common stocks for outstanding warrants to purchase the Company's shares were excluded from diluted earnings per share for the period from August 6, 2020 (inception) through December 31, 2020 and for the year ended December 31, 2021 because the warrants are contingently exercisable, and the contingencies have not yet been met. As a result, diluted net loss per common stock is the same as basic net loss per common stock for the periods. The table below presents a reconciliation of the numerator and denominator used to compute basic and diluted net loss per share for each class of common stock:

	For the year ended December 31, 2021		For the period from August 6, 2020 (inception) through December 31, 2020	
	Redeemable Common Stock	Outstanding Common Stock	Redeemable Common Stock	Outstanding Common Stock
Basic and diluted net loss per share:				
Numerator:				
Allocation of net loss	$ (377,606)	$ (110,383)	$ —	$ (310)
Denominator:				
Weighted-average shares outstanding	5,259,589	1,537,500	—	1,537,500
Basic and diluted net loss per share	$ (0.07)	$ (0.07)	$ —	$ (0.00)

Offering Costs associated with the Initial Public Offering

The Company complies with the requirements of the ASC 340-10-S99-1 and SEC Staff Accounting Bulletin ("SAB") Topic 5A — "Expenses of Offering". Offering costs consist principally of professional and registration fees incurred through the balance sheet date that are related to the IPO and were charged to temporary equity upon the completion of the IPO. Accordingly, as of February 1, 2021, offering costs in the aggregate of $1,594,485 have been charged to temporary equity (consisting of $1,150,000 of underwriting discount and $444,485 of other offering costs).

Warrant Liabilities

The Company accounts for the Public Warrants and Private Warrants (as defined in Notes 3 and 4) collectively ("Warrants"), as either equity or liability-classified instruments based on an assessment of the specific terms of the Warrants and the applicable authoritative guidance in Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 815, Derivatives and Hedging ("ASC 815"). The assessment considers whether the Warrants meet all of the requirements for equity classification under ASC 815, including whether the Warrants are indexed to the Company's own common stocks and whether the warrant holders could potentially require "net cash settlement" in a circumstance outside of the Company's control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of issuance of the Warrants and as of each subsequent quarterly period end date while the Warrants are outstanding.

For issued or modified warrants that meet all of the criteria for equity classification, such warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants

that do not meet all the criteria for equity classification, such warrants are required to be recorded at their initial fair value on the date of issuance, and each balance sheet date thereafter. Changes in the estimated fair value of liability-classified warrants are recognized as a non-cash gain or loss on the statements of operations.

The Company accounts for the Private Warrants in accordance with ASC 815-40 under which the Private Warrants do not meet the criteria for equity classification and must be recorded as liabilities. The fair value of the Private Warrants has been estimated using the Modified Black Scholes model. See Note 6 for further discussion of the pertinent terms of the Warrants used to determine the value of the Private Warrants and Representative's Warrants.

The Company evaluated the Public Warrants in accordance with ASC 815-40, "Derivatives and Hedging — Contracts in Entity's Own Equity" and concluded that they met the criteria for equity classification and are required to be recorded as part a component of additional paid-in capital at the time of issuance.

Income Taxes

The Company follows the asset and liability method of accounting for income taxes under ASC 740, "Income Taxes." Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statements carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that included the enactment date. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized.

ASC 740 prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more likely than not to be sustained upon examination by taxing authorities. The Company recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense. There were no unrecognized tax benefits and no amounts accrued for interest and penalties as of December 31, 2021. The Company is currently not aware of any issues under review that could result in significant payments, accruals or material deviation from its position. The Company is subject to income tax examinations by major taxing authorities since inception.

Risks and Uncertainties

On January 30, 2020, the World Health Organization ("WHO") announced a global health emergency because of a new strain of coronavirus (the "COVID-19 outbreak"). In March 2020, the WHO classified the COVID-19 outbreak as a pandemic, based on the rapid increase in exposure globally. The full impact of the COVID-19 outbreak continues to evolve. The impact of the COVID-19 outbreak on the Company's financial position will depend on future developments, including the duration and spread of the outbreak and related advisories and restrictions. These developments and the impact of the COVID-19 outbreak on the financial markets and the overall economy are highly uncertain and cannot be predicted. If the financial markets and/or the overall economy are impacted for an extended period, the Company's financial position may be materially adversely affected. Additionally, the Company's ability to complete an initial Business Combination may be materially adversely affected due to significant governmental measures being implemented to contain the COVID-19 outbreak or treat its impact, including travel restrictions, the shutdown of businesses and quarantines, among others, which may limit the Company's ability to have meetings with potential investors or affect the ability of a potential target company's personnel, vendors and service providers to negotiate and consummate an initial Business Combination in a timely manner. The Company's ability to consummate an initial Business Combination may also be dependent on the ability to raise additional equity and debt financing, which may be impacted by the COVID-19 outbreak and the resulting market downturn. The financial statement does not include any adjustments that might result from the outcome of this uncertainty.

Recent Accounting Standards

In August 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2020-06, Debt — Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40) ("ASU 2020-06") to simplify accounting for certain financial instruments. ASU 2020-06 eliminates the current models that require separation of beneficial conversion and cash conversion features from convertible instruments and simplifies the derivative scope exception guidance pertaining to equity classification of contracts in an entity's own equity. The new standard also introduces additional disclosures for convertible debt and freestanding instruments that are indexed to and settled in an entity's own equity. ASU 2020-06 amends the diluted earnings per share guidance, including the requirement to use the if-converted method for all convertible instruments. ASU 2020-06 is effective January 1, 2024 and should be applied on a full or modified retrospective basis, with early adoption permitted beginning on January 1, 2021. The Company is currently assessing the impact, if any, that ASU 2020-06 would have on its financial position, results of operations or cash flows.

Management does not believe that any other recently issued, but not yet effective, accounting pronouncements, if currently adopted, would have a material effect on the Company's financial statements.

Note 3 — Initial Public Offering

On February 1, 2021, the Company sold 5,000,000 Units, at a purchase price of $10.00 per Unit. Each Unit consists of one share of common stock and one-half of one warrant to purchase one share of common stock ("Public Warrant"). Each whole Public Warrant entitles the holder to purchase one share of common stock at a price of $11.50 per share, subject to adjustment.

On February 2, 2021, the Underwriters exercised the over-allotment option in full to purchase 750,000 Units (the "Over-Allotment Units"), generating an aggregate of gross proceeds of $7,500,000, and incurred $150,000 in underwriting fees.

Public Warrants

Each whole warrant entitles the holder to purchase one share of Common Stock at a price of $11.50 per share, subject to adjustment as discussed herein. The warrants will become exercisable 30 days after the completion of the Company's initial Business Combination. However, no warrants will be exercisable for cash unless the Company has an effective and current registration statement covering the shares of common stock issuable upon exercise of the warrants and a current prospectus relating to such shares of common stock. Notwithstanding the foregoing, if a registration statement covering the shares of common stock issuable upon exercise of the public warrants is not effective within a specified period following the consummation of the initial Business Combination, warrant holders may, until such time as there is an effective registration statement and during any period when the Company shall have failed to maintain an effective registration statement, exercise warrants on a cashless basis pursuant to the exemption provided by Section 3(a)(9) of the Securities Act, provided that such exemption is available. If that exemption, or another exemption, is not available, holders will not be able to exercise their warrants on a cashless basis. In the event of such cashless exercise, each holder would pay the exercise price by surrendering the warrants for that number of shares of common stock equal to the quotient obtained by dividing (x) the product of the number of shares of common stock underlying the warrants, multiplied by the difference between the exercise price of the warrants and the "fair market value" (defined below) by (y) the fair market value. The "fair market value" for this purpose will mean the average reported last sale price of the shares of common stock for the 5 trading days ending on the trading day prior to the date of exercise. The warrants will expire on the fifth anniversary of the completion of an initial Business Combination, at 5:00 p.m., New York City time, or earlier upon redemption or liquidation.

The Company may call the warrants for redemption (excluding the Private Placement Warrants and any warrants underlying additional units issued to the Sponsor, initial stockholders, officers, directors or their affiliates in payment of Working Capital Loans made to the Company)

- in whole and not in part;
- at a price of $0.01 per warrant;
- at any time after the warrants become exercisable,
- upon not less than 30 days' prior written notice of redemption to each warrant holder; and
- if, and only if, the reported last sale price of the Common Stock equals or exceeds $18.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations) for any 20 trading days within a 30-trading day period commencing at any time after the warrants become exercisable and ending on the third business day prior to the notice of redemption to warrant holders; and
- if, and only if, there is a current registration statement in effect with respect to the shares of common stock underlying such warrants.

If the Company calls the warrants for redemption as described above, the Company's management will have the option to require all holders that wish to exercise warrants to do so on a "cashless basis." In such event, each holder would pay the exercise price by surrendering the warrants for that number of shares of common stock equal to the quotient obtained by dividing (x) the product of the number of shares of common stock underlying the warrants, multiplied by the difference between the exercise price of the warrants and the "fair market value" (defined below) by (y) the fair market value. The "fair market value" for this purpose shall mean the average reported last sale price of the shares of common stock for the 5 trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders of warrants.

In addition, if (x) the Company issue additional shares of Common Stock or equity-linked securities for capital raising purposes in connection with the closing of the initial Business Combination at an issue price or effective issue price of less than $9.20 per share of common stock (with such issue price or effective issue price to be determined in good faith by the Company's board of directors, and in the case of any such issuance to the Sponsor, initial stockholders or their affiliates, without taking into account any founders' shares held by them prior to such issuance), (y) the aggregate gross proceeds from such issuances represent more than 60% of the total equity proceeds, and interest thereon, available for the funding of the initial Business Combination on the date of the consummation of the initial Business Combination (net of redemptions), and (z) the Market Value is below $9.20 per share, the exercise price of the warrants will be adjusted (to the nearest cent) to be equal to 115% of the greater of (i) the Market Value or (ii) the price at which the Company issues the additional shares of common stock or equity-linked securities.

Note 4 — Private Placement

Simultaneously with the closing of the IPO, the Sponsor purchased an aggregate of 2,350,000 Private Placement Warrants at a price of $1.00 per Private Placement Warrant, for an aggregate purchase price of $2,350,000, in a private placement (the "Private Placement"). Each Private Placement Warrant will entitle the holder to purchase one share of common stock at a price of $11.50 per share, subject to adjustment. The proceeds from the Private Placement Warrants were added to the proceeds from the IPO held in the Trust Account. If the Company does not complete a Business Combination within the Combination Period, the proceeds from the sale of the Private Placement Warrants held in the Trust Account will be used to fund the redemption of the Public Shares (subject to the requirements of applicable law) and the Private Placement Warrants will expire worthless.

The Private Placement Warrants are identical to the Warrants underlying the Units sold in the IPO, except that the Private Placement Warrants are non-redeemable and may be exercised on a cashless basis, in each case so long as they continue to be held by the initial purchasers or their permitted transferees. Further, the Sponsor has agreed not to transfer, assign, or sell the Private Placement Warrants (including the shares of Common Stock issuable upon the exercise of the Private Placement Warrants), except to certain permitted transferees, until after the consummation of the Company's initial Business Combination.

Simultaneously with the closing of the exercise of the over-allotment option, the Company completed the private sale (the "Private Placement") of an aggregate of 150,000 private placement warrants (the "Private Placement Warrants") to Ignyte Sponsor LLC, a Delaware limited liability company (the "Sponsor"), at a purchase price of $1.00 per Private Placement Warrant, generating gross proceeds of $150,000.

Note 5 — Related Party Transactions

Founder Shares

On August 12, 2020, the Sponsor paid $25,000, or approximately $0.02 per share, to cover certain offering costs in consideration for 1,437,500 shares of Common Stock, par value $0.0001 (the "Founder Shares"). Up to 187,500 Founder Shares were subject to forfeiture by the Sponsor depending on the extent to which the underwriters' over-allotment option is exercised. On February 2, 2021, the underwriter exercised its over-allotment option in full, hence, the 187,500 Founder Shares were no longer subject to forfeiture since then.

The founders' shares were placed into an escrow account maintained in New York, New York by Continental Stock Transfer & Trust Company, acting as escrow agent. Subject to certain limited exceptions, these shares will not be transferred, assigned, sold or released from escrow (subject to certain limited exceptions set forth below) (i) with respect to 50% of such shares, for a period ending on the earlier of the one-year anniversary of the date of the consummation of the initial Business Combination and the date on which the closing price of the Company's common stock equals or exceeds $12.50 per share (as adjusted for share splits, share dividends, reorganizations and recapitalizations) for any 20 trading days within a 30- trading day period following the consummation of the initial Business Combination and (ii) with respect to the remaining 50% of such shares, for a period ending on the one-year anniversary of the date of the consummation of the initial Business Combination, or earlier, in either case, if, subsequent to the initial Business Combination, the Company consummates a liquidation, merger, stock exchange or other similar transaction which results in all of the Company's stockholders having the right to exchange their shares of common stock for cash, securities or other property.

Promissory Note — Related Party

On November 20, 2020, the Company's executive officers loaned the Company $80,000 to be used for a portion of the expenses of the IPO. These loans are non-interest bearing, unsecured and are due at the earlier of June 30, 2021 or the closing of the IPO. As of February 1, 2021, the Company repaid the note in full. On March 21, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of $300,000 to the Company as required.

Due to Related Party

As of December 31, 2021, the amount due to related party is $111,953 which represents the accrual of administrative service fee from February 1, 2021 to December 31, 2021 of $111,643 and formation cost of $310 paid by the Officer. As of December 31, 2020, the amount due to related party is $310 which represents the formation cost of $310 paid by the Officer.

Related Party Loans

In order to meet the Company's working capital needs following the consummation of the IPO the Sponsor, officers, directors, the initial stockholders or their affiliates may, but are not obligated to, loan the Company funds ("Working Capital Loans"), from time to time or at any time, in whatever amount they deem reasonable in their sole discretion. Each loan would be evidenced by a promissory note. The notes would either be paid upon consummation of the initial Business Combination, without interest, or, at holder's discretion, up to $1,500,000 of the notes may be converted into warrants at a price of $1.00 per warrant. The warrants would be identical to the Private Placement Warrants. In the event that the initial Business Combination does not close, the Company may use a portion of the working capital held outside the Trust Account to repay such loaned amounts, but no proceeds from the Trust Account would be used for such repayment. As of December 31, 2021 and 2020, no such Working Capital Loans were outstanding.

Administrative Service Fee

The Company has agreed, commencing on the date of the securities of the Company are first listed on The Nasdaq Capital Market (the "Listing Date"), to pay the Sponsor $10,000 per month for office space, utilities and secretarial support. Upon completion of the initial Business Combination or the Company's liquidation, the Company will cease paying these monthly fees. The Company accrued $111,643 for the administrative service fee for the period from the Listing Date to December 31, 2021.

Note 6 — Recurring Fair Value Measurements

The following table presents information about the Company's assets and liabilities that were measured at fair value on a recurring basis as of December 31, 2021, and indicates the fair value hierarchy of the valuation techniques the Company utilized to determine such fair value.

	December 31, 2021	Quoted Prices In Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Assets:				
U.S. Money Market held in Trust Account	$57,506,299	$57,506,299	$ —	$ —
	$57,506,299	$57,506,299	$ —	$ —
Liabilities:				
Warrant liabilities-Private Placement Warrants	$ 1,975,000	$ —	$ —	$ 1,975,000
	$ 1,975,000	$ —	$ —	$ 1,975,000

The following table sets forth a summary of the changes in the fair value of the warrant liabilities for the period from February 1, 2021 through December 31, 2021:

	Warrant Liability
Fair value as of February 1, 2021	$ 2,303,000
Issuance of private warrants in connection with over-allotment as of February 2, 2021	147,000
Change in fair value (1)	(475,000)
Fair value as of December 31, 2021	$ 1,975,000

(1) Represents the non-cash gain on the change in valuation of Private Warrants and is included in the change in fair value of warrant liability on the statements of operations.

At December 31, 2021, the Public Warrants were determined to contain none of the features requiring liability treatment; therefore, the Public warrants were not included in the fair value reporting.

The Private Warrants were valued using a Modified Black Scholes Model. The Private Warrants are considered to be a Level 3 fair value measurements due to the use of unobservable inputs. The Black Scholes Model can be modified to value SPAC Private Warrants by discounting the Acquisition Date warrant value to the Valuation Date and multiplying the present value by the probability of a future transaction occurring.

Transfers to/from Levels 1, 2 and 3 are recognized at the end of the reporting period. There were no transfers between levels for the year ended December 31, 2021.

The following table provides quantitative information regarding Level 3 fair value measurements for Private Warrants as of December 31, 2021 and February 1, 2021.

	December 31, 2021	February 1, 2021
Exercise price	$ 11.50	$ 11.50
Share price	$ 9.74	$ 10.00
Volatility	13.75%	19.00%
Expected life	5.33	5.99
Risk-free rate	1.26%	0.42%
Dividend yield	— %	— %

Note 7 — Commitments and Contingencies Registration Rights

The holders of the founders' shares issued and outstanding on the date of the IPO, as well as the holders of the representative shares, Private Placement Warrants and any warrants the Company's Sponsor, officers, directors or their affiliates may be issued in payment of Working Capital Loans made to the Company (and all underlying securities), will be entitled to registration rights pursuant to an agreement signed on January 27, 2021. The holders of a majority of these securities are entitled to make up to two demands that the Company registers such securities. The holders of the majority of the founders' shares can elect to exercise these registration rights at any time commencing three months prior to the date on which these shares of common stock are to be released from escrow. The holders of a majority of the representative shares, Private Placement Warrants and warrants issued to the Company's Sponsor, officers, directors or their affiliates in payment of Working Capital Loans made to the Company (or underlying securities) can elect to exercise these registration rights at any time after the Company consummates a Business Combination. Notwithstanding anything to the contrary, EarlyBirdCapital may only make a demand on one occasion and only during the five-year period beginning on the Effective Date of the registration statement of which the IPO forms a part. In addition, the holders have certain "piggy-back" registration rights with respect to registration statements filed subsequent to the Company's consummation of a Business Combination; provided, however, that EarlyBirdCapital may participate in a "piggyback" registration only during the seven-year period beginning on the Effective Date of the registration statement of which the IPO forms a part. The Company will bear the expenses incurred in connection with the filing of any such registration statements.

Underwriting Agreement

The underwriters had a 45-day option beginning February 1, 2021 to purchase up to an additional 750,000 units to cover over-allotments, if any, at the IPO price less the underwriting discounts.

The Company issued to the underwriter (and/or its designees) (the "Representative") 100,000 shares of common stock for $0.0001 per share (the "Representative Shares"). The Company estimated the fair value of the stock to be $2,000 based upon the price of the founder shares issued to the Sponsor. The stock was treated as underwriters' compensation and charged directly to stockholders' equity. The underwriter (and/or its designees) agreed (i) to waive their conversion rights (or right to participate in any tender offer) with respect to such shares in connection with the completion of the initial Business Combination and (ii) to waive their rights to liquidating distributions from the trust account with respect to such shares if the Company fails to complete the initial Business Combination within 21 months from the closing of this offering.

On February 1, 2021, the Company paid a fixed underwriting fee of $1,000,000.

On February 2, 2021, the underwriters purchased an additional 750,000 units to exercise its over-allotment option in full. The proceeds of $7,500,000 from the over-allotment was deposited in the Trust Account after deducting the underwriting discounts.

Business Combination Marketing Agreement

The Company has engaged underwriters as advisors in connection with its Business Combination to assist it in holding meetings with the stockholders to discuss the potential Business Combination and the target business's attributes, introduce the Company to potential investors that are interested in purchasing the Company's securities in connection with the potential Business Combination, assist the Company in obtaining stockholder approval for the Business Combination and assist the Company with its press releases and public filings in connection with the Business Combination. The Company will pay the Marketing Fee for such services upon the consummation of the initial Business Combination in an amount equal to, in the aggregate, 3.5% of the gross proceeds of the IPO, or $2,012,500 including the proceeds from the full exercise of the over-allotment option on February 2, 2021.

Right of First Refusal

If the Company determines to pursue any equity, equity-linked, debt or mezzanine financing relating to or in connection with a Business Combination or after a Business Combination, then EarlyBirdCapital shall have the right, but not the obligation, to act as book running manager, placement agent and/or arranger, as the case may be, in any and all such financing or financings and to receive at least 25% of the aggregate gross spread or fees from any and all such financings. This right of first refusal extends from the February 1, 2021 until the earlier of twelve (12) months after the consummation of an initial Business Combination or the liquidation of the Trust Account if the Company fails to consummate a Business Combination during the required time period.

Note 8 — Stockholder's Equity (Deficit)

Preferred Stock — The Company is authorized to issue 1,000,000 shares of preferred stock with a par value of $0.0001 and with such designations, voting and other rights and preferences as may be determined from time to time by the Company's board of directors. At December 31, 2021 and 2020, there were no shares of preferred stock issued or outstanding.

Common Stock — The Company is authorized to issue 50,000,000 shares of common stock with a par value of $0.0001 per share. On August 12, 2020, the Sponsor paid $25,000, or approximately $0.02 per share, to cover certain offering costs in consideration for 1,437,500 shares of Common Stock, par value $0.0001. Of the 1,437,500 shares of common stock, an aggregate of up to 187,500 shares were subject to forfeiture to the Company for no consideration to the extent that the underwriters' over-allotment option is not exercised in full or in part, so that the initial stockholders will collectively own 20% of the Company's issued and outstanding common stock after the IPO. On February 2, 2021, the underwriter exercised its over-allotment option in full, hence, the 187,500 Founder Shares were no longer subject to forfeiture since then. In August 2020, the Company also issued to designees of EarlyBirdCapital an aggregate of 100,000 shares of common stock ("representative shares"), at a price of $0.0001 per share. As of December 31, 2021 and 2020, there were 1,537,500 shares of common stock issued and outstanding.

Common stockholders of record are entitled to one vote for each share held on all matters to be voted on by stockholders. In connection with any vote held to approve the initial Business Combination, the initial stockholders, as well as all of the Company's officers and directors, have agreed to vote their respective shares of common stock owned by them immediately prior to the IPO and any shares purchased in the IPO or following the IPO in the open market in favor of the proposed Business Combination.

Note 9 — Income Tax

The Company's net deferred tax assets are as follows:

	December 31, 2021	December 31, 2020
Deferred tax asset		
Organizational costs/Startup expenses	$ 169,369	$ —
Federal Net Operating loss	32,923	65
Total deferred tax asset	202,293	65
Valuation allowance	(202,293)	(65)
Deferred tax asset, net of allowance	$ —	$ —

The income tax provision consists of the following:

	December 31, 2021	December 31, 2020
Federal		
Current	$ —	$ —
Deferred	(202,228)	(65)
State		
Current	—	—
Deferred	—	—
Change in valuation allowance	202,228	65
Income tax provision	$ —	$ —

As of December 31, 2021 and December 31, 2020, the Company had $156,778 and $310, respectively of U.S. federal operating loss carryovers available to offset future taxable income, which do not expire.

In assessing the realization of the deferred tax assets, management considers whether it is more likely than not that some portion of all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which temporary differences representing net future deductible amounts become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. After consideration of all of the information available, management believes that significant uncertainty exists with respect to future realization of the deferred tax assets and has therefore established a full valuation allowance. For the year December 31, 2021 and December 31, 2020, the change in the valuation allowance was $202,228 and $65, respectively.

Reconciliations of the federal income tax rate to the Company's effective tax rate at December 31, 2021 and December 31, 2020 are as follows:

	December 31, 2021	December 31, 2020
Statutory federal income tax rate	21.0%	21.0%
State taxes, net of federal tax benefit	0.0%	0.0%
Change in FV of Warrant Liability	20.44%	0.0%
Change in valuation allowance	-41.44%	-21.0%
Income tax provision	— %	— %

The Company files income tax returns in the U.S. federal jurisdiction and is subject to examination by the various taxing authorities. The Company considers New York to be a significant tax jurisdiction.

Note 10 — Subsequent Events

The Company evaluated subsequent events and transactions that occurred after the balance sheet date up to the date that the audited financial statements were issued. Based on this review, except the description as below, the Company did not identify any subsequent events that would have required adjustments or disclosure in the financial statements.

On March 21, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of $300,000 to the Company evidenced by a promissory note (the "Note") as required. The principal balance of the Note shall be payable in cash by the Company on the earlier of: (i) the date on which the Company consummates its initial business combination or (ii) the date that the winding up of the Company is effective. No interest shall accrue on the unpaid principal balance of the Note. The principal balance of the Note may be prepaid at any time, at the election of the Company.

PEAK BIO, INC.
F/K/A IGNYTE ACQUISITION CORP.

CONDENSED BALANCE SHEETS

	September 30, 2022 (Unaudited)	December 31, 2021
Assets		
Cash	$ 75,974	$ 329,192
Prepaid expense and other current assets	60,708	71,319
Total current assets	136,682	400,511
Marketable securities held in Trust Account	57,849,285	57,506,299
Total Assets	$ 57,985,967	$ 57,906,810
Liabilities and Stockholders' Deficit		
Current liabilities:		
Accrued expenses	$ 1,478,152	$ 325,641
Due to related party	201,953	111,953
Promissory note — related party	399,380	—
Income tax payable	8,083	—
Total current liabilities	2,087,568	437,594
Warrant liabilities	300,000	1,975,000
Total liabilities	2,387,568	2,412,594
Commitments and Contingencies (See Note 7)		
Common stock subject to possible redemption, 5,750,000 shares at redemption value at September 30, 2022 and December 31, 2021	57,528,802	57,500,000
Stockholders' Deficit		
Preferred stock, $0.0001 par value; 1,000,000 shares authorized; none issued and outstanding	—	—
Common stock, $0.0001 par value; 50,000,000 shares authorized; 1,537,500 shares issued and outstanding (excluding 5,750,000 shares subject to possible redemption) at September 30, 2022 and December 31, 2021	154	154
Additional paid-in capital	—	—
Accumulated deficit	(1,930,557)	(2,005,938)
Total stockholders' deficit	(1,930,403)	(2,005,784)
Total Liabilities and Stockholders' Deficit	$ 57,985,967	$ 57,906,810

The accompanying notes are an integral part of these unaudited condensed financial statements.

PEAK BIO, INC.
F/K/A IGNYTE ACQUISITION CORP.

UNAUDITED CONDENSED STATEMENTS OF OPERATIONS

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2022	2021	2022	2021
Formation and operating costs	$ 674,219	$ 104,370	$ 1,905,720	$ 413,791
Loss from operations	(674,219)	(104,370)	(1,905,720)	(413,791)
Other income:				
Change in fair value of warrants	250,000	225,000	1,675,000	800,000
Trust interest income	261,295	739	342,986	5,084
Total other income	511,295	225,739	2,017,986	805,084
(Loss) income before provision for income taxes	(162,924)	121,369	112,266	391,293
Provision for income taxes	(8,083)	—	(8,083)	—
Net (loss) income	**$ (171,007)**	**$ 121,369**	**$ 104,183**	**$ 391,293**
Basic and diluted weighted average shares outstanding, common stock subject to redemption	5,750,000	5,750,000	5,750,000	5,076,007
Basic and diluted net (loss) income per share	**$ (0.02)**	**$ 0.02**	**$ 0.01**	**$ 0.06**
Basic and diluted weighted average shares outstanding, common stock	1,537,500	1,537,500	1,537,500	1,537,500
Basic and diluted net (loss) income per share	**$ (0.02)**	**$ 0.02**	**$ 0.01**	**$ 0.06**

The accompanying notes are an integral part of these unaudited condensed financial statements.

PEAK BIO, INC.
F/K/A IGNYTE ACQUISITION CORP.

UNAUDITED CONDENSED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (DEFICIT)
THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2022

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount			
Balance as of January 1, 2022	**1,537,500**	**$ 154**	$ —	**$(2,005,938)**	**$(2,005,784)**
Net income	—	—	—	597,123	597,123
Balance as of March 31, 2022	**1,537,500**	**154**	—	**(1,408,815)**	**(1,408,661)**
Net loss	—	—	—	(321,933)	(321,933)
Balance as of June 30, 2022	**1,537,500**	**154**	—	**(1,730,748)**	**(1,730,594)**
Remeasurement in value of common stock subject to possible redemption	—	—	—	(28,802)	(28,802)
Net loss	—	—	—	(171,007)	(171,007)
Balance as of September 30, 2022	**1,537,500**	$ 154	$ —	$(1,930,557)	$(1,930,403)

THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2021

	Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Capital	Deficit	Equity (Deficit)
Balance as of January 1, 2021	**1,537,500**	**$ 154**	**$ 26,846**	**$ (310)**	**$ 26,690**
Sale of 5,000,000 and 750,000 Units on February 1, and 2, 2021 through IPO and over-allotment, respectively	5,750,000	575	57,499,425	—	57,500,000
Sale of 2,350,000 and 150,000 Private Placement Warrants on February 1, and 2, 2021, respectively, net of fair value of warrant liabilities	—	—	50,000	—	50,000
Underwriting fee	—	—	(1,150,000)	—	(1,150,000)
Other offering expenses	—	—	(444,485)	—	(444,485)
Net loss	—	—	—	(346,183)	(346,183)
Common stock subject to possible redemption	(5,750,000)	(575)	(55,981,786)	(1,474,897)	(57,457,258)
Balance as of March 31, 2021	**1,537,500**	**154**	—	**(1,821,390)**	**(1,821,236)**
Net income	—	—	—	616,107	616,107
Remeasurement in value of common stock subject to possible redemption	—	—	—	(2,087)	(2,087)
Balance as of June 30, 2021	**1,537,500**	**154**	—	**(1,207,370)**	**(1,207,216)**
Remeasurement in value of common stock subject to possible redemption	—	—	—	(739)	(739)
Net income	—	—	—	121,369	121,369
Balance as of September 30, 2021 (unaudited)	**1,537,500**	**$ 154**	$ —	**$(1,086,740)**	**$ (1,086,586)**

The accompanying notes are an integral part of these unaudited condensed financial statements.

PEAK BIO, INC.
F/K/A IGNYTE ACQUISITION CORP.

UNAUDITED CONDENSED STATEMENTS OF CASH FLOWS

	For the nine months ended September 30,	
	2022	**2021**
Cash flows from Operating Activities:		
Net income	$ 104,183	$ 391,293
Adjustments to reconcile net income to net cash used in operating activities:		
Increase (decrease) in fair value of warrants	(1,675,000)	(800,000)
Interest earned on marketable securities held in Trust Account	(342,986)	(5,084)
Changes in current assets and current liabilities:		
Prepaid expenses	10,611	(126,319)
Accrued offering costs and expenses	1,152,511	10,156
Income tax payable	8,083	—
Due to related party	90,000	81,643
Net cash used in operating activities	**(652,598)**	**(448,311)**
Cash Flows from Investing Activities:		
Purchase of investment held in Trust Account	—	(57,500,000)
Net cash used in investing activities	**—**	**(57,500,000)**
Cash flows from Financing Activities:		
Proceeds from Initial Public Offering, net of underwriters' fees	—	56,350,000
Proceeds from private placement	—	2,500,000
Proceeds from issuance of promissory note to related party	399,380	—
Repayment of promissory note to related party	—	(80,000)
Payments of offering costs	—	(317,910)
Net cash provided by financing activities	**399,380**	**58,452,090**
Net change in cash	**(253,218)**	**503,779**
Cash, beginning of the period	329,192	25,425
Cash, end of the period	**$ 75,974**	**$ 529,204**
Supplemental disclosure of noncash investing and financing activities:		
Initial value of Common stock subject to possible redemption	$ —	$ 50,150,000
Remeasurement in value of Common stock subject to possible redemption	$ 28,802	$ 7,355,084
Initial fair value of warrant liabilities	$ —	$ 2,450,000

The accompanying notes are an integral part of these unaudited condensed financial statements.

PEAK BIO, INC.
F/K/A IGNYTE ACQUISITION CORP.

NOTES TO UNAUDITED CONDENSED FINANCIAL STATEMENTS

Note 1 — Organization and Business Operations

Organization and General prior to the Business Combination

Peak Bio, Inc. F/K/A Ignyte Acquisition Corp. (the "Company") was incorporated as a Delaware corporation on August 6, 2020. The Company was incorporated for the purpose of effecting a merger, stock exchange, asset acquisition, stock purchase, reorganization or other similar business combination with one or more businesses (the "Business Combination").

The Company is an early stage and emerging growth company and, as such, the Company is subject to all of the risks associated with early stage and emerging growth companies.

As of September 30, 2022, the Company had not commenced any operations. All activity for the period from August 6, 2020 (inception) through September 30, 2022 relates to the Company's formation and the initial public offering ("IPO"), which is described below and, since the closing of the IPO, a search for a Business Combination candidate. The Company will not generate any operating revenues until after the completion of its initial Business Combination, at the earliest. The Company will generate non-operating income in the form of interest income on cash and cash equivalents from the proceeds derived from the IPO.

The Company's sponsor is Ignyte Sponsor LLC (the "Sponsor"), a Delaware limited liability company (the "Sponsor").

Financing

The registration statement for the Company's IPO was declared effective on January 27, 2021 (the "Effective Date"). On February 1, 2021, the Company consummated the IPO of 5,000,000 units (the "Units" and, with respect to the shares of common stock included in the Units being offered, the "Public Shares"), at $10.00 per Unit, generating gross proceeds of $50,000,000, which is discussed in Note 3.

Simultaneously with the closing of the IPO, the Company consummated the sale of 2,350,000 Private Placement Warrants (the "Private Placement Warrants") at a price of $1.00 per Private Placement Warrant in a private placement to the Sponsor, generating total gross proceeds of $2,350,000.

On February 2, 2021, the underwriters purchased an additional 750,000 Units to exercise their over-allotment option in full at a purchase price of $10.00 per Unit, generating gross proceeds of $7,500,000. Simultaneously with the closing of the full exercise of the over-allotment option, the Company completed the private sale of an aggregate of 150,000 Private Placement Warrants to the Sponsor, at a purchase price of $1.00 per Private Placement Warrant, generating gross proceeds of $150,000. A total of $7,500,000 was added to the Trust Account after the payment of $150,000 underwriting discount.

Transaction costs amounted to $1,594,485 consisting of $1,150,000 of underwriting discount and $444,485 of other offering costs. In addition, at February 2, 2021, $975,465 of cash was held outside of the Trust Account (as defined below) and has been available for working capital purposes.

Trust Account

Following the closing of the IPO, on February 1, 2021, $50,000,000 ($10.00 per Unit) from the net proceeds of the sale of the Units in the IPO and the sale of the Private Placement Warrants was placed in a Trust Account

("Trust Account"), and has been invested, and will only be invested in U.S. government securities, within the meaning set forth in Section 2(a)(16) of the Investment Company Act, having a maturity of 185 days or less or in money market funds meeting certain conditions under Rule 2a-7 promulgated under the Investment Company Act which invest only in direct U.S. government treasury obligations. Except with respect to interest earned on the funds held in the Trust Account that may be released to the Company to pay income tax obligations, the proceeds from the IPO will not be released from the Trust Account until the earlier of the completion of a Business Combination or the Company's redemption of 100% of the outstanding Public Shares if it has not completed a Business Combination in the required time period. The proceeds held in the Trust Account may be used as consideration to pay the sellers of a target business with which the Company completes a Business Combination. Any amounts not paid as consideration to the sellers of the target business may be used to finance operations of the target business.

Business Combination with Peak Bio Co., Ltd.

As previously disclosed on the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission (the "SEC") on April 29, 2022, on April 28, 2022, the Company entered into that certain Business Combination Agreement dated as of April 28, 2022 (the "Business Combination Agreement"), by and among the Company, Ignyte Korea Co., Ltd., a corporation organized under the laws of the Republic of Korea and a wholly-owned subsidiary of the Company ("Korean Sub"), and Peak Bio Co., Ltd., a corporation organized under the laws of the Republic of Korea ("Peak Bio").

On October 25, 2022, Ignyte held a special meeting of its stockholders (the "Special Meeting") at which Ignyte's stockholders voted to approve the proposals outlined in the definitive proxy statement, filed with the SEC on October 7, 2022 (the "Proxy Statement"), including, among other things, the adoption of the Business Combination Agreement. On November 1, 2022 (the "Closing Date"), as contemplated by the Business Combination Agreement and described in the section of the Proxy Statement entitled "Proposal No. 1 — The Business Combination Proposal" beginning on page 138 of the Proxy Statement, Ignyte consummated the transactions contemplated by the Business Combination Agreement, whereby the Share Swap (as defined in the Business Combination Agreement) was consummated, resulting in Peak Bio becoming a wholly-owned subsidiary of the Company (the "Business Combination").

Pursuant to the Business Combination Agreement, the Company issued the following securities:

- Holders of existing shares of common stock, par value KRW 500 per share, of Peak Bio received an aggregate of 17,295,044 shares of the Company's common stock, calculated based on the exchange ratio of 2.07188599 (the "Exchange Ratio") pursuant to the Business Combination Agreement for each share of Peak Bio's common stock held at the Effective Time (as defined in the Business Combination Agreement);
    - An aggregate of 635,229 shares of the Company's common stock in connection with the PIPE Investment (as defined in the Business Combination Agreement) and those certain Payment Agreements, each dated as of November 1, 2022, as previously disclosed on the Company's Current Report on Form 8-K filed with the SEC on November 2, 2022;
    - An aggregate of 445,545 warrants to purchase shares of the Company's common stock in connection with the PIPE Investment (as defined in the Business Combination Agreement); and
- Each Peak Bio option that was outstanding immediately prior to the Effective Time was assumed by the Company and converted into an option to purchase that number of shares of the Company's common stock calculated based on the Exchange Ratio; accordingly, holders of Peak Bio options received options to acquire an aggregate of 1,750,967 shares of the Company's common stock pursuant to the Exchange Ratio.

In connection with the Special Meeting and the Business Combination, the holders of 5,159,287 shares of Ignyte common stock exercised their right to redeem their shares for cash at a redemption price of approximately $10.07, for an aggregate redemption amount of approximately $51,978,834.

Immediately after giving effect to the Business Combination, there were 20,058,486 issued and outstanding shares of the Company's common stock. Following the closing of the Business Combination, the Peak Bio stockholders hold approximately 86.22% of the outstanding shares of the Company's common stock, and Peak Bio became a wholly-owned subsidiary of the Company. Ownership of the Company's common stock by various constituents immediately after giving effect to the Business Combination is as follows:

- The Company's current directors and executive officers beneficially own 9,378,710 shares of the Company's common stock, which represents approximately 46.7% of the outstanding shares of the Company's common stock;
    - The Sponsor owns 1,514,700 shares of the Company's common stock, which represents approximately 7.6% of the outstanding shares of the Company's common stock; and
- The Peak Bio stockholders own 17,295,044 shares of the Company's common stock, which represents approximately 86.22% of the outstanding shares of the Company's common stock.

The Units Ignyte sold in its IPO separated into their component securities upon consummation of the Business Combination and, as a result, no longer trade as a separate security and were delisted from the Nasdaq Stock Market LLC ("Nasdaq"). On November 2, 2022, the Company's common stock and the Company's public warrants that were a component of the Units sold in the IPO began trading on the Nasdaq Capital market under symbols "PKBO" and "PKBOW," respectively.

The foregoing description of the Business Combination does not purport to be complete and is qualified in its entirety by the full text of the Business Combination Agreement, which is attached as Exhibit 2.1 to the Current Report on Form 8-K filed by the Company on November 7, 2022 and is incorporated herein by reference.

Liquidity and Capital Resources

As of September 30, 2022, the Company had $75,974 in its operating bank account and working capital deficit of $1,629,184, which excludes $320,483 of accrued Delaware franchise tax to be paid out of interest earned on the Trust Account.

Prior to the completion of the IPO, the Company's liquidity needs had been satisfied through a payment from the Sponsor of $25,000 (see Note 5) for the Founder Shares to cover certain offering costs, the loan under an unsecured promissory note from the Sponsor of $80,000 (see Note 5), and the net proceeds from the consummation of the Private Placement not held in the Trust Account. In addition, in order to finance transaction costs in connection with a Business Combination, the Company's Sponsor or an affiliate of the Sponsor or the Company's officers and directors or their affiliates may, but are not obligated to, provide the Company Working Capital Loans (see Note 5). On March 21, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of $300,000 to the Company as required. On September 20, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of up to $100,000 to the Company as required.

Going Concern

In connection with the Company's assessment of going concern considerations in accordance with Financial Accounting Standard Board's Accounting Standards Update ("ASU") 2014-15, "Disclosures of Uncertainties about an Entity's Ability to Continue as a Going Concern," the Company has until November 2, 2022 to consummate the proposed Business Combination. It is uncertain that the Company will be able to consummate the proposed Business Combination by this time. If a Business Combination is not consummated by this date, there will be a mandatory liquidation and subsequent dissolution of the Company. Management has determined that the mandatory liquidation, should a business combination not occur, and potential subsequent dissolution, raises substantial doubt about the Company's ability to continue as a going concern. No adjustments have been made to the carrying amounts of assets or liabilities should the Company be required to liquidate after November 2, 2022. The Company intends to complete the proposed Business Combination before the mandatory

liquidation date. However, there can be no assurance that the Company will be able to consummate any business combination by November 2, 2022. As of November 2, 2022, substantial doubt about our ability to continue as a going concern was alleviated due to the closing of a business combination.

Based on the foregoing, management believes that the Company will not have sufficient working capital and borrowing capacity from the Sponsor or an affiliate of the Sponsor, or certain of the Company's officers and directors to meet its needs through the earlier of the consummation of a Business Combination or one year from this filing. However, the Working Capital Loans, as defined in Note 5, will provide additional flexibility to continue our identification and pursuit of potential business combination targets. Over this time period, the Company will be using available funds, including those from the Working Capital Loans, for the purpose of paying existing accounts payable, identifying and evaluating prospective Initial Business Combination candidates, performing due diligence on prospective target businesses, paying for travel expenditures, selecting the target business to merge with or acquire, and structuring, negotiating and consummating the Business Combination.

Note 2 — Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed financial statements are presented in U.S. dollars and in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") for financial information and pursuant to the rules and regulations of the SEC. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP. In the opinion of management, the unaudited condensed financial statements reflect all adjustments, which include only normal recurring adjustments necessary for the fair statement of the balances and results for the periods presented. Operating results for the period for the three and nine months ended September 30, 2022 are not necessarily indicative of the results that may be expected through December 31, 2022.

The accompanying unaudited condensed financial statements should be read in conjunction with the audited financial statements and notes thereto included in the Company's Annual Report on Form10-K for the year ended December 31, 2021, filed by the Company with the SEC on March 31, 2022.

Emerging Growth Company

The Company is an "emerging growth company," as defined in Section 2(a) of the Securities Act of 1933, as amended, (the "Securities Act"), as modified by the Jumpstart our Business Startups Act of 2012, (the "JOBS Act"), and it may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. The Company has elected not to opt out of such extended transition period which means that when a standard is issued or revised and it has different application dates for public or private companies, the Company, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard.

This may make comparison of the Company's financial statement with another public company which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.

Use of Estimates

The preparation of unaudited condensed financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the unaudited condensed financial statements and the reported amounts of expenses during the reporting period. Making estimates requires management to exercise significant judgment. It is at least reasonably possible that the estimate of the effect of a condition, situation or set of circumstances that existed at the date of the unaudited condensed financial statements, which management considered in formulating its estimate, could change in the near term due to one or more future confirming events. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all short-term investments with an original maturity of three months or less when purchased to be cash equivalents. The Company did not have any cash equivalents as of September 30, 2022 and December 31, 2021.

Marketable Securities Held in Trust Account

As of September 30, 2022 and December 31, 2021, the assets held in the Trust Account were invested in money market funds.

Fair Value Measurements

Financial Accounting Standards Board ("FASB") ASC Topic 820 "Fair Value Measurements and Disclosures" ("ASC 820") defines fair value, the methods used to measure fair value and the expanded disclosures about fair value measurements. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between the buyer and the seller at the measurement date. In determining fair value, the valuation techniques consistent with the market approach, income approach and cost approach shall be used to measure fair value. ASC 820 establishes a fair value hierarchy for inputs, which represent the assumptions used by the buyer and seller in pricing the asset or liability. These inputs are further defined as observable and unobservable inputs. Observable inputs are those that buyer and seller would use in pricing the asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs reflect the Company's assumptions about the inputs that the buyer and seller would use in pricing the asset or liability developed based on the best information available in the circumstances.

The fair value hierarchy is categorized into three levels based on the inputs as follows:

Level 1 — Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access. Valuation adjustments and block discounts are not being applied. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of these securities does not entail a significant degree of judgment.

Level 2 — Valuations based on (i) quoted prices in active markets for similar assets and liabilities, (ii) quoted prices in markets that are not active for identical or similar assets, (iii) inputs other than quoted prices for the assets or liabilities, or (iv) inputs that are derived principally from or corroborated by market through correlation or other means.

Level 3 — Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

The fair value of the Company's certain assets and liabilities, which qualify as financial instruments under ASC 820 approximates the carrying amounts represented in the balance sheet. The fair values of cash, prepaid assets, and accounts payable are estimated to approximate the carrying values as of December 31, 2021 due to the short maturities of such instruments.

The Company's warrant liabilities are based on a valuation model utilizing management judgment and pricing inputs from observable and unobservable markets with less volume and transaction frequency than active markets. Significant deviations from these estimates and inputs could result in a material change in fair value. In some circumstances, the inputs used to measure fair value might be categorized within different levels of the fair value hierarchy. In those instances, the fair value measurement is categorized in its entirety in the fair value hierarchy based on the lowest level input that is significant to the fair value measurement. See Note 6 for additional information on assets and liabilities measured at fair value.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist of a cash account in a financial institution, which, at times, may exceed the Federal Depository Insurance Coverage of $250,000. As of September 30, 2022 and December 31, 2021, the Company has not experienced losses on this account and management believes the Company is not exposed to significant risks on such account.

Common Stock Subject to Possible Redemption

All of the 5,750,000 shares of common stock sold as part of the Units in the IPO contain a redemption feature which allows for the redemption of such public shares in connection with the Company's liquidation, if there is a stockholder vote or tender offer in connection with the Business Combination and in connection with certain amendments to the Company's amended and restated certificate of incorporation. In accordance with SEC and its staff's guidance on redeemable equity instruments, which has been codified in ASC 480-10-S99, redemption provisions not solely within the control of the Company require common stock subject to redemption to be classified outside of permanent equity. Therefore, all common stock, excluding the founder shares, has been classified outside of permanent equity.

The Company recognizes changes in redemption value immediately as they occur and adjusts the carrying value of redeemable common stock to equal the redemption value at the end of each reporting period. Increases or decreases in the carrying amount of redeemable common stock are affected by charges against additional paid in capital and accumulated deficit.

Net Income (Loss) Per Common Stock

The Company recognizes two classes of shares for EPS purposes, which are referred to as redeemable common stock and outstanding common stock. Earnings and losses are shared pro rata between the two classes of shares. The 5,375,000 potential common shares for outstanding warrants to purchase the Company's stock were excluded from diluted earnings per share for the three and nine months ended September 30, 2022 and 2021 because the warrants are contingently exercisable, and the contingencies have not yet been met. As a result,

diluted net income (loss) per common share is the same as basic net income (loss) per common share for the periods. The table below presents a reconciliation of the numerator and denominator used to compute basic and diluted net income (loss) per share for each class of common stock:

	For the Three Months Ended September 30,			
	2022		2021	
	Redeemable Common Stock	Outstanding Common Stock	Redeemable Common Stock	Outstanding Common Stock
Basic and diluted net (loss) income per share:				
Numerator:				
Allocation of net (loss) income	$ (134,928)	$ (36,079)	$ 95,763	$ 25,606
Denominator:				
Weighted-average shares outstanding	5,750,000	1,537,500	5,750,000	1,537,500
Basic and diluted net (loss) income per share	$ (0.02)	$ (0.02)	$ 0.02	$ 0.02

	For the Nine Months Ended September 30,			
	2022		2021	
	Redeemable Common Stock	Outstanding Common Stock	Redeemable Common Stock	Outstanding Common Stock
Basic and diluted net income per share:				
Numerator:				
Allocation of net income	$ 82,203	$ 21,980	$ 300,326	$ 90,967
Denominator:				
Weighted-average shares outstanding	5,750,000	1,537,500	5,076,007	1,537,500
Basic and diluted net income per share	$ 0.01	$ 0.01	$ 0.06	$ 0.06

Offering Costs associated with the Initial Public Offering

The Company complies with the requirements of the ASC 340-10-S99-1 and SEC Staff Accounting Bulletin ("SAB") Topic 5A-"Expenses of Offering". Offering costs consist principally of professional and registration fees incurred through the balance sheet date that are related to the IPO and were charged to temporary equity upon the completion of the IPO. Accordingly, as of February 1, 2021, offering costs in the aggregate of $1,594,485 have been charged to temporary equity (consisting of $1,150,000 of underwriting discount and $444,485 of other offering costs).

Warrant Liabilities

The Company accounts for the Public Warrants and Private Warrants (as defined in Notes 3 and 4) collectively ("Warrants"), as either equity or liability-classified instruments based on an assessment of the specific terms of the Warrants and the applicable authoritative guidance in FASB Accounting Standards Codification ("ASC") 815, Derivatives and Hedging ("ASC 815"). The assessment considers whether the Warrants meet all of the requirements for equity classification under ASC 815, including whether the Warrants are indexed to the Company's own common stocks and whether the warrant holders could potentially require "net cash settlement" in a circumstance outside of the Company's control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of issuance of the Warrants and as of each subsequent quarterly period end date while the Warrants are outstanding.

For issued or modified warrants that meet all of the criteria for equity classification, such warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants

that do not meet all the criteria for equity classification, such warrants are required to be recorded at their initial fair value on the date of issuance, and each balance sheet date thereafter. Changes in the estimated fair value of liability-classified warrants are recognized as a non-cash gain or loss on the statements of operations.

The Company accounts for the Private Warrants in accordance with ASC 815-40 under which the Private Warrants do not meet the criteria for equity classification and must be recorded as liabilities. The fair value of the Private Warrants has been estimated using the Modified Black Scholes model. See Note 6 for further discussion of the pertinent terms of the Warrants used to determine the value of the Private Warrants and Representative's Warrants.

The Company evaluated the Public Warrants in accordance with ASC 815-40, "Derivatives and Hedging—Contracts in Entity's Own Equity" and concluded that they met the criteria for equity classification and are required to be recorded as part a component of additional paid-in capital at the time of issuance.

Income Taxes

The Company accounts for income taxes under ASC 740, "Income Taxes." ASC 740 requires the recognition of deferred tax assets and liabilities for both the expected impact of differences between the unaudited condensed financial statements and tax basis of assets and liabilities and for the expected future tax benefit to be derived from tax loss and tax credit carry forwards. ASC 740 additionally requires a valuation allowance to be established when it is more likely than not that all or a portion of deferred tax assets will not be realized. As of September 30, 2022 and December 31, 2021, the Company's deferred tax asset had a full valuation allowance recorded against it. Our effective tax rate was (4.96)% and 0% for the three months ended September 30, 2022 and 2021, respectively, and 7.20% and 0% for the nine months ended September 30, 2022 and 2021, respectively. The effective tax rate differs from the statutory tax rate of 21% for the three months and nine months ended September 30, 2022 and 2021, due to changes in fair value in warrant liability, changes in fair value in the PIPE derivative liability, and the valuation allowance on the deferred tax assets.

ASC 740 also clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements and prescribes a recognition threshold and measurement process for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not to be sustained upon examination by taxing authorities. ASC 740 also provides guidance on derecognition, classification, interest and penalties, accounting in interim period, disclosure and transition.

The Company recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense. There were no unrecognized tax benefits and no amounts accrued for interest and penalties as of September 30, 2022 and December 31, 2021. The Company is currently not aware of any issues under review that could result in significant payments, accruals or material deviation from its position.

The Company has identified the United States as its only "major" tax jurisdiction. The Company is subject to income taxation by major taxing authorities since inception. These examinations may include questioning the timing and amount of deductions, the nexus of income among various tax jurisdictions and compliance with federal and state tax laws. The Company's management does not expect that the total amount of unrecognized tax benefits will materially change over the next twelve months

Risks and Uncertainties

In February 2022, the Russian Federation and Belarus commenced a military action with the country of Ukraine. As a result of this action, various nations, including the United States, have instituted economic sanctions against the Russian Federation and Belarus. Further, the impact of this action and related sanctions on the world

economy are not determinable as of the date of these condensed financial statements. The specific impact on the Company's financial condition, results of operations, and cash flows is also not determinable as of the date of these condensed financial statements.

On January 30, 2020, the World Health Organization ("WHO") announced a global health emergency because of a new strain of coronavirus (the "COVID-19 outbreak"). In March 2020, the WHO classified the COVID-19 outbreak as a pandemic, based on the rapid increase in exposure globally. The full impact of the COVID-19 outbreak continues to evolve. The impact of the COVID-19 outbreak and Russian military action against Ukraine on the Company's financial position will depend on future developments, including the duration and spread of the outbreak and related advisories and restrictions and the effects and duration of economic sanctions. These developments and the impact on the financial markets and the overall economy are highly uncertain and cannot be predicted. If the financial markets and/or the overall economy are impacted for an extended period, the Company's financial position may be materially adversely affected. Additionally, the Company's ability to complete an initial business combination may be materially adversely affected due to significant governmental measures being implemented to contain the COVID-19 outbreak or treat its impact, including travel restrictions, the shutdown of businesses and quarantines, among others, which may limit the Company's ability to have meetings with potential investors or affect the ability of a potential target company's personnel, vendors and service providers to negotiate and consummate an initial business combination in a timely manner. The Company's ability to consummate an initial business combination may also be dependent on the ability to raise additional equity and debt financing, which may be impacted by the COVID-19 outbreak and the effects and duration of economic sanctions and the resulting market downturn. The financial statements do not include any adjustments that might result from the outcome of these uncertainties.

Inflation Reduction Act of 2022

On August 16, 2022, the Inflation Reduction Act of 2022 (the "IR Act") was signed into federal law. The IR Act provides for, among other things, a new U.S. federal 1% excise tax on certain repurchases of stock by publicly traded U.S. domestic corporations and certain U.S. domestic subsidiaries of publicly traded foreign corporations occurring on or after January 1, 2023. The excise tax is imposed on the repurchasing corporation itself, not its shareholders from which shares are repurchased. The amount of the excise tax is generally 1% of the fair market value of the shares repurchased at the time of the repurchase. However, for purposes of calculating the excise tax, repurchasing corporations are permitted to net the fair market value of certain new stock issuances against the fair market value of stock repurchases during the same taxable year. In addition, certain exceptions apply to the excise tax. The U.S. Department of the Treasury (the "Treasury") has been given authority to provide regulations and other guidance to carry out and prevent the abuse or avoidance of the excise tax.

Any redemption or other repurchase that occurs after December 31, 2022, in connection with a Business Combination, extension vote or otherwise, may be subject to the excise tax. Whether and to what extent the Company would be subject to the excise tax in connection with a Business Combination, extension vote or otherwise would depend on a number of factors, including (i) the fair market value of the redemptions and repurchases in connection with the Business Combination, extension or otherwise, (ii) the structure of a Business Combination, (iii) the nature and amount of any "PIPE" or other equity issuances in connection with a Business Combination (or otherwise issued not in connection with a Business Combination but issued within the same taxable year of a Business Combination) and (iv) the content of regulations and other guidance from the Treasury. In addition, because the excise tax would be payable by the Company and not by the redeeming holder, the mechanics of any required payment of the excise tax have not been determined. The foregoing could cause a reduction in the cash available on hand to complete a Business Combination and in the Company's ability to complete a Business Combination.

Recent Accounting Standards

In August 2020, the FASB issued Accounting Standards Update ("ASU") 2020-06, Debt — Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own

Equity (Subtopic 815-40) ("ASU 2020-06") to simplify accounting for certain financial instruments. ASU 2020-06 eliminates the current models that require separation of beneficial conversion and cash conversion features from convertible instruments and simplifies the derivative scope exception guidance pertaining to equity classification of contracts in an entity's own equity. The new standard also introduces additional disclosures for convertible debt and freestanding instruments that are indexed to and settled in an entity's own equity. ASU 2020-06 amends the diluted earnings per share guidance, including the requirement to use the if-converted method for all convertible instruments. ASU 2020-06 is effective January 1, 2024 and should be applied on a full or modified retrospective basis, with early adoption permitted beginning on January 1, 2021. The Company is currently assessing the impact, if any, that ASU 2020-06 would have on its financial position, results of operations or cash flows.

Management does not believe that any other recently issued, but not yet effective, accounting pronouncements, if currently adopted, would have a material effect on the Company's financial statements.

Note 3 — Initial Public Offering

On February 1, 2021, the Company sold 5,000,000 Units, at a purchase price of $10.00 per Unit. Each Unit consists of one share of common stock and one-half of one warrant to purchase one share of common stock ("Public Warrant"). Each whole Public Warrant entitles the holder to purchase one share of common stock at a price of $11.50 per share, subject to adjustment.

On February 2, 2021, the Underwriters exercised the over-allotment option in full to purchase 750,000 Units (the "Over-Allotment Units"), generating an aggregate of gross proceeds of $7,500,000, and incurred $150,000 in underwriting fees.

Public Warrants

Each whole warrant entitles the holder to purchase one share of Common Stock at a price of $11.50 per share, subject to adjustment as discussed herein. The warrants will become exercisable 30 days after the completion of the Company's initial Business Combination. However, no warrants will be exercisable for cash unless the Company has an effective and current registration statement covering the shares of common stock issuable upon exercise of the warrants and a current prospectus relating to such shares of common stock. Notwithstanding the foregoing, if a registration statement covering the shares of common stock issuable upon exercise of the public warrants is not effective within a specified period following the consummation of the initial Business Combination, warrant holders may, until such time as there is an effective registration statement and during any period when the Company shall have failed to maintain an effective registration statement, exercise warrants on a cashless basis pursuant to the exemption provided by Section 3(a)(9) of the Securities Act, provided that such exemption is available. If that exemption, or another exemption, is not available, holders will not be able to exercise their warrants on a cashless basis. In the event of such cashless exercise, each holder would pay the exercise price by surrendering the warrants for that number of shares of common stock equal to the quotient obtained by dividing (x) the product of the number of shares of common stock underlying the warrants, multiplied by the difference between the exercise price of the warrants and the "fair market value" (defined below) by (y) the fair market value. The "fair market value" for this purpose will mean the average reported last sale price of the shares of common stock for the 5 trading days ending on the trading day prior to the date of exercise. The warrants will expire on the fifth anniversary of the completion of an initial Business Combination, at 5:00 p.m., New York City time, or earlier upon redemption or liquidation.

The Company may call the warrants for redemption (excluding the Private Placement Warrants and any warrants underlying additional units issued to the Sponsor, initial stockholders, officers, directors or their affiliates in payment of Working Capital Loans made to the Company)

- in whole and not in part;
- at a price of $0.01 per warrant;

- at any time after the warrants become exercisable,
- upon not less than 30 days' prior written notice of redemption to each warrant holder; and
- if, and only if, the reported last sale price of the Common Stock equals or exceeds $18.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations) for any 20 trading days within a 30-tradingday period commencing at any time after the warrants become exercisable and ending on the third business day prior to the notice of redemption to warrant holders; and
- if, and only if, there is a current registration statement in effect with respect to the shares of common stock underlying such warrants.

If the Company calls the warrants for redemption as described above, the Company's management will have the option to require all holders that wish to exercise warrants to do so on a "cashless basis." In such event, each holder would pay the exercise price by surrendering the warrants for that number of shares of common stock equal to the quotient obtained by dividing (x) the product of the number of shares of common stock underlying the warrants, multiplied by the difference between the exercise price of the warrants and the "fair market value" (defined below) by (y) the fair market value. The "fair market value" for this purpose shall mean the average reported last sale price of the shares of common stock for the 5 trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders of warrants.

In addition, if (x) the Company issue additional shares of Common Stock or equity-linked securities for capital raising purposes in connection with the closing of the initial Business Combination at an issue price or effective issue price of less than $9.20 per share of common stock (with such issue price or effective issue price to be determined in good faith by the Company's board of directors, and in the case of any such issuance to the Sponsor, initial stockholders or their affiliates, without taking into account any founders' shares held by them prior to such issuance), (y) the aggregate gross proceeds from such issuances represent more than 60% of the total equity proceeds, and interest thereon, available for the funding of the initial Business Combination on the date of the consummation of the initial Business Combination (net of redemptions), and (z) the Market Value is below $9.20 per share, the exercise price of the warrants will be adjusted (to the nearest cent) to be equal to 115% of the greater of (i) the Market Value or (ii) the price at which the Company issues the additional shares of common stock or equity-linked securities.

Note 4 — Private Placement

Simultaneously with the closing of the IPO, the Sponsor purchased an aggregate of 2,350,000 Private Placement Warrants at a price of $1.00 per Private Placement Warrant, for an aggregate purchase price of $2,350,000, in a private placement (the "Private Placement"). Each Private Placement Warrant will entitle the holder to purchase one share of common stock at a price of $11.50 per share, subject to adjustment. The proceeds from the Private Placement Warrants were added to the proceeds from the IPO held in the Trust Account. If the Company does not complete a Business Combination within the Combination Period, the proceeds from the sale of the Private Placement Warrants held in the Trust Account will be used to fund the redemption of the Public Shares (subject to the requirements of applicable law) and the Private Placement Warrants will expire worthless.

The Private Placement Warrants are identical to the Warrants underlying the Units sold in the IPO, except that the Private Placement Warrants are non-redeemable and may be exercised on a cashless basis, in each case so long as they continue to be held by the initial purchasers or their permitted transferees. Further, the Sponsor has agreed not to transfer, assign, or sell the Private Placement Warrants (including the shares of Common Stock issuable upon the exercise of the Private Placement Warrants), except to certain permitted transferees, until after the consummation of the Company's initial Business Combination.

Simultaneously with the closing of the exercise of the over-allotment option, the Company completed the private sale (the "Private Placement") of an aggregate of 150,000 private placement warrants (the "Private Placement Warrants") to Ignyte Sponsor LLC, a Delaware limited liability company (the "Sponsor"), at a purchase price of $1.00 per Private Placement Warrant, generating gross proceeds of $150,000.

Note 5 — Related Party Transactions

Founder Shares

On August 12, 2020, the Sponsor paid $25,000, or approximately $0.02 per share, to cover certain offering costs in consideration for 1,437,500 shares of Common Stock, par value $0.0001 (the "Founder Shares"). Up to 187,500 Founder Shares are subject to forfeiture by the Sponsor depending on the extent to which the underwriters' over-allotment option is exercised. On February 2, 2021, the underwriter exercised its over-allotment option in full, hence, the 187,500 Founder Shares are no longer subject to forfeiture since then.

The founders' shares were placed into an escrow account maintained in New York, New York by Continental Stock Transfer & Trust Company, acting as escrow agent. Subject to certain limited exceptions, these shares will not be transferred, assigned, sold or released from escrow (subject to certain limited exceptions set forth below) (i) with respect to 50% of such shares, for a period ending on the earlier of the one-year anniversary of the date of the consummation of the initial Business Combination and the date on which the closing price of the Company's common stock equals or exceeds $12.50 per share (as adjusted for share splits, share dividends, reorganizations and recapitalizations) for any 20 trading days within a30-tradingday period following the consummation of the initial Business Combination and (ii) with respect to the remaining 50% of such shares, for a period ending on the one-year anniversary of the date of the consummation of the initial Business Combination, or earlier, in either case, if, subsequent to the initial Business Combination, the Company consummates a liquidation, merger, stock exchange or other similar transaction which results in all of the Company's stockholders having the right to exchange their shares of common stock for cash, securities or other property.

Promissory Note — Related Party

On November 20, 2020, the Company's executive officers loaned the Company $80,000 to be used for a portion of the expenses of the IPO. These loans were non-interest bearing, unsecured and are due at the earlier of June 30, 2021 or the closing of the IPO. The Company repaid the note in full on February 1, 2021. On March 21, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of up to $300,000 to the Company as required. On September 20, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of up to $100,000 to the Company as required. The Company has drawn $399,380 of the $400,000 Working Capital Loan, of which $399,380 is outstanding as of September 30, 2022.

Due to Related Party

As of September 30, 2022, the amount due to related party is $201,953 which represent the accrual of administrative service fee of $201,643 from January 26, 2021 to September 30, 2022 and formation cost of $310 paid by David Rosenberg (the "Officer"). As of December 31, 2021, the amount due to related party is $111,953 which represents the accrual of administrative service fee from January 26, 2021 to December 31, 2021 of $111,643 and formation cost of $310 paid by the Officer.

Related Party Loans

In order to meet the Company's working capital needs following the consummation of the IPO the Sponsor, officers, directors, the initial stockholders or their affiliates may, but are not obligated to, loan the Company funds ("Working Capital Loans"), from time to time or at any time, in whatever amount they deem reasonable in their sole discretion. Each loan would be evidenced by a promissory note. The notes would either be paid upon consummation of the initial Business Combination, without interest, or, at holder's discretion, up to $1,500,000 of the notes may be converted into warrants at a price of $1.00 per warrant. The warrants would be identical to the Private Placement Warrants. In the event that the initial Business Combination does not close, the Company may use a portion of the working capital held outside the Trust Account to repay such loaned amounts, but no proceeds from the Trust Account would be used for such repayment. As of September 30, 2022 and December 31, 2021, no such Working Capital Loans were outstanding.

On March 21, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of $300,000 to the Company evidenced by a promissory note (the "Note") as required. The principal balance of the Note shall be payable in cash by the Company on the earlier of: (i) the date on which the Company consummates its initial business combination or (ii) the date that the winding up of the Company is effective. No interest shall accrue on the unpaid principal balance of the Note. The principal balance of the Note may be prepaid at any time, at the election of the Company.

On September 20, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of $100,000 to the Company evidenced by a promissory note (the "Note") as required. The principal balance of the Note shall be payable in cash by the Company on the earlier of: (i) the date on which the Company consummates its initial business combination or (ii) the date that the winding up of the Company is effective. No interest shall accrue on the unpaid principal balance of the Note. The principal balance of the Note may be prepaid at any time, at the election of the Company.

Administrative Service Fee

The Company has agreed, commencing on the date of the securities of the Company are first listed on The Nasdaq Capital Market (the "Listing Date"), to pay the Sponsor $10,000 per month for office space, utilities and secretarial support. Upon completion of the initial Business Combination or the Company's liquidation, the Company will cease paying these monthly fees. The Company accrued $30,000 and $90,000, for the administrative service fee for the three and nine months ended September 30, 2022 and 2021, respectively, of which $201,643 and $81,643 is recorded in accrued expenses in the accompanying condensed balance sheets as of September 30, 2022 and 2021, respectively.

Note 6 — Recurring Fair Value Measurements

The following table presents information about the Company's assets and liabilities that were measured at fair value on a recurring basis as of September 30, 2022 and December 31, 2021 and indicates the fair value hierarchy of the valuation techniques the Company utilized to determine such fair value.

	September 30, 2022	Quoted Prices In Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Assets:				
U.S. Money Market held in Trust Account	$57,849,285	$57,849,285	$ —	$ —
	$57,849,285	$57,849,285	$ —	$ —
Liabilities:				
Warrant liabilities-Private Placement Warrants	$ 300,000	$ —	$ —	$ 300,000
	$ 300,000	$ —	$ —	$ 300,000

	December 31, 2021	Quoted Prices In Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Assets:				
U.S. Money Market held in Trust Account	$57,506,299	$57,506,299	$ —	$ —
	$57,506,299	$57,506,299	$ —	$ —
Liabilities:				
Warrant liabilities-Private Placement Warrants	$ 1,975,000	$ —	$ —	$ 1,975,000
	$ 1,975,000	$ —	$ —	$ 1,975,000

The following table sets forth a summary of the changes in the fair value of the warrant liabilities for the three and nine months ended September 30, 2022 and for the period from February 1, 2021 through September 30, 2021:

	Warrant Liability
Fair value as of December 31, 2021	$ 1,975,000
Change in fair value(1)	(1,025,000)
Fair value as of March 31, 2022	$ 950,000
Change in fair value(1)	(400,000)
Fair value as of June 30, 2022	$ 550,000
Change in fair value(1)	(250,000)
Fair value as of September 30, 2022	$ 300,000

	Warrant Liability
Fair value as of February 1, 2021	$ 2,303,000
Issuance of private warrants in connection with over-allotment as of February 2, 2021	147,000
Change in fair value(1)	(800,000)
Fair value as of September 30, 2021	$ 1,650,000

(1) Represents the non-cash gain on the change in valuation of Private Warrants and is included in the change in fair value of warrant liability on the statement of operations.

At September 30, 2022, the Public Warrants were determined to contain none of the features requiring liability treatment; therefore, the Public warrants were not included in the fair value reporting.

The Private Placement Warrants were valued using a Modified Black Scholes Option Pricing Model, which is considered to be a Level 3 fair value measurement. The Modified Black Scholes model's primary unobservable input utilized in determining the fair value of the Private Placement Warrants is the expected volatility of the common stock. The fair value of the Private Placement Warrants was discounted to present value at September 30, 2022, utilizing the Business Combination date of November 1, 2022, as the key unobservable input. The expected volatility as of the Initial Public Offering date was derived from observable public warrant pricing on comparable 'blank-check' companies without an identified target.

Transfers to/from Levels 1, 2 and 3 are recognized at the end of the reporting period. There were no transfers between levels for the period from January 1, 2022 through September 30, 2022.

The following table provides quantitative information regarding Level 3 fair value measurements for Private Warrants as of September 30, 2022 and December 31, 2021.

	September 30, 2022	December 31, 2021
Exercise price	$ 11.50	$ 11.50
Share price	$ 9.98	$ 9.74
Volatility	2.50%	13.75%
Expected life	3.19	5.33
Risk-free rate	4.06%	1.26%
Dividend yield	— %	— %

Note 7 — Commitments and Contingencies

Registration Rights

The holders of the founders' shares issued and outstanding on the date of the IPO, as well as the holders of the representative shares, Private Placement Warrants and any warrants the Company's Sponsor, officers, directors or their affiliates may be issued in payment of Working Capital Loans made to the Company (and all underlying securities), will be entitled to registration rights pursuant to an agreement signed on January 27, 2021. The holders of a majority of these securities are entitled to make up to two demands that the Company registers such securities. The holders of the majority of the founders' shares can elect to exercise these registration rights at any time commencing three months prior to the date on which these shares of common stock are to be released from escrow. The holders of a majority of the representative shares, Private Placement Warrants and warrants issued to the Company's Sponsor, officers, directors or their affiliates in payment of Working Capital Loans made to the Company (or underlying securities) can elect to exercise these registration rights at any time after the Company consummates a Business Combination. Notwithstanding anything to the contrary, EarlyBirdCapital Inc. ("EarlyBirdCapital") may only make a demand on one occasion and only during the five-year period beginning on the Effective Date of the registration statement of which the IPO forms a part. In addition, the holders have certain "piggy-back" registration rights with respect to registration statements filed subsequent to the Company's consummation of a Business Combination; provided, however, that EarlyBirdCapital may participate in a "piggyback" registration only during the seven-year period beginning on the Effective Date of the registration statement of which the IPO forms a part. The Company will bear the expenses incurred in connection with the filing of any such registration statements.

Underwriting Agreement

The underwriters had a 45-day option beginning February 1, 2021 to purchase up to an additional 750,000 units to cover over-allotments, if any, at the IPO price less the underwriting discounts.

The Company issued to the underwriter (and/or its designees) (the "Representative") 100,000 shares of common stock for $0.0001 per share (the "Representative Shares"). The Company estimated the fair value of the stock to be $2,000 based upon the price of the founder shares issued to the Sponsor. The stock was treated as underwriters' compensation and charged directly to stockholders' equity. The underwriter (and/or its designees) agreed (i) to waive their conversion rights (or right to participate in any tender offer) with respect to such shares in connection with the completion of our initial Business Combination and (ii) to waive their rights to liquidating distributions from the trust account with respect to such shares if we fail to complete our initial Business Combination within 21 months from the closing of this offering.

On February 1, 2021, the Company paid a fixed underwriting fee of $1,000,000.

On February 2, 2021, the underwriters purchased an additional 750,000 units to exercise its over-allotment option in full. The proceeds of $7,500,000 from the over-allotment was deposited in the Trust Account after deducting the underwriting discounts.

Business Combination Marketing Agreement

The Company has engaged underwriters as advisors in connection with its Business Combination to assist it in holding meetings with the stockholders to discuss the potential Business Combination and the target business's attributes, introduce the Company to potential investors that are interested in purchasing the Company's securities in connection with the potential Business Combination, assist the Company in obtaining stockholder approval for the Business Combination and assist the Company with its press releases and public filings in connection with the Business Combination. The Company will pay the Marketing Fee for such services upon the consummation of the initial Business Combination in an amount equal to, in the aggregate, 3.5% of the gross proceeds of the IPO, or $2,012,500 including the proceeds from the full exercise of the over-allotment option on February 2, 2021.

In connection with the pending Business Combination, two purported stockholders have sent a demand letter. No amount of damages is stated in the demand letter. The Company believes that the threatened lawsuit is without merit and, if filed, the Company intends to defend the matters vigorously. The Company is currently unable to reasonably determine the outcome of any potential litigation or estimate any potential losses, and, as such, have not recorded a loss contingency. There is no other material litigation, arbitration or governmental proceedings currently pending against the Company or any members of its management team in their capacity as such.

Right of First Refusal

If the Company determines to pursue any equity, equity-linked, debt or mezzanine financing relating to or in connection with a Business Combination or after a Business Combination, then EarlyBirdCapital shall have the right, but not the obligation, to act as book running manager, placement agent and/or arranger, as the case may be, in any and all such financing or financings and to receive at least 25% of the aggregate gross spread or fees from any and all such financings. This right of first refusal extends from the February 1, 2021 until the earlier of twelve (12) months after the consummation of an initial Business Combination or the liquidation of the Trust Account if the Company fails to consummate a Business Combination during the required time period.

Note 8 — Stockholders' Equity

Preferred Stock- The Company is authorized to issue 1,000,000 shares of preferred stock with a par value of $0.0001 and with such designations, voting and other rights and preferences as may be determined from time to time by the Company's board of directors. At September 30, 2022 and December 31, 2021, there were no shares of preferred stock issued or outstanding.

Common Stock- The Company is authorized to issue 50,000,000 shares of common stock with a par value of $0.0001 per share. On August 12, 2020, the Sponsor paid $25,000, or approximately $0.02 per share, to cover certain offering costs in consideration for 1,437,500 shares of Common Stock, par value $0.0001. Of the 1,437,500 shares of common stock, an aggregate of up to 187,500 shares are subject to forfeiture to the Company for no consideration to the extent that the underwriters' over-allotment option is not exercised in full or in part, so that the initial stockholders will collectively own 20% of the Company's issued and outstanding common stock after the IPO. On February 2, 2021, the underwriter exercised its over-allotment option in full, hence, the 187,500 Founder Shares are no longer subject to forfeiture since then. In August 2020, the Company also issued to designees of EarlyBirdCapital an aggregate of 100,000 shares of common stock ("representative shares"), at a price of $0.0001 per share. As of September 30, 2022 and December 31, 2021, there were 1,537,500 shares of common stock issued and outstanding.

Common stockholders of record are entitled to one vote for each share held on all matters to be voted on by stockholders. In connection with any vote held to approve the initial Business Combination, the initial stockholders, as

well as all of the Company's officers and directors, have agreed to vote their respective shares of common stock owned by them immediately prior to the IPO and any shares purchased in the IPO or following the IPO in the open market in favor of the proposed Business Combination.

Note 9 — Subsequent Events

The Company evaluated subsequent events and transactions that occurred after the balance sheet date up to the date that the unaudited condensed financial statements were issued. Based on this review, the Company did not identify any subsequent events that would have required adjustments or disclosure in the condensed financial statements.

On October 25, 2022, Ignyte Acquisition Corp. (the "Company") entered into a forward share purchase agreement (the "Purchase Agreement") with Frost Gamma Investments Trust (the "Investor") pursuant to which, provided that the Investor holds at least 450,000 shares of the Company's common stock (the "Shares") as of the closing of the Company's previously announced business combination (the "Business Combination") with Peak Bio Co., Ltd., a corporation organized under the laws of the Republic of Korea ("Peak Bio"), the Investor may elect to sell and transfer to the combined company following the Business Combination (the "Combined Company"), and the Combined Company will purchase from the Investor, on the date that is sixty (60) days from the closing of the Business Combination, the Shares (the "Share Repurchase").

On October 31, 2022, Ignyte entered into new subscription agreements (the "Warrant Share PIPE Subscription Agreements") whereby Ignyte agreed to issue and sell to the investors thereto, in private placements to close immediately prior to the closing of the Business Combination, at $10.00 per share, an aggregate of up to (i) 302,500 PIPE Shares and (ii) 281,325 warrants (the "PIPE Financing Warrants") to purchase shares of Common Stock, at an exercise price of $0.01 per share, for an aggregate purchase price of $3,025,000. The warrants would be on terms substantially the same as the outstanding warrants that were included in the units issued in Ignyte's initial public offering, except that the new warrants would not be redeemable, and the warrants shall be exercisable for one year.

Concurrently with Ignyte's entry into the Warrant Share PIPE Subscription Agreements, on October 31, 2022, Ignyte executed subscription agreements with certain of Peak Bio's lenders (the "Bridge Loan PIPE Subscription Agreements" and together with the Warrant Share PIPE Subscription Agreements, the "New PIPE Subscription Agreements") whereby Ignyte agreed to issue and sell to the Peak Bio lenders party thereto, in private placements to close immediately prior to the closing of the Business Combination, an aggregate of up to (i) 176,579 PIPE Shares and (ii) 164,218 PIPE Financing Warrants to purchase shares of Common Stock, at an exercise price of $0.01 per share, in consideration for their agreement to cancel an aggregate principal amount of $1,750,000 and the interest accrued thereon in promissory notes evidencing the loans such lenders had extended to Peak Bio between July and September 2022. The warrants would be on terms substantially the same as the outstanding warrants that were included in the units issued in Ignyte's initial public offering, except that the new warrants would not be redeemable, and the warrants shall be exercisable for one year.

Additionally, pursuant to the terms of a Bridge Loan PIPE Subscription Agreement entered into with an Original PIPE Investor, the Original PIPE Subscription Agreement executed by such Original PIPE Investor, which provided for the sale of 1,500,000 PIPE Shares for an aggregate purchase price of $15,000,000, was terminated.

On November 1, 2022, Ignyte Sponsor LLC, a Delaware limited liability company (the "Sponsor") entered into a share purchase agreement with Knight Family Management, LLC ("Knight Family"), whereby the Sponsor agreed to transfer 20,167 shares of Common Stock held by it to Knight Family in consideration for Knight Family's services arranging for the commitment by certain other investors to fund the aggregate purchase price of $3,025,000 pursuant to the Warrant Share PIPE Subscription Agreements.

On November 1, 2022, Ignyte entered into payment agreements with each of (i) the Sponsor and (ii) Ingalls & Snyder, LLC ("Ingalls"). Collectively, these payment agreements are referred to as the "Payment Agreements." The Payment

Agreements provide that Ignyte, at the closing of the Business Combination, would issue shares of Common Stock to each of the Sponsor and Ingalls, as consideration for (i) the working capital loans extended to Ignyte by the Sponsor and (ii) the marketing and consulting services provided to Ignyte by Ingalls. The dollar amount due and the number of shares of Common Stock issued as payment therefor is as follows: (i) 77,200 shares of the Company's common stock issued to the Sponsor for the $400,000 amount due and (ii) 28,950 shares of the Company's common stock issued to Ingalls for the $150,000 amount due.

On November 1, 2022 (the "Closing Date"), the Company completed its Business Combination with Peak Bio Co., Ltd.

In connection with the Business Combination, the holders of 5,159,287 shares of Ignyte common stock exercised their right to redeem their shares for cash at a redemption price of approximately $10.07, for an aggregate redemption amount of approximately $51,978,834, which was paid to such holders on the Closing Date.

As of the open of trading on November 2, 2022, the Company's common stock and public warrants, formerly those of Ignyte, began trading on the Nasdaq Capital market under the trading symbols "PKBO" and "PKBOW," respectively.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
of Peak Bio Co., Ltd.

Opinion on the Financial Statements

We have audited the accompanying carve-out consolidated balance sheets of Peak Bio Co., Ltd. ("the Company") as of December 31, 2021 and 2020, and the related carve-out consolidated statements of operations and comprehensive loss, carve-out consolidated statements of equity (deficit), and carve-out consolidated statements of cash flows for each of the two years in the period ended December 31, 2021, and the related carve-out notes (collectively referred to as the "carve-out consolidated financial statements"). In our opinion, the carve-out consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2021 in conformity with accounting principles generally accepted in the United States of America.

Substantial Doubt About the Entity's Ability to Continue as a Going Concern

The accompanying carve-out consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the carve-out consolidated financial statements, the Company had recurring losses from operations, negative cash flow from operations and is dependent on additional financing to fund operations. These conditions raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are described in Note 2 to the carve-out consolidated financial statements. The carve-out consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

Emphasis of Matter for Carve-out consolidated financial statements

As discussed in Note 2 to the carve-out consolidated financial statements, the Company's business is a component of pH Pharma, Ltd. and is not a stand-alone entity. The carve-out consolidated financial statements of the Company reflect the assets, liabilities and expenses directly attributable to the Company, as well as allocations deemed reasonable by management, to present the financial position, results of operations, and cash flows of the Company on a stand-alone basis and do not necessarily reflect the financial position, results of operations, and cash flows of the Company in the future or what they would have been had the Company been a separate, stand-alone entity during the periods presented.

Basis for Opinion

These carve-out consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's carve-out consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America (GAAS). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the carve-out consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the carve-out consolidated financial statements, whether due to error

or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the carve-out consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the carve-out consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

We conducted our audits in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the carve-out consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the carve-out consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the carve-out consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the carve-out consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

We have served as the Company's auditor since 2022.

/s/ Mayer Hoffman McCann P.C.

San Diego, California
June 17, 2022

PEAK BIO
BALANCE SHEETS

	December 31, 2021	December 31, 2020
Assets		
Current assets		
Cash and cash equivalents	$ 205,477	$ 349,867
Prepaid expenses and other current assets	253,669	284,174
Total current assets	459,146	634,041
Property and equipment, net	380,610	536,118
Restricted cash	237,000	60,000
Noncurrent assets	1,500	95,808
Total assets	$ 1,078,256	$ 1,325,967
Liabilities and deficit		
Current liabilities		
Accounts payable	$ 301,469	$ 728,796
Accrued expenses	990,485	786,644
Debt — current	—	285,566
Related party loan	1,500,000	—
Total current liabilities	2,791,954	1,801,006
Note payable -noncurrent	—	82,203
Deferred tax liability	35,000	36,000
Other noncurrent liabilities	186,570	—
Total liabilities	3,013,524	1,919,209
Commitments and contingencies (Note 8)		
Equity (deficit)		
Accumulated net parent investment in Peak Bio	(2,023,711)	(159,972)
Accumulated other comprehensive loss	88,443	(433,270)
Total deficit	(1,935,268)	(593,242)
Total liabilities and deficit	$ 1,078,256	$ 1,325,967

See accompanying notes to carve-out consolidated financial statements.

PEAK BIO
STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

	Year Ended December 31,	
	2021	2020
Revenue		
Grant revenue	$ 528,309	$ —
Total revenue	528,309	—
Operating expenses		
Research and development	7,124,077	10,400,570
General and administrative	2,469,762	2,938,111
Total operating expenses	9,593,839	13,338,681
Loss from operations	(9,065,530)	(13,338,681)
Other income (expense)		
Interest income	160	17
Interest expense	(11,471)	(2,504)
Gain on extinguishment of debt	866,332	—
Total other income (expense), net	855,021	(2,487)
Loss before income tax expense	(8,210,509)	(13,341,168)
Income tax expense	(82,067)	(5,965)
Net loss	$ (8,292,576)	$ (13,347,133)
Other comprehensive loss:		
Foreign currency translation	521,713	(433,270)
Total comprehensive loss	$ (7,770,863)	$ (13,780,403)

See accompanying notes to carve-out consolidated financial statements.

PEAK BIO
STATEMENTS OF EQUITY (DEFICIT)

	Accumulated Net Parent Investment In Peak Bio	Accumulated Other Comprehensive Loss	Total Equity (Deficit)
Balance, January 1, 2020	$ (46,489)	$ —	$ (46,489)
Net investment from parent	13,233,650	—	13,233,650
Foreign currency translation	—	(433,270)	(433,270)
Net loss	(13,347,133)	—	(13,347,133)
Balance, December 31, 2020	(159,972)	(433,270)	(593,242)
Net investment from parent	6,428,837	—	6,428,837
Foreign currency translation	—	521,713	521,713
Net loss	(8,292,576)	—	(8,292,576)
Balance, December 31, 2021	$ (2,023,711)	$ 88,443	$ (1,935,268)

See accompanying notes to carve-out consolidated financial statements.

PEAK BIO
STATEMENTS OF CASH FLOWS

	Year Ended December 31,	
	2021	2020
Cash flows from operating activities		
Net loss	$ (8,292,576)	$ (13,347,133)
Adjustment to reconcile net loss to net cash used in operating activities		
Share-based compensation	4,890	911,223
Depreciation	176,649	157,216
Gain on extinguishment of debt	(866,332)	—
Write-down of other receivable	—	114,955
Loss on disposal of fixed assets	20,061	—
Changes in operating assets and liabilities		
Other receivables	—	373,339
Prepaid expenses and other current assets	30,506	46,758
Other noncurrent assets	94,307	30,824
Accounts payable	(427,327)	(447,739)
Accrued expenses and other current liabilities	210,028	521,045
Other noncurrent liabilities and deferred tax liability	185,570	(5,052)
Net cash used in operating activities	(8,864,224)	(11,644,564)
Cash flows from investing activities		
Purchase of property and equipment	(9,880)	(341,320)
Net cash used in investing activities	(9,880)	(341,320)
Cash flows from financing activities		
Proceeds from net shareholder contributions	6,392,626	12,290,360
Proceeds from long term debt	492,375	367,770
Proceeds from related party loan	1,500,000	—
Net cash provided by financing activities	8,385,001	12,658,130
Net (decrease) increase in cash and cash equivalents	(489,103)	672,246
Effect of exchange rate changes on cash and cash equivalents	521,713	(433,270)
Cash and cash equivalents, beginning of year	409,867	170,891
Cash and cash equivalents, end of year	$ 442,477	$ 409,867
Components of cash, cash equivalents and restricted cash		
Cash and cash equivalents	205,477	349,867
Restricted cash	237,000	60,000
Total cash, cash equivalents and restricted cash	442,477	409,867
Supplemental disclosures of non-cash financing activities:		
Cash paid for interest	$ —	$ —
Cash paid for taxes	$ 8,566	$ —
Non-cash investing and financing activities:		
Purchase of property and equipment included in accounts payable	$ —	$ 8,519

See accompanying notes to carve-out consolidated financial statements.

PEAK BIO
NOTES TO CARVE-OUT CONSOLIDATED FINANCIAL STATEMENTS

1. Description of the Business

The accompanying carve-out consolidated financial statements and notes have been prepared to include certain assets and liabilities of pH Pharma Co., Ltd (now Peak Bio Co., Ltd. or "Peak Bio") (sometimes referred to as "pH Pharma Ltd" prior to the Spin-Off described below), on the basis described within Note 2, *Summary of Significant Accounting Policies*, with certain wholly-owned subsidiaries of Peak Bio, that were included following the Spin-Off as follows: Ph Pharma, Inc, as well as certain assets and liabilities allocated to Peak Bio, including the PHP- 303 and PH-1 ADC Platform programs. These are collectively referred to herein as the Balance Sheets, Statements of Operations and Comprehensive Loss, Statements of Equity (Deficit) and Statements of Cash Flows of Peak Bio ("Peak Bio" or the "Company").

The Spin-Off was completed on March 1, 2022, prior to the execution of the Business Combination Agreement with Ignyte Acquisition Corp. ("Ignyte"), with Peak Bio retaining the PHP-303 and PH-1 ADC Platform platforms. Historically and throughout the periods presented, the PHP-303 and PH-1 ADC Platform programs have been owned by pH Pharma Co., Ltd and its subsidiaries (prior to the change of its name to Peak Bio Co., Ltd.). The PHP-303 and PH-1 ADC Platform programs have historically operated as a part of pH Pharma Co., Ltd and not as a separate stand-alone entity or group.

Peak Bio is a clinical-stage biotechnology company focused on discovering, developing and delivering innovative therapies for multiple therapeutic areas. The Company has established a portfolio of potential therapies for the aging population. The Company's pipeline includes the PHP-303 program for genetic disease, liver disease and inflammation, specifically for Alpha-1 antitrypsin deficiency (AATD) and acute respiratory distress syndrome (ARDS) including COVID-19. The Company's pipeline also includes PH-1 ADC Platform for oncology.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying carve-out consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") and are comprised of the Company's activities distributed across multiple legal entities of pH Pharma Ltd.

These carve-out consolidated financial statements have been extracted from the accounting records of pH Pharma Ltd. The historical results of operations, financial position, and cash flows may not be indicative of what such results of operations, financial position, and cash flows would have been had the Company been a separate standalone entity, nor are they indicative of what the results of operations, financial position and cash flows may be in the future.

The accompanying carve-out consolidated financial statements reflect assets, liabilities, revenue, and expenses that are directly attributable to the Company, including the assets, liabilities, revenue and expenses of the PHP-303 and PH-1 ADC Platform programs. The assets and liabilities excluded from the accompanying carve-out consolidated financial statements consist of:

- Cash provided by pH Pharma Ltd to fund operations. pH Pharma Ltd uses a centralized approach to cash management and financing of its operations. Accordingly, only the cash, cash equivalents and restricted cash residing in pH Pharma, Inc., a 100% owned U.S. subsidiary of pH Pharma Ltd, has been reflected in these carve-out consolidated financial statements.
- Other assets and liabilities at pH Pharma Ltd which are not directly related to, or are not specifically owned by, or are not commitments, of the Company, including fixed assets and leases shared by the Company with other businesses of pH Pharma Ltd.

- Most of the pH Pharma Ltd' third-party debt and the related interest expense have not been allocated to these carve-out consolidated financial statements as the Company was not the legal obligor of the third-party debt and pH Pharma Ltd' borrowings were not directly attributable to the Company. The carve-out consolidated financial statements include the Paycheck Protection Program ("PPP") loans and 50% of a related party loan (see Note 11, *Debt*), for additional information. To fund short-term cash flow shortages, ph Pharma Ltd advanced funds to the Company during the years ended December 31, 2021 and 2020. These advances were short-term in nature and, as the amounts due were typically paid within 30 days, no interest was charged. Average amounts to pH Pharma Ltd for the years ended December 31, 2021 and 2020 were $5.6 million and $7.7 million, respectively. These advances are not expected to be paid back by the Company and have been excluded from the historical financial statements.

Earnings per share data has not been presented in the Financial Statements because the Company does not operate, historically, as a separate legal entity with its own capital structure.

The majority of the Company's operating expenses related to research and development ("R&D"). R&D expenses directly related to the Company were entirely attributed to the Company in the accompanying carve-out consolidated financial statements. R&D salaries, wages and benefits were allocated to the Company using methodologies based on the proportionate share of R&D expenses for the PHP-303 and PH-1 ADC Platform programs compared to the R&D expenses for pH Pharma Ltd as a whole. The Company also received services and support from other functions of pH Pharma Ltd. The Company's operations are dependent upon the ability of these other functions to provide these services and support. The costs associated with these services and support were allocated to the Company using methodologies based on the proportionate share of R&D expenses for the PHP-303 and PH-1 ADC Platform programs compared to the total R&D expenses and certain administrative expenses for pH Pharma Ltd as a whole. These allocated costs were primarily related to corporate administrative expenses, non-R&D employee related costs, including salaries and other benefits, for corporate and shared employees, and other expenses for shared assets for the following functional groups: information technology, legal, accounting and finance, human resources, facilities, and other corporate and infrastructural services. These allocated costs were primarily recorded as R&D expenses and general and administrative ("G&A") expenses in the statements of operations and comprehensive loss.

The Company believes the assumptions and allocations underlying the carve-out financial statements were reasonable and appropriate under the circumstances.

Segment Information

The Company currently operates in one business segment focused on the discovery and development of innovative therapies for multiple therapeutic areas. The Company is not organized by market and is managed and operated as one business. The Company does not operate any separate lines of business or separate business entities with respect to its programs. Accordingly, the Company does not accumulate discrete financial information with respect to separate service lines, and thus there is one reporting unit.

Going Concern

Since inception, the Company has incurred significant net losses. The Company incurred net losses of $8.3 million and $13.3 million for the years ended December 31, 2021 and 2020, respectively. The Company has not been capitalized with sufficient funding to conduct its operations. Since the Company has no available cash or credit facilities, the Company is dependent upon pH Pharma Ltd and its affiliates to provide services and funding to support the operations of the Company until, at least, such time as external financing is obtained. The Company expects to incur significant expenses and operating losses for the foreseeable future as it continues its efforts to identify product candidates and seek regulatory approvals within its portfolio.

The Company will need additional financing to fund its ongoing activities. The Company may raise this additional funding through the sale of equity, debt financings or other capital sources, including potential

collaborations with other companies or other strategic transactions and funding under government contracts. The Company may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms, or at all. If the Company is unable to raise capital when needed or on attractive terms, the Company could be forced to delay, reduce or eliminate certain of the Company's research and development programs. There can be no assurances that other sources of financing would be available or that pH Pharma Ltd will continue to financially support the Company's operations. Due to these uncertainties, there is substantial doubt about the Company's ability to continue as a going concern.

The accompanying carve-out consolidated financial statements have been prepared assuming that the Company will continue as a going concern. The carve-out consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or classification of liabilities that might result from the outcome of the uncertainties discussed above.

The Company's future operations are highly dependent on a combination of factors, including (i) the timely and successful completion of additional financing as discussed above; (ii) the success of its research and development programs; (iii) the development of competitive therapies by other biotechnology and pharmaceutical companies; (iv) the Company's ability to manage growth of the organization; (v) the Company's ability to protect its proprietary technology; and ultimately (vi) regulatory approval and market acceptance of the Company's product candidates.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent liabilities at the date of the financial statements, and the reported amounts of expenses during the reporting periods. Actual results could differ from those estimates. Significant items subject to such estimates and assumptions, are used for, but not limited to, include stock-based compensation, the valuation of pH Pharma Ltd common stock and the allocation of certain pH Pharma Ltd expenses in the carve-out consolidated financial statements.

Additionally, the Company assessed the impact the COVID-19 pandemic has had on its operations and financial results as of December 31, 2021. The Company's analysis was informed by the facts and circumstances as they were known to the Company. This assessment considered the impact COVID-19 may have on financial estimates and assumptions that affect the reported amounts of assets and liabilities and revenue and expenses. Based on this assessment, the Company's operations have not been significantly impacted, with the exception of research and development expense decreasing during the year ended December 31, 2021 in part due to delays in the Company's ongoing and planned research activities due to COVID-19. Research and development expense during the year ended December 31, 2021 also decreased in part as the Company reduced its average headcount from 33 to 21 employees primarily as a result of scaling back its clinical activities as a result of COVID-19. The Company's results of operations in future periods may be negatively impacted by unknown future impacts from COVID-19.

Fair Value Measurements

The Company records certain liability balances under the fair value measurements as defined by the Financial Accounting Standards Board ("FASB") guidance. Current FASB fair value guidance emphasizes that fair value is a market-based measurement, not an entity-specific measurement. Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability. As a basis for considering market participant assumptions in fair value measurements, current FASB guidance establishes a fair value hierarchy that distinguishes between market participant assumptions based on market data obtained from sources independent of the reporting entity (observable inputs that are classified within Levels 1 and 2 of the hierarchy) and the reporting entity's own assumptions that market participants assumptions would use in pricing assets or liabilities (unobservable inputs classified within Level 3 of the hierarchy).

Level 1 inputs utilize quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access at measurement date. Level 2 inputs are inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs may include quoted prices for similar assets and liabilities in active markets, as well as inputs that are observable for the asset or liability (other than quoted prices), such as interest rates, foreign exchange rates, and yield curves that are observable at commonly quoted intervals. Level 3 inputs are unobservable inputs for the asset or liability, which is typically based on an entity's own assumptions, as there is little, if any, related market activity. In instances where the determination of the fair value measurement is based on inputs from different levels of the fair value hierarchy, the level in the fair value hierarchy within which the entire fair value measurement falls is based on the lowest level input that is significant to the fair value measurement in its entirety. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability.

Cash and cash equivalents

Cash equivalents include short-term, highly liquid instruments, consisting of money market accounts in the U.S.

Restricted Cash

The Company has a lease agreement for the premises it occupies in Palo Alto, California. A secured letter of credit in lieu of a lease deposit totaling $177,000 is secured by restricted cash in the same amount at December 31, 2021. The secured letter of credit will remain in place for the life of the related lease, expiring in March 2027 (see Note 8, *Commitments and Contingencies*). The Company also has established a restricted bank account to secure its credit cards in the amount of $60,000 at December 31, 2021 and 2020.

Concentration of credit risk

The Company maintains its cash and cash equivalent balances in the form of business checking accounts and money market accounts in the U.S., the balances of which, at times, may exceed federally insured limits. Exposure to credit risk is reduced by placing such deposits in high credit quality federally insured financial institutions.

The Company received all of its total revenue through a grant from a government organization during the year ended December 31, 2021.

Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation. Depreciation is calculated over the estimated useful lives of the respective assets, which range from two to five years, or the lesser of the related initial term of the lease or useful life for leasehold improvements.

The initial cost of property and equipment consists of its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use. Expenditures incurred after the assets have been put into operation, such as repairs and maintenance, are charged to expense in the period in which the costs are incurred. Major replacements, improvements, and additions are capitalized in accordance with Company policy.

Leases

The Company enters into lease agreements for office and laboratory facilities and accounts for them in accordance with FASB Accounting Standards Codification ("ASC") Topic 840, Leases. These leases are classified as operating leases. Rent expense is recognized on a straight-line basis over the term of the lease and,

accordingly, the Company records the difference between cash rent payments and the recognition of rent expense as a deferred rent liability. Incentives granted under the Company's facilities leases, including allowances to fund leasehold improvements, are deferred and are recognized as adjustments to rental expense on a straight-line basis over the term of the lease. No incentives were recognized in the years ended December 31, 2021 and 2020.

Revenue recognition

The Company's revenue is primarily generated through grants from government organizations.

The Company recognizes revenue from these contracts during the period that the research and development services occur, as qualifying expenses are incurred or conditions of the grant are met. The Company concluded that payments received under these grants represent conditional, nonreciprocal contributions, as described in ASC 958, Not-for-Profit Entities, and that the grants are not within the scope of ASC 606, Revenue from Contracts with Customers, as the organizations providing the grants do not meet the definition of a customer. Qualifying expenses are recognized when incurred as research and development expenses. Revenues and related expenses are presented gross in the statements of operations as the Company determined it is the principal in conducting the research and development services and the primary obligor relative to the research and development services it performed as lead technical expert. Expenses for grants are tracked by using a project code specific to the grant, and the employees also track hours worked by using the project code.

Research and Development Expenses

Research and development costs are expensed as incurred. Research and development expenses consist primarily of costs related to personnel, including salaries and other personnel related expenses, contract manufacturing and supply, consulting fees, and the cost of facilities and support services used in drug development. Assets acquired that are used for research and development and have no future alternative use are expensed as in-process research and development.

Share-based Compensation

The Company recognizes share-based compensation expense for grants under pH Pharma Ltd's equity plan for employees. At December 31, 2021, pH Pharma Ltd had one share-based employee compensation plan, which is described more fully in Note 5, *Share-Based Compensation*.

The Company applies the fair value method of measuring share-based compensation, which requires measurement of the cost of employee services received in exchange for an award of equity instruments based on the grant-date fair value of the award.

Income Taxes

Deferred income taxes reflect future tax effects of temporary differences between the tax and financial reporting basis of the Company's assets and liabilities measured using enacted tax laws and statutory tax rates applicable to the periods when the temporary differences will affect taxable income. When necessary, deferred tax assets are reduced by a valuation allowance, to reflect realizable value, and all deferred tax balances are reported as long-term on the balance sheet. Accruals are maintained for uncertain tax positions, as necessary. As of December 31, 2021 and 2020, the Company had $27.8 million and $23.3 million, respectively, of valuation allowances against its deferred tax assets.

The Company uses a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken, or expected to be taken, in a tax return. The Corporation has elected to treat interest and penalties related to income taxes, to the extent they arise, as a component of income taxes.

ASC 740 prescribes the accounting for uncertainty in income taxes recognized in the financial statements. The Company regularly assesses the outcome of potential examinations in each of the taxing jurisdictions when determining the adequacy of the amount of unrecognized tax benefit recorded. The Company recognizes tax benefits from uncertain tax positions only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such positions are then measured based on the largest benefit which is more likely than not to be realized upon ultimate settlement. As of December 31, 2021 and 2020, the Company had no uncertain tax positions.

Common stock valuations

The Company is required to periodically estimate the fair value of pH Pharma Ltd.'s common stock with the assistance of an independent third-party valuation firm when issuing stock options and computing the estimated stock-based compensation expense. The assumptions underlying these valuations represented management's best estimates, which involved inherent uncertainties and the application of significant levels of management judgment.

In order to determine the fair value of pH Pharma Ltd.'s common stock, the Company considered, among other items, previous transactions involving the sale of pH Pharma Ltd.'s securities, the pH Pharma Ltd.'s business, financial condition and results of operations, economic and industry trends, the market performance of comparable publicly traded companies, and the lack of marketability of pH Pharma Ltd.'s common stock.

Risks and Uncertainties

The Company relies, and expects to continue to rely, on a small number of vendors to provide services, supplies and materials related to its research and development programs. These research and development programs could be adversely affected by a significant interruption in these services or the availability of materials.

Recently Issued Accounting Standards

In February 2016, the FASB issued Accounting Standards Update ("ASU") 2016-02, Leases (Topic 842), as amended ("ASU 2016-02"), with guidance regarding the accounting for and disclosure of leases. ASU 2016-02 requires lessees to recognize the liabilities related to all leases, including operating leases, with a term greater than 12 months on the balance sheet. This update also requires lessees and lessors to disclose key information about their leasing transactions. This standard is effective for annual reporting periods beginning after December 15, 2021, and interim periods within annual periods beginning after December 15, 2022. Early adoption is permitted. This standard is effective for the Company beginning January 1, 2022. The Company will utilize the practical expedients available under ASU No. 2016-02, including, electing the package of practical expedients to not reassess prior conclusions related to contracts containing leases, lease classification and initial direct costs. In addition, the Company will apply the accounting policy election to not separate lease and non-lease components and the accounting policy election to not apply the recognition requirement under ASU No. 2016-02 to leases with a term of twelve months or less. The Company will not have a material cumulative adjustment to the statement of operations and comprehensive loss on January 1, 2022. The Company expects a material adjustment to the balance sheet in connection with the recognition of right-of-use assets and lease liabilities on January 1, 2022.

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments-Credit Losses: Measurement of Credit Losses on Financial Instruments ("ASU 2016-13"). ASU 2016-13 requires measurement and recognition of expected credit losses for financial assets. In April 2019, the FASB issued clarification to ASU 2016-13 within ASU 2019-04, Codification Improvements to Topic 326, Financial Instruments-Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments, or ASU 2016-13. The guidance is effective for fiscal years beginning after December 15, 2022. The Company is currently assessing the potential impact of adopting ASU 2016- 02 on its financial statements and financial statement disclosures.

In December 2019, the FASB issued ASU 2019-12, Simplifying the Accounting for Income Taxes ASU 2019-12. ASU 2019-12 eliminates certain exceptions related to the approach for intra-period tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. It also clarifies and simplifies other aspects of the accounting for income taxes. This guidance is effective for fiscal years beginning after December 15, 2021, and interim periods within fiscal years beginning after December 15, 2022. Early adoption is permitted. The Company is currently assessing the potential impact of adopting ASU 2016-02 on its financial statements and financial statement disclosures.

3. Property and Equipment

Property and equipment consist of the following:

	December 31,	
	2021	2020
Lab equipment	$ 682,209	$ 683,332
Leasehold improvements	8,519	20,807
Computer equipment	11,584	11,584
Computer software	3,725	3,725
Gross property and equipment	$ 706,037	$ 719,448
Less: accumulated depreciation	(325,427)	(183,330)
Net property and equipment	$ 380,610	$ 536,118

Depreciation expense, including an allocation of depreciation expense from pH Pharma Ltd, was $176,649 and $157,216 for the years ended December 31, 2021 and 2020, respectively.

4. Accrued Expenses

Accrued expenses consist of the following:

	December 31,	
	2021	2020
Contract research and development costs	$ 486,795	$ 562,147
Employee compensation costs	157,248	81,687
Income tax	107,474	48,984
Other liabilities	238,968	93,826
Total accrued expenses and other current liabilities	$ 990,485	$ 786,644

Included in contract research and development costs as of December 31, 2021 and 2020 was the liability related to the upfront payment received from VennDC, LLC (“Venn”). See Note 9, Collaborative and Licensing Agreements, for additional information.

5. Share-Based Compensation

The pH Pharma Ltd Stock Option Plan (the “Plan”) provides for the granting of stock options to purchase common stock in pH Pharma Ltd to employees, directors, advisors, and consultants at a price to be determined by pH Pharma Ltd’ Board of Directors. The Plan is intended to encourage ownership of stock by employees and consultants of the Company and to provide additional incentives for them to promote the success of pH Pharma Ltd’ business. Under the provisions of the Plan, stock options will generally have a term of 7 years. The Board of

Directors of pH Pharma Ltd, or its committee, is responsible for determining the individuals to be granted stock options, the number of stock options each individual will receive, the stock option price per share, and the exercise period of each stock option. Stock options granted pursuant to the Plan generally vest on the second-year anniversary date of grant and may be exercised in whole or in part for 100% of the shares vested at any time after the date of grant.

The Black-Scholes option pricing model is used when estimating the grant date fair value for stock-based awards. Use of a valuation model requires management to make certain assumptions with respect to selected model inputs. Expected volatility was based on the historical volatility of a publicly traded set of peer companies of pH Pharma Ltd. The expected life was equal to the contractual life of the stock option. The risk-free interest rate is based on U.S. Treasury, zero-coupon issues with a remaining term equal to the expected life assumed at the date of grant. Forfeitures related to equity-based compensation awards are recognized as they occur, and the Company reverses any previously recognized compensation cost associated with forfeited awards in the period the forfeiture occurs.

The fair value of the stock options granted is estimated on the date of grant using a Black-Scholes option pricing model with the following weighted average assumptions:

	Year Ended December 31,	
	2021	2020
Expected volatility	76.6%	78.0%
Risk-free interest rate	1.15%	1.63%
Expected term (in years)	7.0	7.0
Expected dividend yield	0%	0%

For the years ended December 31, 2021 and 2020, the share-based compensation expense allocated to the Company was $4,890 and $0.9 million, respectively. The following table summarizes information related to share-based compensation expense recognized in the statements of operations and comprehensive loss related to the equity awards:

	Year Ended December 31,	
	2021	2020
Research and development	$ —	$ 757,773
General and administrative	4,890	153,450
Total equity-based compensation	$ 4,890	$ 911,223

6. Fair Value of Financial Instruments

The Company's financial assets and liabilities are measured at fair value and classified within the fair value hierarchy which is defined as follows:

- Level 1 — Quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.
- Level 2 — Inputs other than quoted prices in active markets that are observable for the asset or liability, either directly or indirectly.
- Level 3 — Inputs that are unobservable for the asset or liability.

As of December 31, 2021 and 2020, the Company did not have any assets or liabilities that were recorded at fair value on a recurring basis.

The Company believes the carrying amounts of its cash and cash equivalents, related party loan and debt approximate their fair values due to their near-term maturities.

7. Related Party Transactions and Shared Service Costs

Transactions entered into between the Company and pH Pharma Ltd were included within the carve-out consolidated financial statements and are considered related party transactions and have been adjusted to Equity within the balance sheets and statements of cash flows as they represent an investment to the Company. The components of the net transfers from pH Pharma Ltd as of December 31, 2021 and 2020 are as follows:

	Year Ended December 31,	
	2021	2020
Corporate allocations		
Research and development	$ 2,055,839	$ 4,435,515
Selling, general and administrative	447,506	1,105,727
Accounts payable and general financing activities	3,925,492	7,692,408
Net increase in contributions from member	$ 6,428,837	$ 13,233,650

8. Commitments and Contingencies

Operating leases

In December 2016, the Company entered into a 39-month sublease for laboratory and office facilities in Menlo Park, California. Base rent for this sublease was approximately $16,000 monthly with annual escalations of 3%. The Company vacated this facility in March 2020.

In October 2019, the Company entered into a 24-month sublease for laboratory and office facilities in South San Francisco, California. Base rent for this sublease was approximately $66,000 monthly with annual escalations of 3%. The Company vacated this facility in October 2021.

In October 2021, the Company entered into a lease for laboratory and office facilities in Palo Alto, California that expires in March 2027 with a five-year renewal option and opened a secured letter of credit with a third-party financial institution in lieu of a security deposit for $177,000. Base rent for this sublease is approximately $89,000 monthly with annual escalations of 3%.

Rent expense, including an allocation of costs from pH Pharma Ltd, for the years ended December 31, 2021 and 2020 was $0.9 million and $1.0 million, respectively.

As of December 31, 2021, the minimum obligations under non-cancelable operating leases are as follows:

	Operating Lease
2022	$ 955,777
2023	1,102,758
2024	1,135,841
2025	1,169,916
2026	1,205,014
Thereafter	205,321
Total future minimum lease payments	$ 5,774,627

There were no commitments under capital leases for the years ended December 31, 2021 and 2020.

Bayer Acquisition Agreement

In March 2017, pH Pharma, Inc. entered into an assignment, license, development and commercialization agreement (the "Bayer Acquisition Agreement") with Bayer, to acquire from Bayer all right, title and interest in and to PHP-303, including each and every invention and any priority rights relating to its patents.

Upon entering into the Bayer Acquisition Agreement, pH Pharma, Inc. made an upfront payment, and the Company has agreed to pay certain development and regulatory milestones and future royalties. Royalties will be payable on a licensed product-by-licensed product and country-by-country basis until the later of ten years after the first commercial sale of such licensed product in such country and expiration of the last patent covering such licensed product in such country that would be sufficient to prevent generic entry.

Either party may terminate the Bayer Acquisition Agreement upon prior written notice for the other party's material breach that remains uncured for a specified period of time or insolvency. Bayer agreed not to assert any Bayer intellectual property rights that were included in the scope of the Bayer Acquisition Agreement against the Company.

Legal proceedings

The Company is not currently a party to any material legal proceedings. At each reporting date, the Company evaluates whether a potential loss amount or a potential range of loss is probable and reasonably estimable under the provisions of the authoritative guidance that addresses accounting for contingencies. The Company expenses the costs related to its legal proceedings as incurred.

9. Collaborative and Licensing Agreements

Venn License Agreement

In December 2019, a collaboration and license agreement (the "License Agreement") was entered into with Venn to pursue research and development of certain payload and linker technologies that are useful for the development of antibody-drug conjugates. This collaboration was expected to allow Venn to further develop and commercialize such antibody-drug conjugates developed under the collaboration. Under the collaboration agreement with Venn, the Company received a $400,000 upfront payment and was expected to be eligible to receive reimbursement of costs and expenses incurred, certain development and regulatory milestone payments, royalties and commercial milestone payments with respect to licensed products for each product. Milestone payments were expected to be payable following the achievement of certain development, regulatory and commercial milestone events in each product, up to an aggregate of $107.1 million per product. Royalty payments were expected to be based on net sales of licensed products on a licensed product-by-licensed product basis. The initial term of the research collaboration was expected to be three years. During the years ended December 31, 2021 and 2020, the Company did not recognize any revenue related to the upfront payment as it was not probable that a significant reversal in the amount of cumulative revenue recognized would not occur. In addition, no reimbursement of costs and expenses incurred, and no other payments (for development and regulatory milestones, royalties, and commercial milestones with respect to licensed products for each product) were received by the Company during the years ended December 31, 2021 and 2020, as none of the performance obligations were satisfied by the Company. During the years ended December 31, 2021 and 2020, the Company recorded a liability to accrued expenses of $400,000 related to the upfront payment. See Note 13, *Subsequent Events*, for additional information.

10. Grant Revenue

Government grants

Department of Defense, US Army Medica Research Acquisition Activity – this grant is for work on a COVID-19 therapeutic with a potential of $4.0 million, awarded in stages starting in January 2021 and with potential stages

running through September 2026. For the years ended December 31, 2021 and 2020, grant revenue of approximately $528,000 and $0, respectively, was recognized from this grant. Approximately $3.5 million in funding remains available for this grant at December 31, 2021.

11. Debt

PPP loans pursuant to the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act")

In April 2020, the Company received proceeds from a loan in the amount of $367,770 from Silicon Valley Bank ("SVB"), as lender, pursuant to the PPP of the CARES Act. The loan originally matured on April 20, 2022 and bore interest at a rate of 1.0% per annum. The loan was evidenced by a promissory note dated April 20, 2020, which contained customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. The loan may have been prepaid by the Company at any time prior to maturity, with no prepayment penalties.

In April 2021, the Company received proceeds from another loan in the amount of $492,375 from SVB, as lender, pursuant to the PPP of the CARES Act. The loan originally matured on April 15, 2026 and bore interest at a rate of 1.0% per annum. The loan was evidenced by a promissory note dated April 15, 2021, which contained customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. The loan may have been prepaid by the Company at any time prior to maturity, with no prepayment penalties.

The application for these funds required the Company to certify in good faith that the then-current economic uncertainty made the loan requests necessary to support the ongoing operations of the Company.

This certification further required the Company to take into account its current business activity and its ability to access other sources of liquidity sufficient to support ongoing operations in a manner that was not significantly detrimental to the business. The Company made this good faith assertion based upon various factors, including the degree of uncertainty introduced to the capital markets as a result of the COVID-19 pandemic and the Company's dependency on its ability to raise capital to fund ongoing operations.

All or a portion of the loans may have been forgiven by the U.S. Small Business Administration ("SBA") upon application by the Company upon documentation of expenditures in accordance with the SBA requirements. Under the CARES Act, loan forgiveness was available for the sum of eligible and documented payroll costs, covered rent payments, covered mortgage interest and covered utilities during the eight-week period beginning on the date of loan approval. If, despite the Company's good-faith belief that given the circumstances the Company satisfied all eligibility requirements for the loans, the Company was later determined to have violated any applicable laws or regulations or it is otherwise determined that the Company was ineligible to receive the loans, the Company may have been required to repay the loans in their entirety and/or be subject to additional penalties. In the event the loans, or any portion thereof, were forgiven pursuant to the PPP, the amounts forgiven would be applied to outstanding principal.

The Company used all proceeds from the loans to retain employees, maintain payroll and make lease, rent and utility payments. Under the terms of the loans, the Company may have been eligible for full or partial loan forgiveness. The Company applied for forgiveness on the loan dated April 20, 2020 and the loan plus accrued interest was forgiven in full on April 30, 2021. The Company applied for forgiveness on the loan dated April 15, 2021 and the loan plus accrued interest was forgiven in full on October 5, 2021. The Company recorded a gain on extinguishment of debt in the amount of $866,332 for the forgiveness of the loans plus accrued interest.

The Company has accounted for the loans as a debt instrument in accordance with ASC 470, Debt. At December 31, 2021, there was no amount outstanding under these loans. At December 31, 2020, there was $367,770 outstanding under these loans, of which $285,566 was classified as current.

Related Party Loan

In August 2021, the Company received proceeds from a loan in the amount of approximately $1.5 million from its chairman and founding chief executive officer. The loan, which was scheduled to mature on July 31, 2022, bears interest at a rate of 1.0% per annum. The loan is evidenced by a promissory note dated August 6, 2021, which contains customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. The loan may be prepaid by the Company at any time prior to maturity with no prepayment penalties.

In January 2022, the Company entered into an employment agreement with its chairman and founding chief executive officer. As part of the agreement, the Company agreed to repay $0.5 million of the $1.5 million outstanding under the related party loan upon closing of the Ignyte transaction. The remaining $1.0 million plus accrued interest will be repaid pursuant to the discretion of the Company's Board of Directors.

At December 31, 2021, there was $1.5 million outstanding under this loan.

12. Income Taxes

The components of (loss) income before income taxes are as follows:

	Year Ended December 31,	
	2021	2020
Domestic	$ 978,993	$ 163,899
Foreign	(9,244,326)	(13,506,587)
Total	$ (8,265,333)	$ (13,342,688)

	Year Ended December 31,	
Components of Tax Expense	**2021**	**2020**
Current — Federal	$ 16,761	$ —
Current — State	66,306	5,965
Current — Foreign	—	—
Total current	83,067	5,965
Deferred — Federal	$ (1,000)	$ —
Deferred — State	—	—
Deferred — Foreign	—	—
Total deferred	(1,000)	—
(Benefit from) provision for income taxes	$ 82,067	$ 5,965
Effective income tax rate	(1.01)%	(0.04)%

The effective tax rate of the Company's provision (benefit) for income taxes differs from the federal statutory rate for the years ended December 31, 2021 and 2020 as follows:

	Year Ended December 31,	
	2021	2020
Tax computed at federal statutory rate	21.00%	21.00%
State Tax Provision/(Benefit) net of federal benefit	(0.73)%	(0.08)%
Earnings in jurisdictions taxed at rates different from the statutory U.S. federal tax rate	4.43%	0.86%

	Year Ended December 31,	
	2021	2020
Permanent differences	2.19%	(0.02)%
Foreign tax credits	2.15%	1.25%
Change in valuation allowance	(30.04)%	(23.04)%
Income Tax Provision/(Benefit)	(1.01)%	(0.04)%

The effective income tax rate is based upon the income for the year, the composition of the income in Korea, and adjustments, if any, for the potential tax consequences, benefits or resolutions of audits or other tax contingencies. The corporate income tax rate in Korea is more than our income tax rate in the United States. Our effective tax rate for the fiscal years 2021 and 2020 differed from the U.S. Federal statutory rate of 21.0% primarily due to our composition of Korean earnings. In addition, a portion of the deferred tax expense includes items not included in the carve -out financials but carryover with the company as part of the transaction.

Deferred income taxes reflect the net tax effects of (a) temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, and (b) operating losses and tax credit carryforwards. Significant components of deferred tax assets (liabilities) at December 31, 2021 and 2020 are as follows:

	December 31,	
	2021	2020
Deferred tax assets		
Federal Net Operating Loss	$ 9,000	$ 76,000
State Net Operating Loss	—	—
Foreign Net Operating Loss	27,414,000	23,026,000
Foreign Tax Credits	428,000	250,000
Accruals	43,000	—
Charitable contributions	—	1,000
Total deferred tax assets	27,894,000	23,353,000
Deferred tax liabilities		
Share-based compensation	—	—
Depreciation	(87,000)	(113,000)
Total deferred tax liabilities	(87,000)	(113,000)
Total net deferred tax assets	27,807,000	23,240,000
Less: valuation allowance	(27,842,000)	(23,276,000)
Net deferred tax assets	$ (35,000)	$ (36,000)

Deferred income taxes reflect future tax effects of temporary differences between the tax and financial reporting basis of the Corporation's assets and liabilities measured using enacted tax laws and statutory tax rates applicable to the periods when the temporary differences will affect taxable income. When necessary, deferred tax assets are reduced by a valuation allowance, if based on the weight of available positive and negative evidence, it is more likely than not that some portion or all the deferred tax assets will not be realized. As of December 31, 2021, the Company has $27.8 million in valuation allowance against its deferred tax assets. As of December 31, 2020, the Company has $23.3 million of valuation allowance against its deferred tax asset.

At December 31, 2021, the Company has U.S net operating losses ("NOL") carryforwards of $42,000, with an indefinite carryforward, state NOL carryforwards of $0 and Korean NOL carryforwards of $109 million which will expire at various dates beginning in 2025. As of December 31, 2021 the Company has Korean tax credit carryforwards of $428,000 which will expire at various dates beginning in 2024.

The Korean NOLs are historical NOLs generated in years prior to the carve-out financials.

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change income and taxes may be limited. In general, an "ownership change" generally occurs if there is a cumulative change in the Company's ownership by "5-percent shareholders" that exceeds 50 percentage points over a rolling three-year period. There has not been an ownership change

As of December 30, 2021, we have not provided taxes on undistributed earnings of our foreign subsidiaries, which may be subject to foreign withholding taxes upon repatriation, as we consider these earnings indefinitely reinvested. Our indefinite reinvestment determination is based on the future operational and capital requirements of our domestic and foreign operations. We expect our international cash and cash equivalents and marketable securities will continue to be used for our foreign operations and therefore do not anticipate repatriating these funds. As of December 31, 2021, it is not practical to calculate the unrecognized deferred tax liability on these earnings due to the complexities of the utilization of foreign tax credits and other tax assets.

Uncertain Tax Positions

ASC 740 prescribes the accounting for uncertainty in income taxes recognized in the financial statements. We regularly assess the outcome of potential examinations in each of the taxing jurisdictions when determining the adequacy of the amount of unrecognized tax benefit recorded. We recognize tax benefits from uncertain tax positions only if it more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such positions are then measured based on the largest benefit which is more likely than not to be realized upon ultimate settlement. As of December 31, 2021 the company has no uncertain tax positions.

The Company and its subsidiaries file income tax returns in the U.S., California and Korea. The Company is subject to U.S. federal, state and local income tax examinations by tax authorities for years 2018 through present. The tax years which remain subject to examination by tax authorities in Korea, as of December 31, 2021, include years 2016 through present. Carryforward attributes that were generated in earlier periods remain subject to examination to the extent the year in which they were used or will be used remains open for examination.

13. Subsequent Events

The Company evaluated subsequent events through June 17, 2022, the date on which these carve-out consolidated financial statements were available to be issued, to ensure that these carve-out consolidated financial statements include appropriate disclosure of events both recognized in the carve-out consolidated financial statements as of December 31, 2021 and events which occurred subsequently but were not recognized in the Financial Statements.

Employment Agreements

In January 2022, the Company entered into an employment agreement with its chairman and founding chief executive officer. The effective date of the employment agreement was February 1, 2022, and is subject to the completion of the business combination with Ignyte. As part of the agreement, the Company agreed to repay its chairman and founding chief executive officer $1.5 million in forwent salary over a period of four years. In addition, as part of the agreement, the Company agreed to repay $0.5 million of the $1.5 million outstanding under the related party loan upon closing of the Ignyte transaction. The remaining $1.0 million plus accrued interest will be repaid pursuant to the discretion of the Company's Board of Directors. Further, the employment agreement provides for the payment of success fees in connection with future business or corporate development transactions (licensing, product development and acquisitions).

In March 2022, the Company entered into an employment agreement with our chief operating officer which is subject to the completion of the business combination with Ignyte. The agreement provides for confirmation of Peak Bio's previously agreed upon success fee payment upon consummation of the business combination with Ignyte in the amount of $250,000 and the payment of success fees in connection with future business or corporate development transactions (licensing, product development and acquisitions).

Spin-Off

In March 2022, the Spin-Off was completed, prior to the completion of the Business Combination Agreement with Ignyte, with Peak Bio retaining the PHP-303 and PH-1 ADC Platform platforms. See Note 1, *Description of the Business*, for additional information.

Venn

In April 2022, the Company entered into an agreement with its chairman and founding chief executive officer, in consideration of the repayment to be made by the Company's chairman and founding chief executive officer to settle a contractual obligation for the upfront payment received by the Company associated with the License Agreement with Venn. Per the agreement, the Company agreed to repay its chairman and founding chief executive officer $400,000, with interest to accrue on the unpaid principal balance at the rate of 1% per annum. The timing of the repayment will be determined and pursuant to the discretion of the Company's Board of Directors.

In May 2022, the Company's chairman and founding chief executive officer repaid to Venn the $400,000 upfront payment.

In May 2022, the License Agreement was terminated.

Ignyte Acquisition Corp (Ignyte)

In April 2022, the Company entered into a business combination agreement with Ignyte and Korean Sub, a wholly owned subsidiary of Ignyte. The business combination agreement is subject to the satisfaction or waiver of certain closing conditions. As a result of the proposed business combination, Ignyte will be renamed to Peak Bio, Inc. (or "New Peak"), and will acquire a 100% of the equity interests in Peak Bio. In addition, immediately after the completion of the business combination, certain investors, including our chairman and founding chief executive officer, have agreed to subscribe for and purchase an aggregate of up to $25.5 million of common stock of New Peak. The consolidated company is expected to receive gross proceeds of at least $20 million at the closing of the transaction (assuming the maximum redemptions are effected by shareholders of Ignyte) and will operate under the New Peak management team. The boards of directors of both Ignyte and Peak Bio have approved the proposed transaction. Completion of the transaction, which is expected in the fourth quarter of 2022, is subject to approval of Ignyte's shareholders, delivery of minimum cash amounts previously described in the definitive proxy statement, filed with the SEC on October 7, 2022, and the satisfaction or waiver of certain other customary closing conditions.

Financing

In May 2022, the Company entered into an agreement with a certain investor in which the investor purchased an aggregate of less than 100,000 shares of Peak Bio Common Stock for aggregate gross proceeds of approximately $1.2 million.

PEAK BIO
BALANCE SHEETS

	September 30, 2022 (unaudited)	December 31, 2021
Assets		
Current assets		
Cash and cash equivalents	$ 437,401	$ 205,477
Deferred offering costs	655,142	—
Prepaid expenses and other current assets	169,452	253,669
Total current assets	1,261,995	459,146
Property and equipment, net	392,201	380,610
Restricted cash	237,000	237,000
Operating lease right-of-use asset	3,619,389	—
Noncurrent assets	1,500	1,500
Total assets	$ 5,512,085	$ 1,078,256
Liabilities and deficit		
Current liabilities		
Accounts payable	$ 2,123,108	$ 301,469
Accrued expenses	907,963	990,485
Operating lease liability, current	695,001	—
Related party loans	1,923,044	1,500,000
Total current liabilities	5,649,116	2,791,954
Operating lease liability, net of current portion	3,438,857	—
Long-term convertible notes payable	1,337,220	—
Long-term related party loan	500,000	—
Deferred tax liability	18,000	35,000
Other noncurrent liabilities	28,503	186,570
Total liabilities	10,971,696	3,013,524
Commitments and contingencies (Note 9)		
Deficit		
Common stock, par value of $0.3868 per share; 300,000,000 shares authorized; 8,347,469 and no shares issued and outstanding as of September 30, 2022 and December 31, 2021, respectively	3,228,627	—
Additional paid-in capital	1,451,986	—
Accumulated net parent investment in Peak Bio	—	(2,023,711)
Accumulated deficit	(10,200,044)	—
Accumulated other comprehensive income	59,820	88,443
Total deficit	(5,459,611)	(1,935,268)
Total liabilities and deficit	$ 5,512,085	$ 1,078,256

See accompanying notes to the carve-out condensed consolidated financial statements.

PEAK BIO
STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(Unaudited)

	Nine Months Ended September 30,	
	2022	2021
Revenue		
Grant revenue	$ 346,413	$ 497,578
Total revenue	346,413	497,578
Operating expenses		
Research and development	3,443,147	5,759,896
General and administrative	3,543,018	1,663,734
Total operating expenses	6,986,165	7,423,630
Loss from operations	(6,639,752)	(6,926,052)
Other income (expense)		
Interest expense	(2,514)	(3,694)
Fair value adjustment to long-term convertible notes payable	(87,220)	—
Other income	342,281	367,770
Total other income, net	252,547	364,076
Loss before income tax benefit (expense)	(6,387,205)	(6,561,976)
Income tax benefit (expense)	51,000	(63,000)
Net loss	$ (6,336,205)	$ (6,624,976)
Net loss per common share, basic and diluted	$ (0.76)	$ (0.80)
Weighted-average number of shares used in computing net loss per common share, basic and diluted	8,301,253	8,283,613
Other comprehensive loss:		
Foreign currency translation	(28,623)	503,344
Total comprehensive loss	$ (6,364,828)	$ (6,121,632)

See accompanying notes to the carve-out condensed consolidated financial statements.

PEAK BIO
STATEMENTS OF EQUITY (DEFICIT)
(Unaudited)

For the Nine Months Ended September 30, 2021	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Accumulated Net Parent Investment In Peak Bio	Accumulated Other Comprehensive (Loss) Income	Accumulated Deficit	Total Equity (Deficit)
Balance, December 31, 2020	—	$ —	$ —	$ (159,972)	$ (433,270)	$ —	$ (593,242)
Net investment from parent	—	—	—	7,261,348	—	—	7,261,348
Foreign currency translation	—	—	—	—	503,344	—	503,344
Net loss	—	—	—	(6,624,976)	—	—	(6,624,976)
Balance, September 30, 2021	—	$ —	$ —	$ 476,400	$ 70,074	$ —	$ 546,474

For the Nine Months Ended September 30, 2022	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Accumulated Net Parent Investment In Peak Bio	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Deficit
Balance, December 31, 2021	—	$ —	$ —	$ (2,023,711)	$ 88,443	$ —	$ (1,935,268)
Issuance of common stock	63,856	24,525	1,127,638	—	—	—	1,152,163
Net investment from parent	—	—	—	1,363,974	—	—	1,363,974
Foreign currency translation	—	—	—	—	(28,623)	—	(28,623)
Consummation of Spin-Off	8,283,613	3,204,102	—	2,760,172		(5,964,274)	—
Share-based compensation	—	—	324,348	—	—	—	324,348
Net loss	—	—	—	(2,100,435)	—	(4,235,770)	(6,336,205)
Balance, September 30, 2022	8,347,469	$ 3,228,627	$ 1,451,986	$ —	$ 59,820	$ (10,200,044)	$ (5,459,611)

See accompanying notes to the carve-out condensed consolidated financial statements.

PEAK BIO
STATEMENTS OF CASH FLOWS
(Unaudited)

	Nine Months Ended September 30,	
	2022	2021
Cash flows from operating activities		
Net loss	$ (6,336,205)	$ (6,624,976)
Adjustment to reconcile net loss to net cash used in operating activities		
Share-based compensation	432,362	(11,612)
Depreciation	122,525	134,920
Gain on extinguishment of debt	—	(371,591)
Fair value adjustment on convertible note	87,220	—
Amortization of right-of-use lease asset	570,103	—
Changes in operating assets and liabilities		
Prepaid expenses and other current assets	84,218	40,211
Deferred offering costs	(655,142)	—
Accounts payable	1,821,639	(271,942)
Accrued expenses	317,476	87,722
Operating lease liabilities	(55,634)	—
Other noncurrent liabilities and deferred tax liability	(175,066)	—
Net cash used in operating activities	(3,786,504)	(7,017,268)
Cash flows from investing activities		
Purchase of property and equipment	(128,454)	(7,540)
Net cash used in investing activities	(128,454)	(7,540)
Cash flows from financing activities		
Proceeds from net shareholder contributions	1,250,298	5,109,098
Proceeds from long-term convertible notes payable	1,250,000	492,375
Proceeds from related party loans	523,044	1,500,000
Proceeds from issuance of common stock	1,152,163	—
Net cash provided by financing activities	4,175,505	7,101,473
Net increase in cash and cash equivalents	260,547	76,665
Effect of exchange rate changes on cash and cash equivalents	(28,623)	503,344
Cash, cash equivalents and restricted cash, beginning of period	442,477	409,867
Cash, cash equivalents and restricted cash, end of period	$ 674,401	$ 989,876
Components of cash, cash equivalents and restricted cash		
Cash and cash equivalents	437,401	929,876
Restricted cash	237,000	60,000
Total cash, cash equivalents and restricted cash	$ 674,401	$ 989,876
Non-cash investing and financing activities:		
Operating lease liabilities arising from obtaining right-of-use assets	$ 4,189,492	$ —
Related party loan entered into for settlement of accrued expenses	$ 400,000	$ —

See accompanying notes to the carve-out condensed consolidated financial statements.

PEAK BIO

NOTES TO CARVE-OUT CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Description of the Business

The accompanying carve-out condensed consolidated financial statements and notes have been prepared to include certain assets and liabilities of pH Pharma Co., Ltd (now Peak Bio Co., Ltd. or "Peak Bio") (sometimes referred to as "pH Pharma Ltd" prior to the Spin-Off described below), on the basis described within Note 2, *Summary of Significant Accounting Policies*, with certain wholly-owned subsidiaries of Peak Bio, that were included following the Spin-Off as follows: Ph Pharma, Inc, as well as certain assets and liabilities allocated to Peak Bio, including the PHP- 303 and PH-1 ADC Platform programs. These are collectively referred to herein as the Balance Sheets, Statements of Operations and Comprehensive Loss, Statements of Deficit and Statements of Cash Flows of Peak Bio ("Peak Bio" or the "Company").

The Spin-Off was completed on March 1, 2022, prior to the execution of the Business Combination Agreement with Ignyte Acquisition Corp ("Ignyte"), with Peak Bio retaining the PHP-303 and PH-1 ADC Platform. Historically and throughout the periods presented, the PHP-303 and PH-1 ADC Platform programs have been owned by pH Pharma Co., Ltd and its subsidiaries (prior to the change of its name to Peak Bio Co., Ltd.). The PHP-303 and PH-1 ADC Platform programs have historically operated as a part of pH Pharma Co., Ltd and not as a separate stand-alone entity or group.

Peak Bio is a clinical-stage biotechnology company focused on discovering, developing and delivering innovative therapies for multiple therapeutic areas. The Company has established a portfolio of potential therapies for the aging population. The Company's pipeline includes the PHP-303 program for genetic disease, liver disease and inflammation, specifically for Alpha-1 antitrypsin deficiency (AATD) and acute respiratory distress syndrome (ARDS) including COVID-19. The Company's pipeline also includes PH-1 ADC Platform for oncology.

2. Summary of Significant Accounting Policies

Basis of Presentation Prior to April 1, 2022

The accompanying carve-out condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") for interim financial information and are comprised of the Company's activities distributed across multiple legal entities of pH Pharma Ltd. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to instructions, rules and regulations prescribed by the United States Securities and Exchange Commission ("SEC"). Accordingly, they do not include all of the information and disclosures required by U.S. GAAP for complete financial statements. The Company believes that the disclosures provided herein are adequate to make the information presented not misleading when these carve-out condensed consolidated financial statements are read in conjunction with the December 31, 2021 carve-out consolidated audited financial statements. In the opinion of management, the accompanying carve-out condensed consolidated financial statements include all adjustments, consisting solely of normal recurring adjustments, considered necessary for a fair presentation of the Company's financial position, results of operations, comprehensive loss, and cash flows for the periods presented. Intercompany accounts and transactions are eliminated in consolidation.

These carve-out condensed consolidated financial statements have been extracted from the accounting records of pH Pharma Ltd. The historical results of operations, financial position, and cash flows may not be indicative of what such results of operations, financial position, and cash flows would have been had the Company been a separate standalone entity, nor are they indicative of what the results of operations, financial position and cash flows may be in the future.

The accompanying carve-out condensed consolidated financial statements reflect assets, liabilities, revenue, and expenses that are directly attributable to the Company, including the assets, liabilities, revenue and expenses of the PHP-303 and PH-1 ADC Platform programs. The assets and liabilities excluded from the accompanying carve-out condensed consolidated financial statements consist of:

- Cash provided by pH Pharma Ltd to fund operations. pH Pharma Ltd uses a centralized approach to cash management and financing of its operations. Accordingly, only the cash, cash equivalents and restricted cash residing in pH Pharma, Inc., a 100% owned U.S. subsidiary of pH Pharma Ltd, has been reflected in these carve-out condensed consolidated financial statements.
- Other assets and liabilities at pH Pharma Ltd which are not directly related to, or are not specifically owned by, or are not commitments, of the Company, including fixed assets and leases shared by the Company with other businesses of pH Pharma Ltd.
- Most of the pH Pharma Ltd's third-party debt and the related interest expense have not been allocated to these carve-out condensed consolidated financial statements as the Company was not the legal obligor of the third-party debt and pH Pharma Ltd's borrowings were not directly attributable to the Company. The carve-out condensed consolidated financial statements include the Paycheck Protection Program ("PPP") loans and 50% of a related party loan (see Note 13, *Debt*), for additional information. To fund short-term cash flow shortages, pH Pharma Ltd advanced funds to the Company during the nine months ended September 30, 2022 and years ended December 31, 2021 and 2020. These advances were short-term in nature and, as the amounts due were typically paid within 30 days, no interest was charged. These advances to pH Pharma Ltd for the nine months ended September 30, 2022 and the years ended December 31, 2021 and 2020 were $853,000, $5.6 million and $7.7 million, respectively. These advances are not expected to be paid back by the Company and have been excluded from the historical financial statements.

The majority of the Company's operating expenses related to research and development ("R&D"). R&D expenses directly related to the Company were entirely attributed to the Company in the accompanying carve-out condensed consolidated financial statements. R&D salaries, wages and benefits were allocated to the Company using methodologies based on the proportionate share of R&D expenses for the PHP-303 and PH-1 ADC Platform programs compared to the R&D expenses for pH Pharma Ltd as a whole. The Company also received services and support from other functions of pH Pharma Ltd. The Company's operations are dependent upon the ability of these other functions to provide these services and support. The costs associated with these services and support were allocated to the Company using methodologies based on the proportionate share of R&D expenses for the PHP-303 and PH-1 ADC Platform programs compared to the total R&D expenses and certain administrative expenses for pH Pharma Ltd as a whole. These allocated costs were primarily related to corporate administrative expenses, non-R&D employee related costs, including salaries and other benefits, for corporate and shared employees, and other expenses for shared assets for the following functional groups: information technology, legal, accounting and finance, human resources, facilities, and other corporate and infrastructural services. These allocated costs were primarily recorded as R&D expenses and general and administrative ("G&A") expenses in the condensed consolidated statements of operations and comprehensive loss.

The Company believes the assumptions and allocations underlying the carve-out condensed consolidated financial statements were reasonable and appropriate under the circumstances.

Basis of Presentation After April 1, 2022

The Spin-Off resulted in Peak Bio retaining the PHP-303 and PH-1 ADC Platform programs. Historically and throughout the periods presented, the PHP-303 and PH-1 ADC Platform programs have been owned by pH Pharma Co., Ltd and its subsidiaries (prior to the change of its name to Peak Bio Co., Ltd.). The PHP-303 and PH-1 ADC Platform programs have historically operated as a part of pH Pharma Co., Ltd and not as a separate stand-alone entity or group. The Spin-Off resulted in Peak Bio retaining approximately 90% of the equity outstanding in pH Pharma Co., Ltd., consisting of 8,283,613 shares of common stock and 693,000 stock options.

As of April 1, 2022, as a result of the Spin-Off, the Company concluded that all the assets and liabilities of the newly created Peak Bio legal entity were contributed by the parent company pH Pharma Ltd. No other assets or liabilities were considered to be attributable to Peak Bio or that would be transferred to Peak Bio upon the completion of the Business Combination, eliminating the necessity to allocate a portion of pH Pharma Ltd.'s assets and liabilities to Peak Bio on a carve-out basis. Therefore, there was no longer a need to allocate assets and liabilities, as well as expenses, from the parent company for the carve-out condensed consolidated financial statements.

The accompanying financial statements have been prepared in conformity with U.S. GAAP. Any reference in these notes to applicable guidance is meant to refer to U.S. GAAP, as found in the Accounting Standards Codification, or ASC, and Accounting Standards Update, or ASU, of the Financial Accounting Standards Board, or FASB.

The Company's carve-out condensed consolidated financial statements for the nine months ended September 30, 2022 include the accounts of Peak Bio Co., Ltd. and its subsidiary, Peak Bio CA., Inc. All intercompany balances and transactions have been eliminated in consolidation.

Segment Information

The Company currently operates in one business segment focused on the discovery and development of innovative therapies for multiple therapeutic areas. The Company is not organized by market and is managed and operated as one business. The Company does not operate any separate lines of business or separate business entities with respect to its programs. Accordingly, the Company does not accumulate discrete financial information with respect to separate service lines, and thus there is one reporting unit.

Going Concern

Since inception, the Company has incurred significant net losses. The Company incurred net losses of $6.3 million and $6.6 million for the nine months ended September 30, 2022 and 2021, respectively. The Company has not been capitalized with sufficient funding to conduct its operations. The Company expects to incur significant expenses and operating losses for the foreseeable future as it continues its efforts to identify product candidates and seek regulatory approvals within its portfolio.

The Company will need additional financing to fund its ongoing activities. The Company may raise this additional funding through the sale of equity, debt financings or other capital sources, including potential collaborations with other companies or other strategic transactions and funding under government contracts. The Company may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms, or at all. If the Company is unable to raise capital when needed or on attractive terms, the Company could be forced to delay, reduce or eliminate certain of the Company's research and development programs. There can be no assurances that other sources of financing would be available or that pH Pharma Ltd will continue to financially support the Company's operations. Due to these uncertainties, there is substantial doubt about the Company's ability to continue as a going concern.

The accompanying carve-out condensed consolidated financial statements have been prepared assuming that the Company will continue as a going concern. The carve-out condensed consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or classification of liabilities that might result from the outcome of the uncertainties discussed above.

The Company's future operations are highly dependent on a combination of factors, including (i) the timely and successful completion of additional financing as discussed above; (ii) the success of its research and development programs; (iii) the development of competitive therapies by other biotechnology and pharmaceutical companies; (iv) the Company's ability to manage growth of the organization; (v) the Company's ability to protect its proprietary technology; and ultimately (vi) regulatory approval and market acceptance of the Company's product candidates.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent liabilities at the date of the financial statements, and the reported amounts of expenses during the reporting periods. Actual results could differ from those estimates. Significant items subject to such estimates and assumptions, are used for, but not limited to, include stock-based compensation, the fair value of the convertible promissory notes, the valuation of pH Pharma Ltd common stock and the allocation of certain pH Pharma Ltd expenses in the carve-out condensed consolidated financial statements.

Additionally, the Company assessed the impact the COVID-19 pandemic has had on its operations and financial results as of September 30, 2022. The Company's analysis was informed by the facts and circumstances as they were known to the Company. This assessment considered the impact COVID-19 may have on financial estimates and assumptions that affect the reported amounts of assets and liabilities and revenue and expenses. Based on this assessment, the Company's operations have not been significantly impacted. However, the Company's results of operations in future periods may be negatively impacted by unknown future impacts from COVID-19.

Fair Value Measurements

The Company records certain liability balances under the fair value measurements as defined by the Financial Accounting Standards Board ("FASB") guidance. Current FASB fair value guidance emphasizes that fair value is a market-based measurement, not an entity-specific measurement. Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability. As a basis for considering market participant assumptions in fair value measurements, current FASB guidance establishes a fair value hierarchy that distinguishes between market participant assumptions based on market data obtained from sources independent of the reporting entity (observable inputs that are classified within Levels 1 and 2 of the hierarchy) and the reporting entity's own assumptions that market participants assumptions would use in pricing assets or liabilities (unobservable inputs classified within Level 3 of the hierarchy).

Level 1 inputs utilize quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access at measurement date. Level 2 inputs are inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs may include quoted prices for similar assets and liabilities in active markets, as well as inputs that are observable for the asset or liability (other than quoted prices), such as interest rates, foreign exchange rates, and yield curves that are observable at commonly quoted intervals. Level 3 inputs are unobservable inputs for the asset or liability, which is typically based on an entity's own assumptions, as there is little, if any, related market activity. In instances where the determination of the fair value measurement is based on inputs from different levels of the fair value hierarchy, the level in the fair value hierarchy within which the entire fair value measurement falls is based on the lowest level input that is significant to the fair value measurement in its entirety. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability.

Cash and Cash Equivalents

Cash equivalents include short-term, highly liquid instruments, consisting of money market accounts in the U.S. and South Korea.

Restricted Cash

The Company has a lease agreement for the premises it occupies in Palo Alto, California. A secured letter of credit in lieu of a lease deposit totaling $177,000 is secured by restricted cash in the same amount at September 30, 2022 and December 31, 2021. The secured letter of credit will remain in place for the life of the

related lease, expiring in March 2027 (see Note 8, *Leases*). The Company also has established a restricted bank account to secure its credit cards in the amount of $60,000 at September 30, 2022 and December 31, 2021.

Concentration of Credit Risk

The Company maintains its cash and cash equivalent balances in the form of business checking accounts and money market accounts in the U.S. and South Korea, the balances of which, at times, may exceed federally insured limits. Exposure to credit risk is reduced by placing such deposits in high credit quality federally insured financial institutions.

The Company received all of its total revenue through a grant from a government organization during the nine months ended September 30, 2022 and 2021.

Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation. Depreciation is calculated over the estimated useful lives of the respective assets, which range from two to five years, or the lesser of the related initial term of the lease or useful life for leasehold improvements.

The initial cost of property and equipment consists of its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use. Expenditures incurred after the assets have been put into operation, such as repairs and maintenance, are charged to expense in the period in which the costs are incurred. Major replacements, improvements, and additions are capitalized in accordance with Company policy.

Revenue Recognition

The Company's revenue is primarily generated through grants from government organizations.

The Company recognizes revenue from these contracts during the period that the research and development services occur, as qualifying expenses are incurred or conditions of the grant are met. The Company concluded that payments received under these grants represent conditional, nonreciprocal contributions, as described in ASC 958, "Not-for-Profit Entities", and that the grants are not within the scope of ASC 606, "Revenue from Contracts with Customers", as the organizations providing the grants do not meet the definition of a customer. Qualifying expenses are recognized when incurred as research and development expenses. Revenues and related expenses are presented gross in the statements of operations as the Company determined it is the principal in conducting the research and development services and the primary obligor relative to the research and development services it performed as lead technical expert. Expenses for grants are tracked by using a project code specific to the grant, and the employees also track hours worked by using the project code.

Research and Development Expenses

Research and development costs are expensed as incurred. Research and development expenses consist primarily of costs related to personnel, including salaries and other personnel related expenses, contract manufacturing and supply, consulting fees, and the cost of facilities and support services used in drug development. Assets acquired that are used for research and development and have no future alternative use are expensed as in-process research and development.

Share-based Compensation

The Company recognizes share-based compensation expense for grants under pH Pharma Ltd's equity plan for employees. At September 30, 2022, pH Pharma Ltd had one share-based employee compensation plan, which is described more fully in Note 5, *Share-Based Compensation*.

The Company applies the fair value method of measuring share-based compensation, which requires measurement of the cost of employee services received in exchange for an award of equity instruments based on the grant-date fair value of the award.

Determination of the Fair Value of Convertible Notes

The Company has elected the fair value option for the accounting for the convertible promissory notes issued in 2022. Fair value adjustments to the convertible notes are included in other income (expenses) in the condensed consolidated statements of operations and comprehensive loss.

- The fair value of the initial closing of our convertible promissory notes in 2022 was determined to be equal to the proceeds of $1.25 million on issuance.
- The fair value of the convertible promissory notes as of September 30, 2022 was determined using a scenario-based valuation method based on the closing of the Business Combination Agreement. The Company assumed a 70%-75% probability of closing the Business Combination Agreement and 25%-30% probability of not closing at issuance of the convertible promissory notes. The Company assumed an 80% probability of closing the Business Combination Agreement and 20% probability of not closing at September 30, 2022.

Net Loss Per Share

As a result of the Spin-Off, Peak Bio had 8,283,613 shares of common stock outstanding as of March 1, 2022. As such these shares are being utilized for the calculation of basic net loss per share for the periods prior to the Spin-Off.

The Company has reported losses since inception and has computed basic net loss per share attributable to common stockholders by dividing net loss attributable to common stockholders by the weighted-average number of common shares outstanding for the period, without consideration for potentially dilutive securities. The Company computes diluted net loss per common share after giving consideration to all potentially dilutive common shares, including options to purchase common stock, outstanding during the period determined using the treasury-stock and if-converted methods, except where the effect of including such securities would be antidilutive. Because the Company has reported net losses since inception, these potential common shares have been anti-dilutive and basic and diluted loss per share have been the same.

The following table sets forth the potentially dilutive securities that have been excluded from the calculation of diluted net loss per share because to include them would be anti-dilutive (in common stock equivalent shares):

	Nine Months Ended September 30,	
	2022	2021
Stock options to purchase common stock	685,800	659,000

Income Taxes

Deferred income taxes reflect future tax effects of temporary differences between the tax and financial reporting basis of the Company's assets and liabilities measured using enacted tax laws and statutory tax rates applicable to the periods when the temporary differences will affect taxable income. When necessary, deferred tax assets are reduced by a valuation allowance, to reflect realizable value, and all deferred tax balances are reported as long-term on the balance sheet. Accruals are maintained for uncertain tax positions, as necessary.

The Company uses a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken, or expected to be taken, in a tax return. The Corporation has elected to treat interest and penalties related to income taxes, to the extent they arise, as a component of income taxes.

ASC 740, “Income Taxes”, prescribes the accounting for uncertainty in income taxes recognized in the financial statements. The Company regularly assesses the outcome of potential examinations in each of the taxing jurisdictions when determining the adequacy of the amount of unrecognized tax benefit recorded. The Company recognizes tax benefits from uncertain tax positions only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such positions are then measured based on the largest benefit which is more likely than not to be realized upon ultimate settlement.

Common Stock Valuations

Prior to the Spin-Off, the Company was required to periodically estimate the fair value of pH Pharma Ltd.’s common stock with the assistance of an independent third-party valuation firm when issuing stock options and computing the estimated stock-based compensation expense. The assumptions underlying these valuations represented management’s best estimates, which involved inherent uncertainties and the application of significant levels of management judgment.

In order to determine the fair value of pH Pharma Ltd.’s common stock, the Company considered, among other items, previous transactions involving the sale of the pH Pharma Ltd.’s securities, the pH Pharma Ltd.’s business, financial condition and results of operations, economic and industry trends, the market performance of comparable publicly traded companies, and the lack of marketability of the pH Pharma Ltd.’s common stock.

Risks and Uncertainties

The Company relies, and expects to continue to rely, on a small number of vendors to provide services, supplies and materials related to its research and development programs. These research and development programs could be adversely affected by a significant interruption in these services or the availability of materials.

Recently Adopted Accounting Standards

Leases

In February 2016, the FASB issued Accounting Standards Update (“ASU”) No. 2016-02, “Leases” (“ASC 842”) to enhance the transparency and comparability of financial reporting related to leasing arrangements. Under this new lease standard, most leases are required to be recognized on the balance sheet as right-of-use assets and lease liabilities. Disclosure requirements have been enhanced with the objective of enabling financial statement users to assess the amount, timing, and uncertainty of cash flows arising from leases. Prior to January 1, 2019, U.S. GAAP did not require lessees to recognize assets and liabilities related to operating leases on the balance sheet. The new standard establishes a right-of-use model (“ROU”) that requires a lessee to recognize a ROU asset and corresponding lease liability on the balance sheet for all leases with a term longer than 12 months. Leases will be classified as finance or operating, with classification affecting the pattern and classification of expense recognition in the income statement as well as the reduction of the right of use asset.

The Company has adopted the standard effective January 1, 2022 and has chosen to use the effective date as our date of initial application. Prior to January 1, 2022, the Company accounted for leases under ASC 840, “Accounting for Leases”. Consequently, financial information will not be updated and the disclosures required under the new standard will not be provided for dates and periods prior to January 1, 2022. The new standard provides a number of optional practical expedients in transition. The Company has elected to apply the ‘package of practical expedients’ which allow us to not reassess (i) whether existing or expired arrangements contain a lease, (ii) the lease classification of existing or expired leases, or (iii) whether previous initial direct costs would qualify for capitalization under the new lease standard. The Company has also elected to apply (i) the practical expedient which allows us to not separate lease and non-lease components, for new leases entered into after adoption and (ii) the short-term lease exemption for all leases with an original term of less than 12 months, for

purposes of applying the recognition and measurements requirements in the new standard. For the impact to the Company's consolidated financial statement upon adoption of the new leasing standard, see Note 8 to our carve-out condensed consolidated financial statements.

At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on specific facts and circumstances, the existence of an identified asset(s), if any, and the Company's control over the use of the identified asset(s), if applicable. Operating lease liabilities and their corresponding right-of-use assets are recorded based on the present value of future lease payments over the expected lease term. The interest rate implicit in lease contracts is typically not readily determinable. As such, the Company will utilize the incremental borrowing rate, which is the rate incurred to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment. As of the ASC 842 effective date, the Company's incremental borrowing rate is approximately 10.0% based on the remaining lease term of the applicable leases.

The Company has elected to combine lease and non-lease components as a single component. Operating leases are recognized on the balance sheet as ROU lease assets, lease liabilities current and lease liabilities non-current. Fixed rents are included in the calculation of the lease balances while variable costs paid for certain operating and pass-through costs are excluded. Lease expense is recognized over the expected term on a straight-line basis.

Income Taxes

In December 2019, the FASB issued ASU 2019-12, "Simplifying the Accounting for Income Taxes" ("ASU 2019-12"). ASU 2019-12 eliminates certain exceptions related to the approach for intra-period tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. It also clarifies and simplifies other aspects of the accounting for income taxes. This guidance is effective for fiscal years beginning after December 15, 2021, and interim periods within fiscal years beginning after December 15, 2022. The adoption of ASU No. 2019-12 on January 1, 2022 did not have a material impact on the carve-out condensed consolidated financial statements.

Grant Revenue

In November 2021, the FASB issued ASU 2021-10, Government Assistance (Topic 832), which requires business entities to disclose information about transactions with a government entity that are accounted for by applying a grant or contribution model by analogy. For transactions within scope, the new standard requires the disclosure of information about the nature of the transaction, including significant terms and conditions, as well as the amounts and specific financial statement line items affected by the transaction. The new guidance is effective for annual reporting periods beginning after December 15, 2021. The Company adopted ASU 2021-10 in the first quarter of 2022. The adoption of this update did not have a material impact on the Company's financial statements and footnote disclosures.

Recently Issued Accounting Standards

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments-Credit Losses: Measurement of Credit Losses on Financial Instruments" ("ASU 2016-13"). ASU 2016-13 requires measurement and recognition of expected credit losses for financial assets. In April 2019, the FASB issued clarification to ASU 2016-13 within ASU 2019-04, "Codification Improvements to Topic 326, Financial Instruments-Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments". The guidance is effective for fiscal years beginning after December 15, 2022. The Company is currently assessing the potential impact of adopting ASU 2016-13 on its financial statements and financial statement disclosures.

In August 2020, the FASB issued ASU 2020-06, "Debt — Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for

Convertible Instruments and Contracts in an Entity's Own Equity" ("ASU 2020-06"), which simplifies the accounting for convertible instruments by removing major separation models required under current U.S. GAAP. ASU 2020-06 removes certain settlement conditions that are required for equity contracts to qualify for the derivative scope exception, which will permit more equity contracts to qualify for such exception and simplifies the diluted earnings per share calculation in certain areas. ASU 2020-06 is effective for public business entities that meet the definition of a SEC filer, excluding entities eligible to be smaller reporting companies as defined by the SEC, for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. The Company is currently assessing the potential impact of adopting ASU 2020-06 on its financial statements and financial statement disclosures.

3. Property and Equipment

Property and equipment consist of the following:

	September 30, 2022	December 31, 2021
Lab equipment	$ 682,209	$ 682,209
Leasehold improvements	41,578	8,519
Computer equipment	106,979	11,584
Computer software	3,725	3,725
Gross property and equipment	$ 834,491	$ 706,037
Less: accumulated depreciation	(442,290)	(325,427)
Net property and equipment	$ 392,201	$ 380,610

Depreciation expense, including an allocation of depreciation expense from pH Pharma Ltd, was $122,525 and $134,920 for the nine months ended September 30, 2022 and 2021, respectively.

4. Accrued Expenses

Accrued expenses consist of the following:

	September 30, 2022	December 31, 2021
Contract research and development costs	$ —	$ 486,795
Employee compensation costs	376,881	157,248
Professional fees	430,319	—
Income tax	73,270	107,474
Other liabilities	27,493	238,968
Total accrued expenses	$ 907,963	$ 990,485

Included in contract research and development costs as of December 31, 2021 was the liability related to the upfront payment received from VennDC, LLC ("Venn"). See Note 10, *Collaborative and Licensing Agreements*, for additional information.

5. Share-Based Compensation

The pH Pharma Ltd Stock Option Plan (the "Plan") provides for the granting of stock options to purchase common stock in pH Pharma Ltd to employees, directors, advisors, and consultants at a price to be determined by

pH Pharma Ltd' Board of Directors. The Plan is intended to encourage ownership of stock by employees and consultants of the Company and to provide additional incentives for them to promote the success of pH Pharma Ltd's business. Under the provisions of the Plan, stock options will generally have a term of 7 years. The Board of Directors of pH Pharma Ltd, or its committee, is responsible for determining the individuals to be granted stock options, the number of stock options each individual will receive, the stock option price per share, and the exercise period of each stock option. Stock options granted pursuant to the Plan generally vest on the second-year anniversary date of grant and may be exercised in whole or in part for 100% of the shares vested at any time after the date of grant.

The Spin-Off was completed on March 1, 2022, prior to the execution of the Business Combination Agreement with Ignyte Acquisition Corp ("Ignyte"), with holders of stock options in the Plan retaining 693,000 stock options in the Company and 77,000 in the spun-out company pH Pharma Co., Ltd. Since this allocation of stock options was administrative in nature, it did not result in any incremental stock-based compensation expense under modification accounting.

The Black-Scholes option pricing model is used when estimating the grant date fair value for stock-based awards. Use of a valuation model requires management to make certain assumptions with respect to selected model inputs. Expected volatility was based on the historical volatility of a publicly traded set of peer companies of pH Pharma Ltd. The expected life was equal to the contractual life of the stock option. The risk-free interest rate is based on U.S. Treasury, zero-coupon issues with a remaining term equal to the expected life assumed at the date of grant. Forfeitures related to equity-based compensation awards are recognized as they occur, and the Company reverses any previously recognized compensation cost associated with forfeited awards in the period the forfeiture occurs.

The following table summarizes the stock option activity:

	Number of Options	Weighted-average exercise price per share	Weighted-average remaining contractual term (in years)	Aggregate intrinsic value
Outstanding, December 31, 2021	657,000	$ 15.18	4.1	$ —
Granted	135,000	$ 16.36		
Allocation of stock options in Spin-Off	(77,000)	$ 15.18		
Cancelled	(29,200)	$ 15.70		
Outstanding, September 30, 2022	685,800	$ 13.28	3.8	$890,401
Exercisable at September 30, 2022	617,000	$ 12.56	3.2	$890,401

The fair value of the stock options granted is estimated on the date of grant using a Black-Scholes option pricing model with the following weighted average assumptions:

	Nine Months Ended September 30,	
	2022	2021
Expected volatility	75.1%	76.6%
Risk-free interest rate	1.81%	1.15%
Expected term (in years)	7.0	7.0
Expected dividend yield	0%	0%

For the nine months ended September 30, 2022 and 2021, the share-based compensation expense allocated to the Company was $432,362 and $(11,612), respectively. As of September 30, 2022, there was $461,410 of unrecognized compensation cost related to unvested stock-based compensation arrangements that is expected to

be recognized over a weighted average period of 1.3 years. The following table summarizes information related to share-based compensation expense recognized in the condensed consolidated statements of operations and comprehensive loss related to the equity awards:

	Nine Months Ended September 30,	
	2022	2021
Research and development	$316,452	$ (2,463)
General and administrative	115,910	(9,149)
Total equity-based compensation	$432,362	$(11,612)

6. Fair Value of Financial Instruments

The Company's financial assets and liabilities are measured at fair value and classified within the fair value hierarchy which is defined as follows:

- Level 1 — Quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.
- Level 2 — Inputs other than quoted prices in active markets that are observable for the asset or liability, either directly or indirectly.
- Level 3 — Inputs that are unobservable for the asset or liability.

The Company believes the carrying amounts of its cash and cash equivalents and related party loan approximate their fair values due to their near-term maturities.

As of December 31, 2021, the Company did not have any assets or liabilities that were recorded at fair value on a recurring basis. The following table presents a roll-forward of the fair value of the convertible notes payable that will be measured at fair value on a recurring basis for which fair value is determined by Level 3 inputs as of September 30, 2022:

	Nine Months Ended September 30, 2022
Balance at beginning of the year	$ —
Issuance of convertible note	1,250,000
Fair value adjustments	87,220
Balance at end of the year	$ 1,337,220

Valuation techniques used to measure fair value maximize the use of relevant observable inputs and minimize the use of unobservable inputs. Our long-term note payable is classified within Level 3 of the fair value hierarchy because the fair value measurement is based, in part, on significant inputs not observed in the market.

From July through September 2022, the Company received proceeds from loans in the amount of $1.25 million from several lenders. We have elected to account for the loans at fair value. The Company determined the fair value of the loans using a scenario-based valuation method based on the closing of the Business Combination Agreement. The Company assumed a 70%-75% probability of closing the Business Combination Agreement and 25%-30% probability of not closing at issuance of the convertible promissory notes. The Company assumed an 80% probability of closing the Business Combination Agreement and 20% probability of not closing at September 30, 2022. This approach results in the classification of these securities as Level 3 of the fair value

hierarchy. For the nine months ended September 30, 2022, we recognized a $87,220 loss in the statements of operations and comprehensive loss as fair value adjustments to convertible note with respect to changes to the fair value of the note payable during the year.

There were no transfers among Level 1, Level 2 or Level 3 categories in the nine months ended September 30, 2022 and 2021.

7. Related Party Transactions and Shared Service Costs

Transactions entered into between the Company and pH Pharma Ltd were included within the carve-out condensed consolidated financial statements and are considered related party transactions and have been adjusted to Deficit within the condensed consolidated balance sheets and statements of cash flows as they represent an investment to the Company. The components of the net transfers from pH Pharma Ltd as of September 30, 2022 and 2021 are as follows:

	Nine Months Ended September 30,	
	2022	2021
Corporate allocations		
Research and development	$ 482,160	$ 1,720,094
Selling, general and administrative	72,345	393,556
Accounts payable and general financing activities	809,469	5,147,698
Net increase in investment from parent	$ 1,363,974	$ 7,261,348

On March 1, 2022, the Company and pH Pharma Ltd entered into an administrative services and facilities agreement whereby pH Pharma Ltd will perform services, functions and responsibilities for the Company. Under the agreement, the Company paid pH Pharma Ltd $100,000 per month through August 30, 2022 and will pay $15,000 from September 1, 2022 through February 28, 2023 based on the estimated value of the level of service to be performed. Additionally, the Company will pay pH Pharma Ltd $3,000 per month in lease payments. At September 30, 2022 the Company recorded a liability to accounts payable of $498,000 related to this agreement.

8. Leases

On January 1, 2022, the Company adopted ASC 842 using the modified retrospective transition approach allowed under ASU 2018-11 which releases companies from presenting comparative periods and related disclosures under ASC 842 (Note 2). The Company adopted the standard under the modified retrospective approach and the effective date is as of the initial application. Consequently, financial information was not updated, and the disclosures required under ASU 2016-02 are not provided for dates and periods prior to January 1, 2022. The Company is party to one operating lease for office and laboratory space. The Company's finance leases are immaterial both individually and in the aggregate. The Company has elected to apply the short-term lease exception to all leases of one year or less. As of September 30, 2022, this exception does not apply to any of the operating leases for office and laboratory space. Further, the Company has applied the guidance in ASC 842 to our corporate office and laboratory leases and have determined that these should be classified as operating leases. Consequently, as a result of the adoption of ASC 842, we recognized a ROU lease asset of approximately $4.2 million with a corresponding lease liability of approximately $4.4 million based on the present value of the minimum rental payments of such leases. In accordance with ASC 842, the beginning balance of the ROU lease asset was reduced by the existing deferred rent liability at inception of approximately $241,000. In the carve-out condensed consolidated balance sheet at September 30, 2022, the Company has a ROU asset balance of approximately $3.6 million and a current and non-current lease liability of approximately $0.7 million and $3.4 million, respectively, relating to the ROU lease asset.

In October 2019, the Company entered into a 24-month sublease for laboratory and office facilities in San Francisco, California. Base rent for this sublease was approximately $66,000 monthly with annual escalations of 3%. The Company vacated this facility in October 2021.

In October 2021, the Company entered into a lease for laboratory and office facilities in Palo Alto, California that expires in April 2027 with a five-year renewal option and opened a secured letter of credit with a third-party financial institution in lieu of a security deposit for $177,000. Base rent for this sublease is approximately $89,000 monthly with annual escalations of 3%.

Rent expense, including an allocation of costs from pH Pharma Ltd, for the nine months ended September 30, 2022 and 2021 was $0.9 million and $0.6 million, respectively.

Quantitative information regarding the Company's leases for the nine months ended September 30, 2022 is as follows:

	Nine Months Ended September 30, 2022
Operating cash flows paid for amounts included in the measurement of lease liabilities	$ 473,474
Operating lease liabilities arising from obtaining right-of-use assets	$4,189,492
Weighted-average remaining lease terms (years)	4.6
Weighted-average discount rate	10.0%

Future lease payments under noncancelable leases are as follows at September 30, 2022:

	Operating Lease
2022	$ 265,667
2023	1,086,579
2024	1,119,176
2025	1,152,752
2026	1,187,334
Thereafter	398,681
Total lease payments	$ 5,210,189
Less: imputed interest	(1,076,331)
Total lease liabilities	$ 4,133,858

As most of the Company's leases do not provide an implicit rate, the Company used its incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. The Company uses the incremental borrowing rate (discount rate) on January 1, 2022 for operating leases that commenced prior to that date.

9. Commitments and Contingencies

Bayer Acquisition Agreement

In March 2017, pH Pharma, Inc. entered into an assignment, license, development and commercialization agreement (the "Bayer Acquisition Agreement") with Bayer, to acquire from Bayer all right, title and interest in and to PHP-303, including each and every invention and any priority rights relating to its patents.

Upon entering into the Bayer Acquisition Agreement, pH Pharma, Inc. made an upfront payment, and the Company has agreed to pay certain development and regulatory milestones and future royalties. Royalties will be payable on a licensed product-by-licensed product and country-by-country basis until the later of ten years after the first commercial sale of such licensed product in such country and expiration of the last patent covering such licensed product in such country that would be sufficient to prevent generic entry.

Either party may terminate the Bayer Acquisition Agreement upon prior written notice for the other party's material breach that remains uncured for a specified period of time or insolvency. Bayer agreed not to assert any Bayer intellectual property rights that were included in the scope of the Bayer Acquisition Agreement against the Company.

Employment Agreements

In January 2022, the Company entered into an employment agreement with its founder and director. The effective date of the employment agreement was February 1, 2022, and is subject to the completion of the business combination with Ignyte. As part of the agreement, the Company agreed to repay its founder and director $1.5 million in forwent salary over a period of four years. In addition, as part of the agreement, the Company agreed to repay $0.5 million of the $1.5 million outstanding under the related party loan upon closing of the Ignyte transaction. The remaining $1.0 million plus accrued interest will be repaid pursuant to the discretion of the Company's Board of Directors. Further, the employment agreement provides for the payment of success fees in connection with future business or corporate development transactions (licensing, product development and acquisitions).

In March 2022, the Company entered into an employment agreement with its chief operating officer which is subject to the completion of the business combination with Ignyte. The agreement provides for confirmation of Peak Bio's previously agreed upon success fee payment upon consummation of the business combination with Ignyte in the amount of $250,000 and the payment of success fees in connection with future business or corporate development transactions (licensing, product development and acquisitions).

Legal proceedings

The Company is not currently a party to any material legal proceedings. At each reporting date, the Company evaluates whether a potential loss amount or a potential range of loss is probable and reasonably estimable under the provisions of the authoritative guidance that addresses accounting for contingencies. The Company expenses the costs related to its legal proceedings as incurred.

10. Collaborative and Licensing Agreements

Venn License Agreement

In December 2019, a collaboration and license agreement (the "License Agreement") was entered into with Venn to pursue research and development of certain payload and linker technologies that are useful for the development of antibody-drug conjugates. This collaboration was expected to allow Venn to further develop and commercialize such antibody-drug conjugates developed under the collaboration. Under the collaboration agreement with Venn, the Company received a $400,000 upfront payment and was expected to be eligible to receive reimbursement of costs and expenses incurred, certain development and regulatory milestone payments, royalties and commercial milestone payments with respect to licensed products for each product. Milestone payments were expected to be payable following the achievement of certain development, regulatory and commercial milestone events in each product, up to an aggregate of $107.1 million per product. Royalty payments were expected to be based on net sales of licensed products on a licensed product-by-licensed product basis. The initial term of the research collaboration was expected to be three years.

In April 2022, the Company entered into an agreement with its founder and director, in consideration of the repayment to be made by the Company's founder and director to settle a contractual obligation for the upfront payment received by the Company associated with the License Agreement with Venn. Per the agreement, the Company agreed to repay its founder and director $400,000, with interest to accrue on the unpaid principal balance at the rate of 1% per annum. The timing of the repayment will be determined and pursuant to the discretion of the Company's Board of Directors.

In May 2022, the Company's founder and director repaid to Venn the $400,000 upfront payment and the License Agreement was terminated.

During the nine months ended September 30, 2022 and 2021, the Company did not recognize any revenue related to the upfront payment as it was not probable that a significant reversal in the amount of cumulative revenue recognized would not occur. In addition, no reimbursement of costs and expenses incurred, and no other payments (for development and regulatory milestones, royalties, and commercial milestones with respect to licensed products for each product) were received by the Company during the nine months ended September 30, 2022 and 2021 as none of the performance obligations were satisfied by the Company. At December 31, 2021, the Company recorded a liability to accrued expenses of $400,000 related to the upfront payment. At September 30, 2022, the Company recorded a liability to related party loans of $400,000 related to this payment.

11. Common Stock

The Company is authorized to issue 300,000,000 shares of common stock with a par value of $0.3868 per share. The Spin-Off was completed on March 1, 2022, prior to the execution of the Business Combination Agreement with Ignyte Acquisition Corp ("Ignyte"), with Peak Bio retaining 8,283,613 shares of common stock.

In May 2022, the Company entered into an agreement with a certain investor in which the investor purchased an aggregate of 63,856 shares of Peak Bio Common Stock for aggregate gross proceeds of approximately $1.2 million.

12. Grant Revenue

Government grants

Department of Defense, US Army Medica Research Acquisition Activity – this grant is for work on a COVID-19 therapeutic with a potential of $4.0 million, awarded in stages starting in January 2021 and with potential stages running through September 2026. For the nine months ended September 30, 2022 and 2021, grant revenue of $346,413 and $497,578 was recognized from this grant. Approximately $3.1 million in funding remains available for this grant at September 30, 2022.

13. Debt

PPP loans pursuant to the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act")

In April 2020, the Company received proceeds from a loan in the amount of $367,770 from Silicon Valley Bank ("SVB"), as lender, pursuant to the PPP of the CARES Act. The loan originally matured on April 20, 2022 and bore interest at a rate of 1.0% per annum. The loan was evidenced by a promissory note dated April 20, 2020, which contained customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. The loan may have been prepaid by the Company at any time prior to maturity, with no prepayment penalties.

In April 2021, the Company received proceeds from another loan in the amount of $492,375 from SVB, as lender, pursuant to the PPP of the CARES Act. The loan originally matured on April 15, 2026 and bore interest at a rate of 1.0% per annum. The loan was evidenced by a promissory note dated April 15, 2021, which contained

customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. The loan may have been prepaid by the Company at any time prior to maturity, with no prepayment penalties.

The application for these funds required the Company to certify in good faith that the then-current economic uncertainty made the loan requests necessary to support the ongoing operations of the Company. This certification further required the Company to take into account its current business activity and its ability to access other sources of liquidity sufficient to support ongoing operations in a manner that was not significantly detrimental to the business. The Company made this good faith assertion based upon various factors, including the degree of uncertainty introduced to the capital markets as a result of the COVID-19 pandemic and the Company's dependency on its ability to raise capital to fund ongoing operations.

All or a portion of the loans may have been forgiven by the U.S. Small Business Administration ("SBA") upon application by the Company upon documentation of expenditures in accordance with the SBA requirements. Under the CARES Act, loan forgiveness was available for the sum of eligible and documented payroll costs, covered rent payments, covered mortgage interest and covered utilities during the eight-week period beginning on the date of loan approval. If, despite the Company's good-faith belief that given the circumstances the Company satisfied all eligibility requirements for the loans, the Company was later determined to have violated any applicable laws or regulations or it is otherwise determined that the Company was ineligible to receive the loans, the Company may have been required to repay the loans in their entirety and/or be subject to additional penalties. In the event the loans, or any portion thereof, were forgiven pursuant to the PPP, the amounts forgiven would be applied to outstanding principal.

The Company used all proceeds from the loans to retain employees, maintain payroll and make lease, rent and utility payments. Under the terms of the loans, the Company may have been eligible for full or partial loan forgiveness. The Company applied for forgiveness on the loan dated April 20, 2020 and the loan plus accrued interest was forgiven in full on April 30, 2021. The Company applied for forgiveness on the loan dated April 15, 2021 and the loan plus accrued interest was forgiven in full on October 5, 2021. The Company recorded a gain on extinguishment of debt in the amount of $371,000 in the second quarter of 2021 and approximately $495,000 in the fourth quarter of 2021 for the forgiveness of the loans plus accrued interest.

The Company has accounted for the loans as a debt instrument in accordance with ASC 470, "Debt". At September 30, 2022 and December 31, 2021, there was no amount outstanding under these loans.

Related Party Loans

In August 2021, the Company received proceeds from a loan in the amount of approximately $1.5 million from its founder and director. The loan, which was scheduled to mature on July 31, 2022, bears interest at a rate of 1.0% per annum. The loan is evidenced by a promissory note dated August 6, 2021, which contains customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. The loan may be prepaid by the Company at any time prior to maturity with no prepayment penalties.

In January 2022, the Company entered into an employment agreement with its founder and director. As part of the agreement, the Company agreed to repay $0.5 million of the $1.5 million outstanding under the related party loan upon closing of the Ignyte transaction. The remaining $1.0 million plus accrued interest will be repaid pursuant to the discretion of the Company's Board of Directors.

At September 30, 2022 and December 31, 2021, there was $1.5 million outstanding under this loan.

In April 2022, the Company entered into an agreement with its founder and director, in consideration of the repayment to be made by the Company's founder and director to settle a contractual obligation for the upfront payment received by the Company associated with the License Agreement with Venn. Per the agreement, the

Company agreed to repay its founder and director $400,000, with interest to accrue on the unpaid principal balance at the rate of 1% per annum. The timing of the repayment will be determined and pursuant to the discretion of the Company's Board of Directors.

In May 2022, the Company's founder and director repaid to Venn the $400,000 upfront payment and the License Agreement was terminated. At September 30, 2022, the Company recorded a liability to related party loans of $400,000 related to this payment.

In May 2022, the Company received proceeds from a loan in the amount of approximately $23,000 from an employee of the Company to settle certain payables of the Company. The loan accrues interest at 4% per annum and is to be repaid on October 31, 2022.

In September 2022, the Company received proceeds from a loan in the amount of $500,000 from one of its director nominees. The loan matures on the second anniversary and bear interest at a rate of 5.0% per annum. The loan was evidenced by a promissory note, which contains customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. The loan may be prepaid by the Company at any time prior to maturity without the consent of the lender. At September 30, 2022, there was $500,000 outstanding under this loan, which is recorded to long-term related party loan.

In November 2022, the related party loan entered into in September 2022 was amended resulting in the outstanding principal and accrued interest under the related party loan converting at a price of $10.00 per share into 50,273 shares of common stock along with a warrant to purchase 46,754 shares of common stock with an exercise price of $0.01 per share.

Long-term Convertible Notes Payable

From July through September 2022, the Company received proceeds from loans in the amount of $1.25 million from several lenders. The loans mature on the second anniversary and bear interest at a rate of 5.0% per annum. The loans were evidenced by promissory notes, which contain customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. The loans may not be prepaid by the Company at any time prior to maturity without the consent of the lender. The Company will provide for the conversion of the principal and interest of the loans into shares of common stock at fair market value and 25% warrant coverage on common stock prior to the consummation of the Business Combination. Warrant coverage is conditioned on closing of the Business Combination and will be exercisable after the closing of the Business Combination with an exercise price of $0.01.

Upon issuance, the Company elected the fair value option to account for the promissory notes, including the component related to accrued interest. At September 30, 2022, the fair value of the promissory notes was $1.3 million. We recognized a $87,220 loss in the condensed consolidated statements of operations and comprehensive loss as fair value adjustments on convertible notes with respect to changes to the fair value of the promissory notes for the nine months ended September 30, 2022.

In November 2022, the Company amended the terms to provide warrant coverage on the conversion of the loans from 25% to 93% warrant coverage on common stock. The outstanding principal and accrued interest under the promissory notes converted at a price of $10.00 per share into 126,306 shares of common stock along with warrants to purchase 117,465 shares of common stock with an exercise price of $0.01 per share.

14. Income Taxes

For interim financial reporting, the Company estimates its annual effective tax rate based on the projected income for its entire fiscal year and records a provision (benefit) for income taxes on a quarterly basis based on the estimated annual effective income tax rate. Our effective tax rate from continuing operations was 0.27% and

1.01% for the nine months ended September 30, 2022 and 2021 respectively. The Company recognized a tax benefit of $51,000 for the nine months ended September 30, 2022 and a tax expense of $63,000 for the nine months ended September 30, 2021.

15. Subsequent Events

The Company evaluated subsequent events through December 14, 2022, the date on which these carve-out condensed consolidated financial statements were available to be issued, to ensure that these carve-out condensed consolidated financial statements include appropriate disclosure of events both recognized in the carve-out condensed consolidated financial statements as of September 30, 2022 and events which occurred subsequently but were not recognized in the carve-out condensed consolidated financial statements.

Ignyte Acquisition Corp (Ignyte)

On November 1, 2022 (the "Closing Date"), the Company completed the transactions contemplated by that certain business combination agreement, dated as of April 28, 2022 (the "Business Combination Agreement"), by and among Ignyte, Ignyte Korea Co., Ltd., a corporation organized under the laws of the Republic of Korea ("Korean Sub"), and Peak Bio Co., Ltd. At the closing of the transactions, (i) the stockholders of Peak Bio transferred their respective shares of Peak Bio Common Stock to Korean Sub in exchange for shares of Ignyte Common Stock held by Korean Sub, and (ii) in the course of such share swap, Korean Sub distributed the shares of Peak Bio Common Stock to Ignyte in consideration of Ignyte Common Stock (which was in-turn delivered to the stockholders of Peak Bio as described in (i) above ((i) and (ii), collectively, the "Share Swap"). Upon consummation of the Share Swap, Peak Bio became a direct wholly-owned subsidiary of Ignyte. The transactions contemplated by the Business Combination Agreement are referred to herein as the "Business Combination."

On the Closing Date, a purchaser (the "Original Subscriber") purchased from the Company an aggregate of 50,000 shares of Ignyte Common Stock (the "Original PIPE Shares"), for a purchase price of $10.00 per share and an aggregate purchase price of $500,000, pursuant to a subscription agreement entered into effective as of April 28, 2020 (the "Original Subscription Agreement").

On the Closing Date, a number of additional purchasers (each, a "New Subscriber") purchased from the Company an aggregate of (i) 302,500 shares of Ignyte Common Stock (the "New PIPE Shares") and (ii) 281,325 warrants (the "PIPE Financing Warrants") to purchase shares of Ignyte Common Stock, at an exercise price of $0.01 per share, for a purchase price of $10.00 per share and an aggregate purchase price of $3,025,000, pursuant to separate subscription agreements entered into effective as of October 31, 2022 (each a "New Subscription Agreement"). The PIPE Financing Warrants are on terms substantially the same as the outstanding warrants that were included in the units issued in Ignyte's initial public offering, except that the new warrants are not redeemable, and the warrants shall be exercisable for one year.

On the Closing Date, a number of Peak Bio's lenders (each, a "Bridge Loan PIPE Subscriber" and together with the Original Subscriber and the New Subscribers, the "Subscribers") purchased from the Company an aggregate of (i) 176,579 shares of Ignyte Common Stock (the "Bridge Loan PIPE Shares" and together with the Original PIPE Shares and the New PIPE Shares, the "PIPE Shares") and (ii) 164,218 warrants (the "Bridge Loan PIPE Financing Warrants" and together with the PIPE Financing Warrants, the "PIPE Warrants") to purchase shares of Ignyte Common Stock, at an exercise price of $0.01 per share, in consideration for their agreement to cancel an aggregate principal amount of $1,750,000 and the interest accrued thereon in promissory notes evidencing the loans such lenders had extended to Peak Bio between July and September 2022, pursuant to separate subscription agreements entered into effective as of October 31, 2022 (each a "Bridge Loan PIPE Subscription Agreement" and together with the Original Subscription Agreement and the New Subscription Agreements, the "Subscription Agreements"). The Bridge Loan PIPE Financing Warrants are on terms substantially the same as the outstanding warrants that were included in the units issued in Ignyte's initial public offering, except that the new warrants are not redeemable, and the warrants shall be exercisable for one year.

Pursuant to the Subscription Agreements, the Company gave certain registration rights to the Subscribers with respect to the PIPE Shares and the PIPE Financing Warrants. The sale of the PIPE Shares and PIPE Financing Warrants was consummated concurrently with the Closing.

Upon the Closing, Ignyte as the registrant changed its name to "Peak Bio, Inc."

Convertible Note

On November 1, 2022, the Company issued a $1,512,500 convertible note. The convertible note accrues interest at a rate of 8% per annum and is payable on October 31, 2023, provided however that the Company agrees to make mandatory prepayments on this note (which shall first be applied to accrued interest and then to principal) from time to time in amounts equal to 15% of the gross proceeds received by the Company from any equity lines, forward purchase agreements or other equity financings consummated by Company prior to the maturity date.

On the maturity date, the note holder may, in its sole and absolute discretion, convert all or part of the principal and/or accrued interest of this convertible note into shares of common stock of the Company at a per share conversion price equal to 90% of the volume weighted average price of a share of common stock of the Company for the five trading days immediately prior to the maturity date.

White Lion Common Stock Purchase and Registration Rights Agreements

On November 3, 2022, the Company entered into the White Lion Purchase Agreement and White Lion RRA. Pursuant to the White Lion Purchase Agreement, the Company has the right, but not the obligation to require White Lion to purchase, from time to time, up to $100,000,000 in aggregate gross Purchase Price of newly issued shares of the Company's Common Stock, subject to certain limitations and conditions set forth in the White Lion Purchase Agreement. Capitalized terms used but not otherwise defined in this section shall have the meanings given to such terms by the White Lion Purchase Agreement and the White Lion RRA.

The Company is obligated under the White Lion Purchase Agreement and the White Lion RRA to file a registration statement with the SEC to register the Common Stock under the Securities Act of 1933, as amended (the "Securities Act"), for the resale by White Lion of shares of Common Stock that the Company may issue to White Lion under the White Lion Purchase Agreement.

Subject to the satisfaction of certain customary conditions including, without limitation, the effectiveness of a registration statement registering the shares issuable pursuant to the White Lion Purchase Agreement, the Company's right to sell shares to White Lion will commence on the effective date of the registration statement and extend until November 1, 2025. During such term, subject to the terms and conditions of the White Lion Purchase Agreement, the Company may notify White Lion when the Company exercises its right to sell shares (the effective date of such notice, a "Purchase Notice Date").

The number of shares sold pursuant to any such notice may not exceed (i) the lower of (a) the Purchase Notice Fixed Limit (described below) and (b) the product of (1) the Average Daily Trading Volume, and (2) the applicable Percentage Limit. The Purchase Notice Fixed Limit is $500,000 upon payment of the Initial Commitment Shares and can be increased in two tranches: (A) to $1,000,000 following an aggregate purchase of $5,000,000 shares and issuance by the Company to White Lion of an additional $250,000 in Commitment Shares, and (B) to $2,000,000 following an aggregate purchase of $10,000,000 shares and issuance by the for payment of an additional $250,000 in Commitment Shares. The Company issued Initial Commitment Shares of 50,200 shares of Common Stock to White Lion, based upon the Closing Sale Price of our Common Stock of $4.98 per share on November 30, 2022.

The applicable Percentage Limit is 40% or 150% depending on the price the Company agrees to sell Purchase Notice Shares to White Lion. At an applicable Percentage Limit of 40%, the Purchase Price to be paid by White Lion for any such shares will equal 97% of lowest daily volume-weighted average price of Common Stock during a period of two consecutive Trading Days following the applicable Purchase Notice Date until an

aggregate of $50,000,000 in Purchase Notice Shares have been purchased under White Lion Purchase Agreement, at which point the Purchase Price to be paid by White Lion will equal 98% of the lowest daily volume-weighted average price of Common Stock during a period of two consecutive Trading Days following the applicable Purchase Notice Date. At an applicable Percentage Limit of 150%, the Purchase Price to be paid by White Lion for any such shares will equal 94.5% of the lowest daily volume-weighted average price of Common Stock during a period of three consecutive Trading Days following the applicable Purchase Notice Date.

The Company will have the right to terminate the White Lion Purchase Agreement at any time after Commencement, at no cost or penalty, upon three (3) Trading Days' prior written notice. Additionally, White Lion will have the right to terminate the White Lion Purchase Agreement upon three (3) days' prior written notice to the Company if (i) there is a Fundamental Transaction, (ii) the Company is in breach or default in any material respect of the White Lion RRA, (iii) there is a lapse of the effectiveness, or unavailability of, the registration statement for a period of 45 consecutive Trading Days or for more than an aggregate of 90 Trading Days in any 365-day period, (iv) the suspension of trading of the Common Stock for a period of five (5) consecutive Trading Days, (v) the material breach of the White Lion Purchase Agreement by the Company, which breach is not cured within the applicable cure period or (vi) a Material Adverse Effect has occurred and is continuing. No termination of the White Lion Purchase Agreement will affect the registration rights provisions contained in the White Lion RRA.

In consideration for the commitments of White Lion, as described above, the Company has agreed to issue to White Lion shares of Common Stock having a value of $250,000 based upon the Closing Sale Price of Common Stock two Trading Days prior to the filing of the Initial Registration Statement as Initial Commitment Shares. The Company may increase the number of shares it may sell to White Lion by issuing additional Commitment Shares in two additional tranches of $250,000 each. The Company issued Initial Commitment Shares of 50,200 shares of Common Stock to White Lion, based upon the Closing Sale Price of our Common Stock of $4.98 per share on November 30, 2022.

Concurrently with the execution of the White Lion Purchase Agreement, the Company entered into the White Lion RRA with White Lion in which the Company has agreed to register the shares of Common Stock purchased by White Lion with the SEC for resale within 30 days of the consummation of a business combination. The White Lion RRA also contains usual and customary damages provisions for failure to file and failure to have the registration statement declared effective by the SEC within the time periods specified.

The White Lion Purchase Agreement and the White Lion RRA contain customary representations, warranties, conditions and indemnification obligations of the parties. The representations, warranties and covenants contained in such agreements were made only for purposes of such agreements and as of specific dates, were solely for the benefit of the parties to such agreements and may be subject to limitations agreed upon by the contracting parties.

PART II

Information Not Required in Prospectus

Item 13. Other Expenses of Issuance and Distribution.

The following is an estimate of the expenses (all of which are to be paid by the registrant) that we may incur in connection with the securities being registered hereby.

	Amount
SEC registration fee	$15,631
Legal fees and expenses	*
Accounting fees and expenses	*
Miscellaneous	*
Total	$ *

* These fees are calculated based on the securities offered and the number of issuances and accordingly cannot be defined at this time.

We will bear all costs, expenses and fees in connection with the registration of the securities, including with regard to compliance with state securities or "blue sky" laws. The Selling Securityholders, however, will bear all underwriting commissions and discounts, if any, attributable to their sale of the securities. All amounts are estimates except the SEC registration fee and the FINRA filing fee.

Item 14. Indemnification of Directors and Officers.

Our Amended and Restated Charter provides that all of our directors, officers, employees and agents shall be entitled to be indemnified by us to the fullest extent permitted by Section 145 of the DGCL. Section 145 of the DGCL concerning indemnification of officers, directors, employees and agents is set forth below.

Section 145. Indemnification of officers, directors, employees and agents; insurance.

(a) A corporation shall have power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that the person's conduct was unlawful.

(b) A corporation shall have power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer,

employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

(c) To the extent that a present or former director or officer of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections (a) and (b) of this section, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

(d) Any indemnification under subsections (a) and (b) of this section (unless ordered by a court) shall be made by the corporation only as authorized in the specific case upon a determination that indemnification of the present or former director, officer, employee or agent is proper in the circumstances because the person has met the applicable standard of conduct set forth in subsections (a) and (b) of this section. Such determination shall be made, with respect to a person who is a director or officer at the time of such determination, (1) by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or (2) by a committee of such directors designated by majority vote of such directors, even though less than a quorum, or (3) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion, or (4) by the stockholders.

(e) Expenses (including attorneys' fees) incurred by an officer or director in defending any civil, criminal, administrative or investigative action, suit or proceeding may be paid by the corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the corporation as authorized in this section. Such expenses (including attorneys' fees) incurred by former officers and directors or other employees and agents may be so paid upon such terms and conditions, if any, as the corporation deems appropriate.

(f) The indemnification and advancement of expenses provided by, or granted pursuant to, the other subsections of this section shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office. A right to indemnification or to advancement of expenses arising under a provision of the certificate of incorporation or a bylaw shall not be eliminated or impaired by an amendment to such provision after the occurrence of the act or omission that is the subject of the civil, criminal, administrative or investigative action, suit or proceeding for which indemnification or advancement of expenses is sought, unless the provision in effect at the time of such act or omission explicitly authorizes such elimination or impairment after such action or omission has occurred.

(g) A corporation shall have power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under this section.

(h) For purposes of this section, references to "the corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under this section with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued.

(i) For purposes of this section, references to "other enterprises" shall include employee benefit plans; references to "fines" shall include any excise taxes assessed on a person with respect to any employee benefit plan; and references to "serving at the request of the corporation" shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the corporation" as referred to in this section.

(j) The indemnification and advancement of expenses provided by, or granted pursuant to, this section shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

(k) The Court of Chancery is hereby vested with exclusive jurisdiction to hear and determine all actions for advancement of expenses or indemnification brought under this section or under any by law, agreement, vote of stockholders or disinterested directors, or otherwise. The Court of Chancery may summarily determine a corporation's obligation to advance expenses (including attorneys' fees).

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment of expenses incurred or paid by a director, officer or controlling person in a successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to the court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

In accordance with Section 102(b)(7) of the DGCL, our amended and restated certificate of incorporation, provides that no director shall be personally liable to us or any of our stockholders for monetary damages resulting from breaches of their fiduciary duty as directors, except to the extent such limitation on or exemption from liability is not permitted under the DGCL. The effect of this provision of our amended and restated certificate of incorporation is to eliminate our rights and those of our stockholders (through stockholders' derivative suits on our behalf) to recover monetary damages against a director for breach of the fiduciary duty of care as a director, including breaches resulting from negligent or grossly negligent behavior, except, as restricted by Section 102(b)(7) of the DGCL. However, this provision does not limit or eliminate our rights or the rights of any stockholder to seek non-monetary relief, such as an injunction or rescission, in the event of a breach of a director's duty of care.

If the DGCL is amended to authorize corporate action further eliminating or limiting the liability of directors, then, in accordance with our amended and restated certificate of incorporation, the liability of our directors to us or our stockholders will be eliminated or limited to the fullest extent authorized by the DGCL, as so amended. Any repeal or amendment of provisions of our amended and restated certificate of incorporation limiting or eliminating the liability of directors, whether by our stockholders or by changes in law, or the adoption of any other provisions inconsistent therewith, will (unless otherwise required by law) be prospective only, except to the extent such amendment or change in law permits us to further limit or eliminate the liability of directors on a retroactive basis.

Our Amended and Restated Charter provides that we will, to the fullest extent authorized or permitted by applicable law, indemnify our current and former officers and directors, as well as those persons who, while directors or officers of our corporation, are or were serving as directors, officers, employees or agents of another entity, trust or other enterprise, including service with respect to an employee benefit plan, in connection with any threatened, pending or completed proceeding, whether civil, criminal, administrative or investigative, against all expense, liability and loss (including, without limitation, attorney's fees, judgments, fines, ERISA excise taxes and penalties and amounts paid in settlement) reasonably incurred or suffered by any such person in connection with any such proceeding.

Notwithstanding the foregoing, a person eligible for indemnification pursuant to our amended and restated certificate of incorporation will be indemnified by us in connection with a proceeding initiated by such person only if such proceeding was authorized by our board of directors, except for proceedings to enforce rights to indemnification.

The right to indemnification which is conferred by our amended and restated certificate of incorporation is a contract right that includes the right to be paid by us the expenses incurred in defending or otherwise participating in any proceeding referenced above in advance of its final disposition, provided, however, that if the DGCL requires, an advancement of expenses incurred by our officer or director (solely in the capacity as an officer or director of our corporation) will be made only upon delivery to us of an undertaking, by or on behalf of such officer or director, to repay all amounts so advanced if it is ultimately determined that such person is not entitled to be indemnified for such expenses under our amended and restated certificate of incorporation or otherwise.

The rights to indemnification and advancement of expenses will not be deemed exclusive of any other rights which any person covered by our amended and restated certificate of incorporation may have or hereafter acquire under law, our amended and restated certificate of incorporation, our bylaws, an agreement, vote of stockholders or disinterested directors, or otherwise.

Any repeal or amendment of provisions of our amended and restated certificate of incorporation affecting indemnification rights, whether by our stockholders or by changes in law, or the adoption of any other provisions inconsistent therewith, will (unless otherwise required by law) be prospective only, except to the extent such amendment or change in law permits us to provide broader indemnification rights on a retroactive basis, and will not in any way diminish or adversely affect any right or protection existing at the time of such repeal or amendment or adoption of such inconsistent provision with respect to any act or omission occurring prior to such repeal or amendment or adoption of such inconsistent provision. Our amended and restated certificate of incorporation also permits us, to the extent and in the manner authorized or permitted by law, to indemnify and to advance expenses to persons other that those specifically covered by our amended and restated certificate of incorporation.

Our Amended and Restated Bylaws include the provisions relating to advancement of expenses and indemnification rights consistent with those which will are set forth in our Amended and Restated Charter. In addition, our bylaws provide for a right of indemnity to bring a suit in the event a claim for indemnification or advancement of expenses is not paid in full by us within a specified period of time. Our bylaws also permit us to purchase and maintain insurance, at our expense, to protect us and/or any director, officer, employee or agent of

our corporation or another entity, trust or other enterprise against any expense, liability or loss, whether or not we would have the power to indemnify such person against such expense, liability or loss under the DGCL.

Any repeal or amendment of provisions of our bylaws affecting indemnification rights, whether by our board of directors, stockholders or by changes in applicable law, or the adoption of any other provisions inconsistent therewith, will (unless otherwise required by law) be prospective only, except to the extent such amendment or change in law permits us to provide broader indemnification rights on a retroactive basis, and will not in any way diminish or adversely affect any right or protection existing thereunder with respect to any act or omission occurring prior to such repeal or amendment or adoption of such inconsistent provision.

We have entered into indemnification agreements with each of our officers and directors. These agreements require us to indemnify these individuals to the fullest extent permitted under Delaware law against liabilities that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified.

Item 15. Recent Sales of Unregistered Securities.

The Founder Shares, the Target Consideration Shares, the Private Warrants and the shares of Common Stock issued pursuant to the Subscription Agreements in connection with the PIPE financing, were not registered under the Securities Act, and were issued in reliance on the exemption from registration requirements thereof provided by Section 4(a)(2) of the Securities Act and/or Regulation D promulgated thereunder as a transaction by an issuer not involving a public offering without any form of general solicitation or general advertising.

Item 16. Exhibits.

Exhibit No.	Description
2.1	Business Combination Agreement, dated as of April 28, 2022, by and among Ignyte Acquisition Corp., Ignyte Korea Co., Ltd. and Peak Bio Co., Ltd. (incorporated by reference to Exhibit 2.1 of the Company's Current Report on Form 8-K filed with the SEC on April 29, 2022).
3.1	Second Amended and Restated Certificate of Incorporation of Peak Bio, Inc. (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed with the SEC on November 7, 2022).
3.2	Amended and Restated Bylaws of Peak Bio, Inc. (incorporated by reference to Exhibit 3.2 of the Company's Current Report on Form 8-K filed with the SEC on November 7, 2022).
4.1	Form of Warrant Certificate of the Company (incorporated by reference to Exhibit 4.1 to of the Company's Current Report on Form 8-K filed with the SEC on November 7, 2022).
4.2	Form of Amended and Restated Warrant Agreement, dated as of October 31, 2022, by and between Ignyte Acquisition Corp. and Continental Stock Transfer & Trust Company, as warrant agent (incorporated by reference to exhibit 10.4 of the Company's Current Report on Form 8-K filed with the SEC on November 2, 2022).
5.1*	Opinion of DLA Piper LLP (US).
10.1	Registration Rights Agreement, dated as of November 1, 2022, by and among Peak Bio, Inc., Ignyte Sponsor LLC and the Holders party thereto (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed with the SEC on November 7, 2022).
10.2	Lock-Up Agreement (incorporated by reference to Exhibit 10.2 to of the Company's Current Report on Form 8-K filed with the SEC on November 7, 2022).
10.2	Key Company Stockholder Lock-Up Agreement (incorporated by reference to Exhibit 10.2 to of the Company's Current Report on Form 8-K filed with the SEC on November 7, 2022).

Exhibit No.	Description
10.3	Form of New PIPE Subscription Agreement, dated as of October 31, 2022 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on November 2, 2022).
10.4	Form of Subscription Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on April 29, 2022).
10.5	Form of Key Company Stockholder Forward Purchase Agreement, dated as of April 28, 2022, by and between Ignyte and Hoyoung Huh (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on April 29, 2022).
10.6#	Form of Peak Bio, Inc. 2022 Long-Term Incentive Plan (incorporated by reference to Annex J of Ignyte Acquisition Corp.'s Definitive Proxy Statement filed with the SEC on October 7, 2022).
10.7	Common Stock Purchase Agreement, dated as of November 3, 2022, by and between White Lion Capital, LLC and Peak Bio, Inc. (incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K filed with the SEC on November 7, 2022).
10.8	Registration Rights Agreement, dated as of November 3, 2022, by and between White Lion Capital, LLC and Peak Bio, Inc. (incorporated by reference to Exhibit 10.7 to the Company's Current Report on Form 8-K filed with the SEC on November 7, 2022).
21.1*	Subsidiaries of Registrant.
23.1*	Consent of Marcum LLP.
23.2*	Consent of Mayer Hoffman McCann P.C.
23.3*	Consent of DLA Piper LLP (US) (included in Exhibit 5.1).
24.1*	Power of attorney (included in the signature page hereof).
101.INS*	Inline XBRL Instance Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Labels Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)
107*	Filing Fee Table

* Filed herewith.
\# Indicates management contract or compensatory plan or arrangement.

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

A. To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in

the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

B. That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

C. To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

D. That, for the purpose of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

E. That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

F. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in New York, New York, on December 14, 2022.

PEAK BIO, INC.

By: /s/ Stephen LaMond
Stephen LaMond
Interim Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that of the undersigned constitutes and appoints Stephen LaMond and Timothy Cunningham, his true and lawful attorney-in-fact and agent, with full power of substitution and revocation, for him and in his name, place and stead, in any and all capacities, to execute any or all amendments including any post-effective amendments and supplements to this Registration Statement, and any additional Registration Statement filed pursuant to Rule 462(b), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

Name	Title	Date
/s/ Stephen LaMond Stephen LaMond	Interim Chief Executive Officer and Director (principal executive officer)	December 14, 2022
/s/ Timothy Cunningham Timothy Cunningham	Acting Chief Financial Officer (principal financial and accounting officer)	December 14, 2022
/s/ Hoyoung Huh Hoyoung Huh	Director	December 14, 2022
/s/ Nevan Charles Elam Nevan Charles Elam	Director	December 14, 2022
/s/ James Neal James Neal	Director	December 14, 2022
/s/ David Rosenberg David Rosenberg	Director	December 14, 2022
/s/ Brad Stevens Brad Stevens	Director	December 14, 2022

Exhibit 5.1

DLA Piper LLP (US)
51 John F. Kennedy Parkway, Suite 120
Short Hills, New Jersey 07078
www.dlapiper.com
T: 973-520-2550
F: 973-520-2551
Attorney Responsible for Short Hills Office:
Emilio Ragosa

December 14, 2022

Peak Bio, Inc.
3350 W. Bayshore Rd., Suite 100
Palo Alto, CA 94303

Re: Registration Statement on Form S-1

Ladies and Gentlemen:

We refer to the Registration Statement on Form S-1 (the "Registration Statement") being filed by Peak Bio, Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended (the "Securities Act"), covering the registration of (a) the resale of up to 23,467,773 shares of common stock, par value $0.0001 per share ("Common Stock"), of the Company by the selling stockholders named in the Registration Statement (the "Selling Stockholder Shares"), (b) the resale of 2,945,545 warrants consisting of 2,500,000 warrants originally issued in a private placement in connection with the initial public offering of the Company (formerly known as Ignyte Acquisition Corporation) (the "Private Placement Warrants") and 445,545 warrants (the "PIPE Warrants" and together with the Private Placement Warrants, the "Warrants") issued pursuant to subscription agreements in connection with the Company' s PIPE financing and the consummation of that certain business combination with Peak Bio, Co., Ltd, a corporation organized under the laws of the Republic of Korea, (c) the issuance of 2,945,545 shares of Common Stock that are initially issuable upon the exercise of the Private Warrants (the "Warrant Shares") and (d) the resale of the Warrant Shares by holders of such Warrant Shares. The Private Placement Warrants were issued pursuant to that certain Warrant Agreement, dated as of January 27, 2021 (the "Original Warrant Agreement"), between the Company and Continental Stock Transfer & Trust Company, as warrant agent and the PIPE Warrants were issued pursuant to that certain Amended and Restated Warrant Agreement, dated as of October 31, 2022 (the "Amended Warrant Agreement" and together with the Original Warrant Agreement, the "Warrant Agreement"), between the Company and Continental Stock Transfer & Trust Company, as warrant agent.

This opinion letter is being delivered in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act.

We have examined the Registration Statement, the Company' s second amended and restated certificate of incorporation (the "Certificate of Incorporation"), the amended and restated bylaws (the "Bylaws") of the Company, the Warrant Agreement and resolutions adopted by the board of directors of the Company relating to the Registration Statement, the Warrant Agreement and the issuance of the Warrants, the Warrant Shares and the Selling Stockholder Shares by the Company. We have also examined originals, or copies of originals certified to our satisfaction, of such agreements, documents, certificates and statements of the Company and other corporate documents and instruments, and have examined such questions of law, as we have considered relevant and necessary as a basis for this opinion letter. We have assumed the authenticity of all documents submitted to us as originals, the genuineness of all signatures, the legal capacity of all persons and the conformity with the original documents of any copies thereof submitted to us for examination. As to facts relevant to the opinions expressed herein, we have relied without independent investigation or verification upon, and assumed the accuracy and completeness of, certificates, letters and oral and written statements and representations of public officials and officers and other representatives of the Company.

Based on the foregoing and subject to the other qualifications and limitations set forth herein, we are of the opinion that:

1. The Selling Stockholder Shares are validly issued, fully paid and non-assessable.

2. The Warrants constitute valid and binding obligations of the Company.

3. The Warrant Shares will be validly issued, fully paid and non-assessable when: (i) the Registration Statement, as finally amended, shall have been declared effective under the Securities Act and (ii) certificates representing such Warrant Shares shall have been duly executed, countersigned and registered and duly delivered to the purchasers thereof against payment of the exercise price or, if any such Warrant Shares are to be issued in uncertificated form, the Company' s books shall reflect the issuance of such Warrant Shares to the purchasers thereof against payment of the exercise price therefor, all in accordance with the Warrants and the Warrant Agreement.

With respect to each instrument or agreement referred to in or otherwise relevant to the opinions set forth herein (each, an "Instrument"), we have assumed, to the extent relevant to the opinions set forth herein, that (i) each party to such Instrument (if not a natural person) was duly organized or formed, as the case may be, and was at all relevant times and is validly existing and in good standing under the laws of its jurisdiction of organization or formation, as the case may be, and had at all relevant times and has full right, power and authority to execute, deliver and perform its obligations under such Instrument and (ii) such Instrument has been duly authorized, executed and delivered by, and was at all relevant times and is a valid, binding and enforceable agreement or obligation, as the case may be, of, each party thereto.

We express no opinion as to any provision of any instrument, agreement or other document (i) regarding severability of the provisions thereof; or (ii) providing that the assertion or employment of any right or remedy shall not prevent the concurrent assertion or employment of any other right or remedy, or that every right and remedy shall be cumulative and in addition to every other right and remedy, or that any delay or omission to exercise any right or remedy shall not impair any right or remedy or constitute a waiver thereof.

Our opinions are subject to bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance, fraudulent transfer and other similar laws relating to or affecting creditors' rights generally and to general equitable principles (regardless of whether considered in a proceeding in equity or at law), including concepts of commercial reasonableness, good faith and fair dealing and the possible unavailability of specific performance or injunctive relief.

For the purposes of this letter, we have assumed that, at the time of the issuance, sale and delivery of any of the Warrant Shares: (i) the Warrant Shares will be issued and sold as contemplated in the Registration Statement and the prospectus relating thereto; and (ii) the Certificate of Incorporation and the Bylaws, each as currently in effect, will not have been modified or amended and will be in full force and effect.

In rendering the opinions set forth in paragraph (3) above, we have assumed that at the time of exercise of the Warrant Shares there will be a sufficient number of shares of Common Stock authorized and then available for issuance under Certificate of Incorporation as then in effect.

This opinion letter is limited to the General Corporation Law of the State of Delaware and the laws of the State of New York. We express no opinion as to the laws, rules or regulations of any other jurisdiction, including, without limitation, the federal laws of the United States of America or any state securities or blue sky laws, or as to the municipal laws or the laws, rules or regulations of any local agencies or governmental authorities of or within the State of New York.

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement and to all references to our Firm included in or made a part of the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act.

Very truly yours,
/s/ DLA Piper LLP (US)

Exhibit 21.1

SUBSIDIARIES OF THE REGISTRANT

Peak Bio Co., Ltd. (Republic of Korea)

Ignyte Korea Co, Ltd. (Republic of Korea)

Exhibit 23.1

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM' S CONSENT

We consent to the inclusion in this Registration Statement of Peak Bio, Inc. (formerly known as Ignyte Acquisition Corp.) on Form S-1 of our report dated March 30, 2022, which includes an explanatory paragraph as to Ignyte Acquisition Corp. (now known as Peak Bio, Inc.) ability to continue as a going concern with respect to our audit of the financial statements of Ignyte Acquisition Corp. (now known as Peak Bio, Inc.) as of December 31, 2021 and December 31, 2020 and for the year ended December 31, 2021 and for the period from August 6, 2020 (inception) through December 31, 2020, which report appears in the Prospectus, which is part of this Registration Statement. We also consent to the reference to our Firm under the heading "Experts" in such Prospectus.

/s/ Marcum LLP

Marcum LLP
New York, NY
December 14, 2022

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the inclusion in this Registration Statement on Form S-1 and related prospectus of our report dated June 17, 2022, with respect to the carve-out consolidated financial statements of Peak Bio Co., Ltd. as of December 31, 2021 and 2020 and for each of the two years in the period ended December 31, 2021 (which report includes an explanatory paragraph regarding the existence of substantial doubt about the Company' s ability to continue as a going concern), and to the reference to us under the heading "Experts" in the prospectus which is part of this Registration Statement.

/s/ Mayer Hoffman McCann P.C.

San Diego, California
December 14, 2022

Exhibit 107

Calculation of Filing Fee Tables

Form S-1
(Form Type)

Peak Bio, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered(1)	Proposed Maximum Offering Price Per Share	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Fees to Be Paid	Equity	Common Stock, par value $0.0001 per share	457(c)	26,413,318(2)	$5.38(3)	$142,103,651	0.0001102	$15,660
	Other	Warrants	457(i)	2,945,545(4)	–	–	–	–(5)
		Total Offering Amounts				$142,103,651		
		Total Fees Previously Paid				–		
		Total Fee Offsets				–		
		Net Fee Due				$15,660		

(1) Pursuant to Rule 416(a) promulgated under the U.S. Securities Act of 1933, as amended (the "Securities Act"), there are also being registered an indeterminable number of additional securities as may be issued to prevent dilution resulting from stock splits, stock dividends, or similar transactions.

(2) Consists of (i) 23,467,773 shares of common stock registered for sale by the selling securityholders named in this registration statement and (ii) 2,945,545 shares of common stock issuable upon the exercise of Warrants (as defined below).

(3) The proposed maximum offering price per share and the proposed maximum aggregate offering price have been estimated solely for the purpose of calculating the amount of the registration fee in accordance with Rule 457(c) under the Securities Act using the average of the high and low prices as reported on the Nasdaq Capital Market on December 9, 2022.

(4) Represents the resale of 2,945,545 warrants (the "Warrants") to purchase shares of common stock that were issued in private placements, which represents warrants to acquire 2,945,545 shares of common stock.

(5) In accordance with Rule 457(i), the entire registration fee for the Warrants is allocated to the shares of Common Stock underlying the Warrants, and no separate fee is payable for the Warrants.

Cover Page	9 Months Ended Sep. 30, 2022
Document Information Line Items	
Entity Registrant Name	PEAK BIO, INC.
Document Type	S-1
Amendment Flag	false
Entity Central Index Key	0001834645
Entity Filer Category	Non-accelerated Filer
Entity Small Business	true
Entity Emerging Growth Company	true
Entity Ex Transition Period	false

CONDENSED BALANCE SHEETS - USD ($)	Sep. 30, 2022	Dec. 31, 2021	Dec. 31, 2020
Assets			
Cash	$ 75,974	$ 329,192	$ 25,425
Prepaid expense and other current assets	60,708	71,319	
Total current assets	136,682	400,511	25,425
Deferred offering costs			81,575
Marketable securities held in Trust Account	57,849,285	57,506,299	
Total Assets	57,985,967	57,906,810	107,000
Current liabilities:			
Accrued expenses	1,478,152	325,641	
Due to related party	201,953	111,953	310
Promissory note - related party	399,380		80,000
Income tax payable	8,083		
Total current liabilities	2,087,568	437,594	80,310
Warrant liabilities	300,000	1,975,000	
Total liabilities	2,387,568	2,412,594	80,310
Commitments and Contingencies (See Note 7)			
Common stock subject to possible redemption, 5,750,000 shares at redemption value at September 30, 2022 and December 31, 2021	57,528,802	57,500,000	
Stockholders' Deficit			
Preferred stock, $0.0001 par value; 1,000,000 shares authorized; none issued and outstanding	0	0	0
Common stock, $0.0001 par value; 50,000,000 shares authorized; 1,537,500 shares issued and outstanding (excluding 5,750,000 shares subject to possible redemption) at September 30, 2022 and December 31, 2021	154	154	154
Additional paid-in capital	0	0	26,846
Accumulated deficit	(1,930,557)	(2,005,938)	(310)
Total stockholders' deficit	(1,930,403)	(2,005,784)	26,690
Total Liabilities and Stockholders' Deficit	$ 57,985,967	$ 57,906,810	$ 107,000

CONDENSED BALANCE SHEETS (Parentheticals) - $ / shares	Sep. 30, 2022	Dec. 31, 2021	Dec. 31, 2020
Statement of Financial Position [Abstract]			
Number of shares subject to redemption	5,750,000	5,750,000	0
Preferred Stock, Par or Stated Value Per Share (in Dollars per share)	$ 0.0001	$ 0.0001	$ 0.0001
Preferred Stock, Shares Authorized	1,000,000	1,000,000	1,000,000
Preferred Stock, Shares Issued	0	0	0
Preferred Stock, Shares Outstanding	0	0	0
Common Stock, Par or Stated Value Per Share (in Dollars per share)	$ 0.0001	$ 0.0001	$ 0.0001
Common Stock, Shares Authorized	50,000,000	50,000,000	50,000,000
Common Stock, Shares, Issued	1,537,500	1,537,500	0
Common Stock, Shares, Outstanding	1,537,500	1,537,500	0

UNAUDITED CONDENSED STATEMENTS OF OPERATIONS - USD ($)	3 Months Ended		5 Months Ended	9 Months Ended		12 Months Ended
	Sep. 30, 2022	Sep. 30, 2021	Dec. 31, 2020	Sep. 30, 2022	Sep. 30, 2021	Dec. 31, 2021
Income Statement [Abstract]						
Formation and operating costs	$ 674,219	$ 104,370	$ 310	$ 1,905,720	$ 413,791	$ 969,288
Loss from operations	(674,219)	(104,370)	(310)	(1,905,720)	(413,791)	(969,288)
Other income						
Change in fair value of warrants	250,000	225,000		1,675,000	800,000	475,000
Trust interest income	261,295	739		342,986	5,084	6,299
Total other income	511,295	225,739		2,017,986	805,084	481,299
(Loss) income before provision for income taxes	(162,924)	121,369		112,266	391,293	
Provision for income taxes	(8,083)	0		(8,083)	0	0
Net (loss) income	$ (171,007)	$ 121,369	$ (310)	$ 104,183	$ 391,293	$ (487,989)
Basic and diluted weighted average shares outstanding, common stock subject to redemption (in Shares)	5,750,000	5,750,000		5,750,000	5,076,007	5,259,589
Basic and diluted net income (loss) per share (in Dollars per share)	$ (0.02)	$ 0.02		$ 0.01	$ 0.06	$ (0.07)
Basic and diluted weighted average shares outstanding, common stock (in Shares)	1,537,500	1,537,500	1,537,500	1,537,500	1,537,500	1,537,500
Basic and diluted net income (loss) per share (in Dollars per share)	$ (0.02)	$ 0.02	$ 0	$ 0.01	$ 0.06	$ (0.07)

UNAUDITED CONDENSED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (DEFICIT) - USD ($)	Total	Common Stock	Additional Paid-in Capital [Member]	Accumulated Deficit [Member]
Balance at Aug. 05, 2020	$ 0	$ 0	$ 0	$ 0
Balance (in Shares) at Aug. 05, 2020		0		
Underwriting fee	(2,000)	$ (10)	(1,990)	
Net income (loss)	(310)			(310)
Issuance of representative shares (in Shares)		100,000		
Issuance of representative shares	2,000	$ 10	1,990	
Common Stocks issued to Sponsor (in Shares)		1,437,500		
Common Stocks issued to Sponsor	25,000	$ 144	24,856	
Balance at Dec. 31, 2020	26,690	$ 154	26,846	(310)
Balance (in Shares) at Dec. 31, 2020		1,537,500		
Sale of 5,000,000 and 750,000 Units on February 1, and 2, 2021 through IPO and over-allotment, respectively	57,500,000	$ 575	57,499,425	0
Sale of 5,000,000 and 750,000 Units on February 1, and 2, 2021 through IPO and over-allotment, respectively (in Shares)		5,750,000		
Sale of 2,350,000 and 150,000 Private Placement Warrants on February 1, and 2, 2021, respectively, net of fair value of warrant liabilities	50,000	$ 0	50,000	0
Underwriting fee	(1,150,000)	0	(1,150,000)	0
Other offering expenses	(444,485)	0	(444,485)	0
Net income (loss)	(346,183)	0	0	(346,183)
Common stock subject to possible redemption	(57,457,258)	$ (575)	(55,981,786)	(1,474,897)
Common stock subject to possible redemption (in Shares)		(5,750,000)		
Issuance of representative shares	1,150,000	$ 0	1,150,000	0
Balance at Mar. 31, 2021	(1,821,236)	$ 154	0	(1,821,390)
Balance (in Shares) at Mar. 31, 2021		1,537,500		
Balance at Dec. 31, 2020	26,690	$ 154	26,846	(310)
Balance (in Shares) at Dec. 31, 2020		1,537,500		
Sale of 5,000,000 and 750,000 Units on February 1, and 2, 2021 through IPO and over-allotment, respectively	57,500,000	$ 575	57,499,425	
Sale of 5,000,000 and 750,000 Units on February 1, and 2, 2021 through IPO and over-allotment, respectively (in Shares)		5,750,000		
Sale of 2,350,000 and 150,000 Private Placement Warrants on February 1, and 2, 2021, respectively, net of fair value of warrant liabilities	50,000		50,000	
Other offering expenses	(444,485)		(444,485)	

Net income (loss)	(487,989)			(487,989)
Common stock subject to possible redemption	(57,500,000)	$ (575)	(55,981,786)	(1,517,639)
Common stock subject to possible redemption (in Shares)		(5,750,000)		
Balance at Dec. 31, 2021	(2,005,784)	$ 154	0	(2,005,938)
Balance (in Shares) at Dec. 31, 2021		1,537,500		
Underwriting Fees	(1,150,000)		(1,150,000)	
Balance at Mar. 31, 2021	(1,821,236)	$ 154	0	(1,821,390)
Balance (in Shares) at Mar. 31, 2021		1,537,500		
Net income (loss)	616,107			616,107
Remeasurement in value of common stock subject to possible redemption	(2,087)			(2,087)
Balance at Jun. 30, 2021	(1,207,216)	$ 154	0	(1,207,370)
Balance (in Shares) at Jun. 30, 2021		1,537,500		
Net income (loss)	121,369			121,369
Remeasurement in value of common stock subject to possible redemption	(739)			(739)
Balance at Sep. 30, 2021	(1,086,586)	$ 154		(1,086,740)
Balance (in Shares) at Sep. 30, 2021		1,537,500		
Balance at Dec. 31, 2021	(2,005,784)	$ 154	0	(2,005,938)
Balance (in Shares) at Dec. 31, 2021		1,537,500		
Net income (loss)	597,123			597,123
Balance at Mar. 31, 2022	(1,408,661)	$ 154	0	(1,408,815)
Balance (in Shares) at Mar. 31, 2022		1,537,500		
Balance at Dec. 31, 2021	(2,005,784)	$ 154	0	(2,005,938)
Balance (in Shares) at Dec. 31, 2021		1,537,500		
Common stock subject to possible redemption	$ 51,978,834			
Common stock subject to possible redemption (in Shares)	5,159,287			
Balance at Sep. 30, 2022	$ (1,930,403)	$ 154		(1,930,557)
Balance (in Shares) at Sep. 30, 2022		1,537,500		
Balance at Mar. 31, 2022	(1,408,661)	$ 154	0	(1,408,815)
Balance (in Shares) at Mar. 31, 2022		1,537,500		
Net income (loss)	(321,933)			(321,933)
Balance at Jun. 30, 2022	(1,730,594)	$ 154	$ 0	(1,730,748)
Balance (in Shares) at Jun. 30, 2022		1,537,500		
Net income (loss)	(171,007)			(171,007)
Remeasurement in value of common stock subject to possible redemption	(28,802)			(28,802)
Balance at Sep. 30, 2022	$ (1,930,403)	$ 154		$ (1,930,557)
Balance (in Shares) at Sep. 30, 2022		1,537,500		

UNAUDITED CONDENSED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (DEFICIT) (Parentheticals) - shares	Feb. 02, 2021	Feb. 01, 2021
Through IPO and over-allotment [Member]		
Number of sale of units	750,000	5,000,000
Private Placement Warrants [Member]		
Number of sale of units	150,000	2,350,000

UNAUDITED CONDENSED STATEMENTS OF CASH FLOWS - USD ($)	5 Months Ended	9 Months Ended		12 Months Ended
	Dec. 31, 2020	Sep. 30, 2022	Sep. 30, 2021	Dec. 31, 2021
Cash flows from Operating Activities:				
Net income (loss)	$ (310)	$ 104,183	$ 391,293	$ (487,989)
Formation costs paid by related party	310			
Adjustments to reconcile net income to net cash used in operating activities:				
Increase (decrease) in fair value of warrants		(1,675,000)	(800,000)	(475,000)
Interest earned on marketable securities held in Trust Account		(342,986)	(5,084)	(6,299)
Changes in current assets and current liabilities:				
Prepaid expenses		10,611	(126,319)	(71,319)
Accrued offering costs and expenses		1,152,511	10,156	325,641
Income tax payable		8,083	0	
Due to related party		90,000	81,643	111,643
Net cash used in operating activities		(652,598)	(448,311)	(603,323)
Cash Flows from Investing Activities:				
Purchase of investment held in Trust Account		0	(57,500,000)	(57,500,000)
Net cash used in investing activities		0	(57,500,000)	(57,500,000)
Cash flows from Financing Activities:				
Proceeds from Initial Public Offering, net of underwriters' fees		0	56,350,000	56,350,000
Proceeds from private placement		0	2,500,000	2,500,000
Proceeds from issuance of promissory note to related party	80,000	399,380	0	
Repayment of promissory note to related party		0	(80,000)	(80,000)
Payments of offering costs	(54,575)	0	(317,910)	(362,910)
Net cash provided by financing activities	25,425	399,380	58,452,090	58,407,090
Net change in cash	25,425	(253,218)	503,779	303,767
Cash, beginning of the period	0	329,192	25,425	25,425
Cash, end of the period	25,425	75,974	529,204	329,192
Supplemental disclosure of noncash investing and financing activities:				
Deferred offering costs paid by Sponsor in exchange for issuance of common stocks	25,000			
Fair value of representative shares included in deferred offering costs	$ 2,000			
Initial value of Common stock subject to possible redemption		0	50,150,000	50,150,000
Remeasurement in value of Common stock subject to possible redemption		28,802	7,355,084	7,350,000
Initial fair value of warrant liabilities		$ 0	$ 2,450,000	$ 2,450,000

Organization and Business Operations	9 Months Ended Sep. 30, 2022	12 Months Ended Dec. 31, 2021
Accounting Policies [Abstract]		
Organization and Business Operations	**Note 1 — Organization and Business Operations**	**Note 1 — Organization and Business Operations**
	Organization and General prior to the Business Combination	**Organization and General**
	Peak Bio, Inc. F/K/A Ignyte Acquisition Corp. (the "Company") was incorporated as a Delaware corporation on August 6, 2020. The Company was incorporated for the purpose of effecting a merger, stock exchange, asset acquisition, stock purchase, reorganization or other similar business combination with one or more businesses (the "Business Combination").	Ignyte Acquisition Corp. (the "Company") is a blank check company incorporated as a Delaware corporation on August 6, 2020. The Company was incorporated for the purpose of effecting a merger, stock exchange, asset acquisition, stock purchase, reorganization or other similar business combination with one or more businesses (the "Business Combination").
	The Company is an early stage and emerging growth company and, as such, the Company is subject to all of the risks associated with early stage and emerging growth companies.	The Company is an early stage and emerging growth company and, as such, the Company is subject to all of the risks associated with early stage and emerging growth companies.
	As of September 30, 2022, the Company had not commenced any operations. All activity for the period from August 6, 2020 (inception) through September 30, 2022 relates to the Company's formation and the initial public offering ("IPO"), which is described below and, since the closing of the IPO, a search for a Business Combination candidate. The Company will not generate any operating revenues until after the completion of its initial Business Combination, at the earliest. The Company will generate non-operating income in the form of interest income on cash and cash equivalents from the proceeds derived from the IPO.	As of December 31, 2021, the Company had not commenced any operations. All activity for the period from August 6, 2020 (inception) through December 31, 2021 relates to the Company's formation and the initial public offering ("IPO"), which is described below and, since the closing of the IPO, a search for a Business Combination candidate. The Company will not generate any operating revenues until after the completion of its initial Business Combination, at the earliest. The Company will generate non-operating income in the form of interest income on cash and cash equivalents from the proceeds derived from the IPO.
	The Company's sponsor is Ignyte Sponsor LLC (the "Sponsor"), a Delaware limited liability company (the "Sponsor").	The Company's sponsor is Ignyte Sponsor LLC (the "Sponsor"), a Delaware limited liability company (the "Sponsor").
	Financing	**Financing**
	The registration statement for the Company's IPO was declared effective on January 27, 2021 (the "Effective Date"). On February 1, 2021, the Company consummated the IPO of 5,000,000 units (the "Units" and, with respect to the shares of common stock included in the Units	The registration statement for the Company's IPO was declared effective on January 27, 2021 (the "Effective Date"). On February 1, 2021, the Company consummated the IPO of 5,000,000 units (the "Units" and, with respect to the shares of common stock included in the Units being offered, the "Public Shares"), at $10.00 per Unit, generating gross proceeds of $50,000,000, which is discussed in Note 3.
		Simultaneously with the closing of the IPO, the Company consummated the sale of 2,350,000 Private Placement Warrants (the "Private Placement Warrants") at a price of $1.00 per Private Placement

being offered, the “Public Shares”), at $10.00 per Unit, generating gross proceeds of $50,000,000, which is discussed in Note 3.

Simultaneously with the closing of the IPO, the Company consummated the sale of 2,350,000 Private Placement Warrants (the “Private Placement Warrants”) at a price of $1.00 per Private Placement Warrant in a private placement to the Sponsor, generating total gross proceeds of $2,350,000.

On February 2, 2021, the underwriters purchased an additional 750,000 Units to exercise their over-allotment option in full at a purchase price of $10.00 per Unit, generating gross proceeds of $7,500,000. Simultaneously with the closing of the full exercise of the over-allotment option, the Company completed the private sale of an aggregate of 150,000 Private Placement Warrants to the Sponsor, at a purchase price of $1.00 per Private Placement Warrant, generating gross proceeds of $150,000. A total of $7,500,000 was added to the Trust Account after the payment of $150,000 underwriting discount.

Transaction costs amounted to $1,594,485 consisting of $1,150,000 of underwriting discount and $444,485 of other offering costs. In addition, at February 2, 2021, $975,465 of cash was held outside of the Trust Account (as defined below) and has been available for working capital purposes.

Trust Account

Following the closing of the IPO, on February 1, 2021, $50,000,000 ($10.00 per Unit) from the net proceeds of the sale of the Units in the IPO and the sale of the Private Placement Warrants was placed in a Trust Account

Business Combination with Peak Bio Co., Ltd.

As previously disclosed on the Company’s Current Report on Form 8-K filed with the Securities and Exchange Commission (the “SEC”) on April 29, 2022, on April 28, 2022, the Company entered into that certain Business Combination Agreement dated as of April 28, 2022 (the “Business

Warrant in a private placement to the Sponsor, generating total gross proceeds of $2,350,000.

On February 2, 2021, the underwriters purchased an additional 750,000 Units to exercise its over-allotment option in full at a purchase price of $10.00 per Unit, generating gross proceeds of $7,500,000. Simultaneously with the closing of the full exercise of the over-allotment option, the Company completed the private sale of an aggregate of 150,000 Private Placement Warrants to the Sponsor, at a purchase price of $1.00 per Private Placement Warrant, generating gross proceeds of $150,000. A total of $7,500,000 was placed in the Trust Account after the payment of $150,000 underwriting discount.

Transaction costs amounted to $1,594,485 consisting of $1,150,000 of underwriting discount and $444,485 of other offering costs. In addition, $975,465 of cash was held outside of the Trust Account (as defined below) and has been available for working capital purposes.

Trust Account

Following the closing of the IPO, on February 1, 2021, $50,000,000 ($10.00 per Unit) from the net proceeds of the sale of the Units in the IPO and the sale of the Private Placement Warrants was held in a Trust Account (“Trust Account”), and has been invested, and will only be invested in U.S. government securities, within the meaning set forth in Section 2(a)(16) of the Investment Company Act, having a maturity of 185 days or less or in money market funds meeting certain conditions under Rule 2a-7 promulgated under the Investment Company Act which invest only in direct U.S. government treasury obligations. Except with respect to interest earned on the funds held in the Trust Account that may be released to the Company to pay income tax obligations, the proceeds from the IPO will not be released from the Trust Account until the earlier of the completion of a Business Combination or the Company’s redemption of 100% of the outstanding Public Shares if it has not completed a Business Combination in the required time period. The proceeds held in the Trust Account may be used as consideration to pay the sellers of a target business with which the Company completes a Business Combination. Any amounts not paid as consideration to the sellers of the target business may be used to finance operations of the target business.

Initial Business Combination

In connection with any proposed Business Combination, the Company will either (1) seek stockholders approval of the initial Business

Combination Agreement"), by and among the Company, Ignyte Korea Co., Ltd., a corporation organized under the laws of the Republic of Korea and a wholly-owned subsidiary of the Company ("Korean Sub"), and Peak Bio Co., Ltd., a corporation organized under the laws of the Republic of Korea ("Peak Bio").

On October 25, 2022, Ignyte held a special meeting of its stockholders (the "Special Meeting") at which Ignyte's stockholders voted to approve the proposals outlined in the definitive proxy statement, filed with the SEC on October 7, 2022 (the "Proxy Statement"), including, among other things, the adoption of the Business Combination Agreement. On November 1, 2022 (the "Closing Date"), as contemplated by the Business Combination Agreement and described in the section of the Proxy Statement entitled "Proposal No. 1 — The Business Combination Proposal" beginning on page 138 of the Proxy Statement, Ignyte consummated the transactions contemplated by the Business Combination Agreement, whereby the Share Swap (as defined in the Business Combination Agreement) was consummated, resulting in Peak Bio becoming a wholly-owned subsidiary of the Company (the "Business Combination").

Pursuant to the Business Combination Agreement, the Company issued the following securities:

- Holders of existing shares of common stock, par value KRW 500 per share, of Peak Bio received an aggregate of 17,295,044 shares of the Company's common stock, calculated based on the exchange ratio of 2.07188599 (the "Exchange Ratio") pursuant to the Business Combination Agreement for each share of Peak Bio's common stock held at the Effective Time (as defined in the Business Combination Agreement);

Combination at a meeting called for such purpose at which stockholders may seek to convert their shares, regardless of whether they vote for or against the proposed Business Combination or don't vote at all, into their pro rata share of the aggregate amount then on deposit in the Trust Account (net of taxes payable), or (2) provide its stockholders with the opportunity to sell their shares to the Company by means of a tender offer (and thereby avoid the need for a stockholder vote) for an amount equal to their pro rata share of the aggregate amount then on deposit in the Trust Account (net of taxes payable), in each case subject to the limitations described herein. The decision as to whether the Company will seek stockholders' approval of a proposed Business Combination or will allow stockholders to sell their shares to the Company in a tender offer will be made by the Company, solely in its discretion.

The shares of Common Stock subject to redemption will be recorded at a redemption value and classified as temporary equity upon the completion of the IPO, in accordance with Accounting Standards Codification ("ASC") Topic 480 "Distinguishing Liabilities from Equity." In such case, the Company will proceed with a Business Combination if the Company has net tangible assets of at least $5,000,001 upon such consummation of a Business Combination and, if the Company seeks stockholder approval, a majority of the issued and outstanding shares voted are voted in favor of the Business Combination.

The Company will have 21 months from the closing of the IPO to complete the initial Business Combination (the "Combination Period"). However, if the Company is unable to complete the initial Business Combination within the Combination Period, the Company will (i) cease all operations except for the purpose of winding up, (ii) as promptly as reasonably possible but not more than ten business days thereafter, redeem 100% of the outstanding public shares, at a per-share price, payable in cash, equal to the aggregate amount then on deposit in the Trust Account, including interest earned on the funds held in the Trust Account and not previously released to the Company but net of taxes payable (and less up to $50,000 of interest to pay dissolution expenses), divided by the number of then outstanding public shares, which redemption will completely extinguish public stockholders' rights as stockholders (including the right to receive further liquidation distributions, if any), subject to applicable law, and (iii) as promptly as reasonably possible following such redemption, subject to the approval of the Company's remaining stockholders and the Company's board of directors, liquidate and dissolve, subject (in the case of (ii) and (iii) above) to the Company's obligations under

- An aggregate of 635,229 shares of the Company's common stock in connection with the PIPE Investment (as defined in the Business Combination Agreement) and those certain Payment Agreements, each dated as of November 1, 2022, as previously disclosed on the Company's Current Report on Form 8-K filed with the SEC on November 2, 2022;

- An aggregate of 445,545 warrants to purchase shares of the Company's common stock in connection with the PIPE Investment (as defined in the Business Combination Agreement); and

- Each Peak Bio option that was outstanding immediately prior to the Effective Time was assumed by the Company and converted into an option to purchase that number of shares of the Company's common stock calculated based on the Exchange Ratio; accordingly, holders of Peak Bio options received options to acquire an aggregate of 1,750,967 shares of the Company's common stock pursuant to the Exchange Ratio.

- The Company's current directors and executive officers beneficially own 9,378,710 shares of the Company's common stock, which represents approximately 46.7% of the outstanding shares of the Company's common stock;

- The Sponsor owns 1,514,700 shares of the Company's common stock, which represents approximately 7.6% of the outstanding shares of the Company's common stock; and

- The Peak Bio stockholders own 17,295,044 shares of the Company's common stock, which represents approximately 86.22% of the outstanding shares of the Company's common stock.

The Units Ignyte sold in its IPO separated into their component securities upon consummation of the Business Combination and, as a result, no longer trade as a separate security and were delisted from the Nasdaq Stock Market LLC ("Nasdaq"). On November 2, 2022, the Company's common stock and the Company's public warrants that were a

Delaware law to provide for claims of creditors and the requirements of other applicable law.

The Sponsor, officers and directors have agreed (i) to vote any shares owned by them in favor of any proposed Business Combination, (ii) not to convert any shares in connection with a stockholder vote to approve a proposed initial Business Combination or sell any shares to the Company in a tender offer in connection with a proposed initial Business Combination, (iii) that the founders' shares will not participate in any liquidating distributions from the Company's Trust Account upon winding up if a Business Combination is not consummated.

The Sponsor has agreed that it will be liable to ensure that the proceeds in the Trust Account are not reduced below $10.00 per share by the claims of target businesses or claims of vendors or other entities that are owed
money by the Company for services rendered or contracted for or products sold to the Company. The agreement entered into by the Sponsor specifically provides for two exceptions to the indemnity it has given: it will have no liability (1) as to any claimed amounts owed to a target business or vendor or other entity who has executed an agreement with the Company waiving any right, title, interest or claim of any kind they may have in or to any monies held in the Trust Account, or (2) as to any claims for indemnification by the underwriters of the Proposed Public Offering against certain liabilities, including liabilities under the Securities Act. However, the Company has not asked its Sponsor to reserve for such indemnification obligations, nor has it independently verified whether the Sponsor has sufficient funds to satisfy its indemnity obligations and believe that the Sponsor's only assets are securities of the Company. Therefore, the Company believes it is unlikely that the Sponsor will be able to satisfy its indemnification obligations if it is required to do so.

Liquidity and Capital Resources

As of December 31, 2021, the Company had $329,192 in its operating bank account, and working capital of $125,317.

Prior to the completion of the Initial Public Offering, the Company's liquidity needs had been satisfied through a payment from the Sponsor of $25,000 (see Note 5) for the Founder Shares to cover certain offering costs, the loan under an unsecured promissory note from the Sponsor of $80,000 (see Note 5), and the net proceeds from the consummation of the Private Placement not held in the Trust Account. In addition, in order to finance transaction

component of the Units sold in the IPO began trading on the Nasdaq Capital market under symbols “PKBO” and “PKBOW,” respectively.

The foregoing description of the Business Combination does not purport to be complete and is qualified in its entirety by the full text of the Business Combination Agreement, which is attached as Exhibit 2.1 to the Current Report on Form 8-K filed by the Company on November 7, 2022 and is incorporated herein by reference.

Liquidity and Capital Resources

As of September 30, 2022, the Company had $75,974 in its operating bank account and working capital deficit of $1,629,184, which excludes $320,483 of accrued Delaware franchise tax to be paid out of interest earned on the Trust Account.

Prior to the completion of the IPO, the Company’s liquidity needs had been satisfied through a payment from the Sponsor of $25,000 (see Note 5) for the Founder Shares to cover certain offering costs, the loan under an unsecured promissory note from the Sponsor of $80,000 (see Note 5), and the net proceeds from the consummation of the Private Placement not held in the Trust Account. In addition, in order to finance transaction costs in connection with a Business Combination, the Company’s Sponsor or an affiliate of the Sponsor or the Company’s officers and directors or their affiliates may, but are not obligated to, provide the Company Working Capital Loans (see Note 5). On March 21, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of $300,000 to the Company as required. On September 20, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of up to $100,000 to the Company as required.

Going Concern

In connection with the Company’s assessment of going concern considerations in accordance with Financial Accounting Standard Board’s Accounting Standards Update (“ASU”) 2014-15, “Disclosures of Uncertainties

costs in connection with a Business Combination, the Company’s Sponsor or an affiliate of the Sponsor or the Company’s officers and directors or their affiliates may, but are not obligated to, provide the Company Working Capital Loans (see Note 5). On March 21, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of $300,000 to the Company as required. At December 31, 2021, no amounts of Working Capital Loans were outstanding.

Going Concern

In connection with the Company’s assessment of going concern considerations in accordance with Financial Accounting Standard Board’s Accounting Standards Update (“ASU”) 2014-15, “Disclosures of Uncertainties about an Entity’s Ability to Continue as a Going Concern,” the Company has until November 2, 2022 to consummate the proposed Business Combination. It is uncertain that the Company will be able to consummate the proposed Business Combination by this time. If a Business Combination is not consummated by this date, there will be a mandatory liquidation and subsequent dissolution of the Company. Management has determined that the mandatory liquidation, should a business combination not occur, and potential subsequent dissolution, raises substantial doubt about the Company’s ability to continue as a going concern. No adjustments have been made to the carrying amounts of assets or liabilities should the Company be required to liquidate after November 2, 2022. The Company intends to complete the proposed Business Combination before the mandatory liquidation date. However, there can be no assurance that the Company will be able to consummate any business combination by November 2, 2022.

about an Entity's Ability to Continue as a Going Concern," the Company has until November 2, 2022 to consummate the proposed Business Combination. It is uncertain that the Company will be able to consummate the proposed Business Combination by this time. If a Business Combination is not consummated by this date, there will be a mandatory liquidation and subsequent dissolution of the Company. Management has determined that the mandatory liquidation, should a business combination not occur, and potential subsequent dissolution, raises substantial doubt about the Company's ability to continue as a going concern. No adjustments have been made to the carrying amounts of assets or liabilities should the Company be required to liquidate after November 2, 2022. The Company intends to complete the proposed Business Combination before the mandatory
liquidation date. However, there can be no assurance that the Company will be able to consummate any business combination by November 2, 2022. As of November 2, 2022, substantial doubt about our ability to continue as a going concern was alleviated due to the closing of a business combination.

Based on the foregoing, management believes that the Company will not have sufficient working capital and borrowing capacity from the Sponsor or an affiliate of the Sponsor, or certain of the Company's officers and directors to meet its needs through the earlier of the consummation of a Business Combination or one year from this filing. However, the Working Capital Loans, as defined in Note 5, will provide additional flexibility to continue our identification and pursuit of potential business combination targets. Over this time period, the Company will be using available funds, including those from the Working Capital Loans, for the purpose of paying existing accounts payable, identifying and evaluating prospective Initial Business Combination candidates, performing due diligence on prospective target businesses, paying for travel expenditures, selecting the target business to merge with or acquire, and structuring, negotiating and consummating the Business Combination.

Summary of Significant Accounting Policies	9 Months Ended Sep. 30, 2022	12 Months Ended Dec. 31, 2021
Accounting Policies [Abstract]		
Summary of Significant Accounting Policies		

Note 2 — Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed financial statements are presented in U.S. dollars and in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") for financial information and pursuant to the rules and regulations of the SEC. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP. In the opinion of management, the unaudited condensed financial statements reflect all adjustments, which include only normal recurring adjustments necessary for the fair statement of the balances and results for the periods presented. Operating results for the period for the three and nine months ended September 30, 2022 are not necessarily indicative of the results that may be expected through December 31, 2022.

The accompanying unaudited condensed financial statements should be read in conjunction with the audited financial statements and notes thereto included in the Company's Annual Report on Form10-K for the year ended December 31, 2021, filed by the Company with the SEC on March 31, 2022.

Emerging Growth Company

The Company is an "emerging growth company," as defined in Section 2(a) of the Securities Act of 1933, as amended, (the "Securities Act"), as modified by the Jumpstart our Business Startups Act of 2012, (the "JOBS Act"), and it may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. The Company has elected not to opt out of such extended transition period which means that when a standard is issued or revised and it has different application dates for public or private companies, the Company, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard.
This may make comparison of the Company's financial statement with another public company which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.

Use of Estimates

The preparation of unaudited condensed financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the unaudited condensed financial statements and the

Note 2 — Summary of Significant Accounting Policies

Basis of Presentation

The accompanying financial statements of the Company are presented in U.S. dollars in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") and pursuant to the rules and regulations of the SEC. In the opinion of management, all adjustments (consisting of normal recurring adjustments) have been made that are necessary to present fairly the financial position, and the results of its operations and its cash flows.

Emerging Growth Company

The Company is an "emerging growth company," as defined in Section 2(a) of the Securities Act of 1933, as amended, (the "Securities Act"), as modified by the Jumpstart our Business Startups Act of 2012, (the "JOBS Act"), and it may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

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Use of Estimates

The preparation of audited financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the audited financial statements and the reported amounts of expenses during the reporting period. Making estimates requires management to exercise significant judgment. It is at least reasonably possible that the estimate of the effect of a condition, situation or set of circumstances that existed at the date of the audited financial statements, which management considered in formulating its estimate, could change in the near term due to one or more future confirming events. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all short-term investments with an original maturity of three months or less when purchased to be cash

reported amounts of expenses during the reporting period. Making estimates requires management to exercise significant judgment. It is at least reasonably possible that the estimate of the effect of a condition, situation or set of circumstances that existed at the date of the unaudited condensed financial statements, which management considered in formulating its estimate, could change in the near term due to one or more future confirming events. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all short-term investments with an original maturity of three months or less when purchased to be cash equivalents. The Company did not have any cash equivalents as of September 30, 2022 and December 31, 2021.

Marketable Securities Held in Trust Account

As of September 30, 2022 and December 31, 2021, the assets held in the Trust Account were invested in money market funds.

Fair Value Measurements

Financial Accounting Standards Board ("FASB") ASC Topic 820 "Fair Value Measurements and Disclosures" ("ASC 820") defines fair value, the methods used to measure fair value and the expanded disclosures about fair value measurements. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between the buyer and the seller at the measurement date. In determining fair value, the valuation techniques consistent with the market approach, income approach and cost approach shall be used to measure fair value. ASC 820 establishes a fair value hierarchy for inputs, which represent the assumptions used by the buyer and seller in pricing the asset or liability. These inputs are further defined as observable and unobservable inputs. Observable inputs are those that buyer and seller would use in pricing the asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs reflect the Company's assumptions about the inputs that the buyer and seller would use in pricing the asset or liability developed based on the best information available in the circumstances.

The fair value hierarchy is categorized into three levels based on the inputs as follows:

Level 1 — Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access. Valuation adjustments and block discounts are not being applied. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of these securities does not entail a significant degree of judgment.

Level 2 — Valuations based on (i) quoted prices in active markets for similar assets and liabilities, (ii) quoted prices in markets that are not active for identical or similar assets, (iii) inputs other than quoted prices for the assets or liabilities, or (iv) inputs that are derived principally from or corroborated by market through correlation or other means.
Level 3 — Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

The fair value of the Company's certain assets and liabilities, which qualify as financial instruments under ASC 820 approximates the carrying amounts represented in the balance sheet. The fair values of cash, prepaid assets, and accounts payable are estimated to approximate the carrying values as of December 31, 2021 due to the short maturities of such instruments.

The Company's warrant liabilities are based on a valuation model utilizing management judgment and pricing inputs from observable and unobservable markets with less volume and transaction frequency than active markets. Significant deviations from these estimates and inputs could result in a material change in fair value. In some circumstances, the inputs used to measure fair value might be categorized within different levels of the fair value hierarchy. In equivalents. The Company has $329,192 of cash held outside of the Trust Account as of December 31, 2021 and $0 as of December 31, 2020. The Company did not have any cash equivalents as of December 31, 2021 and 2020.

Marketable Securities Held in Trust Account

At December 31, 2021, the assets held in the Trust Account were invested in money market funds.

Fair Value Measurements

FASB ASC Topic 820 "Fair Value Measurements and Disclosures" ("ASC 820") defines fair value, the methods used to measure fair value and the expanded disclosures about fair value measurements. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between the buyer and the seller at the measurement date. In determining fair value, the valuation techniques consistent with the market approach, income approach and cost approach shall be used to measure fair value. ASC 820 establishes a fair value hierarchy for inputs, which represent the assumptions used by the buyer and seller in pricing the asset or liability. These inputs are further defined as observable and unobservable inputs. Observable inputs are those that buyer and seller would use in pricing the asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs reflect the Company's assumptions about the inputs that the buyer and seller would use in pricing the asset or liability developed based on the best information available in the circumstances.
The fair value hierarchy is categorized into three levels based on the inputs as follows:

Level 1 — Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access. Valuation adjustments and block discounts are not being applied. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of these securities does not entail a significant degree of judgment.

Level 2 — Valuations based on (i) quoted prices in active markets for similar assets and liabilities, (ii) quoted prices in markets that are not active for identical or similar assets, (iii) inputs other than quoted prices for the assets or liabilities, or (iv) inputs that are derived principally from or corroborated by market through correlation or other means.

Level 3 — Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

The fair value of the Company's certain assets and liabilities, which qualify as financial instruments under ASC 820, "Fair Value Measurements and Disclosures," approximates the carrying amounts represented in the balance sheet. The fair values of cash, prepaid assets, and accounts payable are estimated to approximate the carrying values as of December 31, 2021 due to the short maturities of such instruments.

The Company's warrant liabilities are based on a valuation model utilizing management judgment and pricing inputs from observable and unobservable markets with less volume and transaction frequency than active markets. Significant deviations from these estimates and inputs could result in a material change in fair value. In some circumstances, the inputs used to measure fair value might be categorized within different levels of the fair value hierarchy. In those instances, the fair value measurement is categorized in its entirety in the fair value hierarchy based on the lowest level input that is significant to the fair value measurement. See Note 6 for additional information on assets and liabilities measured at fair value.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist of a cash account in a financial institution, which, at times, may exceed the Federal Depository Insurance Coverage of $250,000. At December 31, 2021 and 2020, the Company has not experienced losses on this account and

those instances, the fair value measurement is categorized in its entirety in the fair value hierarchy based on the lowest level input that is significant to the fair value measurement. See Note 6 for additional information on assets and liabilities measured at fair value.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist of a cash account in a financial institution, which, at times, may exceed the Federal Depository Insurance Coverage of $250,000. As of September 30, 2022 and December 31, 2021, the Company has not experienced losses on this account and management believes the Company is not exposed to significant risks on such account.

Common Stock Subject to Possible Redemption

All of the 5,750,000 shares of common stock sold as part of the Units in the IPO contain a redemption feature which allows for the redemption of such public shares in connection with the Company's liquidation, if there is a stockholder vote or tender offer in connection with the Business Combination and in connection with certain amendments to the Company's amended and restated certificate of incorporation. In accordance with SEC and its staff's guidance on redeemable equity instruments, which has been codified in ASC 480-10-S99, redemption provisions not solely within the control of the Company require common stock subject to redemption to be classified outside of permanent equity. Therefore, all common stock, excluding the founder shares, has been classified outside of permanent equity.

The Company recognizes changes in redemption value immediately as they occur and adjusts the carrying value of redeemable common stock to equal the redemption value at the end of each reporting period. Increases or decreases in the carrying amount of redeemable common stock are affected by charges against additional paid in capital and accumulated deficit.

Net Income (Loss) Per Common Stock

The Company recognizes two classes of shares for EPS purposes, which are referred to as redeemable common stock and outstanding common stock. Earnings and losses are shared pro rata between the two classes of shares. The 5,375,000 potential common shares for outstanding warrants to purchase the Company's stock were excluded from diluted earnings per share for the three and nine months ended September 30, 2022 and 2021 because the warrants are contingently exercisable, and the contingencies have not yet been met. As a result,

diluted net income (loss) per common share is the same as basic net income (loss) per common share for the periods. The table below presents a reconciliation of the numerator and denominator used to compute basic and diluted net income (loss) per share for each class of common stock:

	For the Three Months Ended September 30,			
	2022		2021	
	Redeemable Common Stock	Outstanding Common Stock	Redeemable Common Stock	Outstanding Common Stock
Basic and diluted net (loss) income per share:				
Numerator:				
Allocation of net (loss) income	$ (134,928)	$ (36,079)	$ 95,763	$ 25,606
Denominator:				
Weighted-average shares outstanding	5,750,000	1,537,500	5,750,000	1,537,500

management believes the Company is not exposed to significant risks on such account.

Common Stock Subject to Possible Redemption

All of the 5,750,000 shares of common stock sold as part of the Units in the IPO contain a redemption feature which allows for the redemption of such public shares in connection with the Company's liquidation, if there is a stockholder vote or tender offer in connection with the Business Combination and in connection with certain amendments to the Company's amended and restated certificate of incorporation. In accordance with SEC and its staff's guidance on redeemable equity instruments, which has been codified in ASC 480-10-S99, redemption provisions not solely within the control of the Company require common stock subject to redemption to be classified outside of permanent equity. Therefore, all common stock, excluding the founder shares, has been classified outside of permanent equity.

The Company recognizes changes in redemption value immediately as they occur and adjusts the carrying value of redeemable common stock to equal the redemption value at the end of each reporting period. Increases or decreases in the carrying amount of redeemable common stock are affected by charges against additional paid in capital and accumulated deficit.

Net Loss Per Common Stock

The Company recognizes two classes of shares for EPS purposes, which are referred to as redeemable common stock and outstanding common stock. Earnings and losses are shared pro rata between the two classes of shares. The 5,750,000 potential common stocks for outstanding warrants to purchase the Company's shares were excluded from diluted earnings per share for the period from August 6, 2020 (inception) through December 31, 2020 and for the year ended December 31, 2021 because the warrants are contingently exercisable, and the contingencies have not yet been met. As a result, diluted net loss per common stock is the same as basic net loss per common stock for the periods. The table below presents a reconciliation of the numerator and denominator used to compute basic and diluted net loss per share for each class of common stock:

	For the year ended December 31, 2021		For the period from August 6, 2020 (inception) through December 31, 2020	
	Redeemable Common Stock	Outstanding Common Stock	Redeemable Common Stock	Outstanding Common Stock
Basic and diluted net loss per share:				
Numerator:				
Allocation of net loss	$ (377,606)	$ (110,383)	$ —	$ (310)
Denominator:				
Weighted-average shares outstanding	5,259,589	1,537,500	—	1,537,500
Basic and diluted net loss per share	$ (0.07)	$ (0.07)	$ —	$ (0.00)

Offering Costs associated with the Initial Public Offering

The Company complies with the requirements of the ASC 340-10-S99-1 and SEC Staff Accounting Bulletin ("SAB") Topic 5A — "Expenses of Offering". Offering costs consist principally of professional and registration fees incurred through the balance sheet date that are related to the IPO and were charged to temporary equity upon the completion of the IPO. Accordingly, as of February 1, 2021, offering costs in the aggregate of $1,594,485 have been charged to temporary equity (consisting of $1,150,000 of underwriting discount and $444,485 of other offering costs).

Warrant Liabilities

Basic and diluted net (loss) income per share	$ (0.02)	$ (0.02)	$ 0.02	$ 0.02

	For the Nine Months Ended September 30,			
	2022		2021	
	Redeemable Common Stock	Outstanding Common Stock	Redeemable Common Stock	Outstanding Common Stock
Basic and diluted net income per share:				
Numerator:				
Allocation of net income	$ 82,203	$ 21,980	$ 300,326	$ 90,967
Denominator:				
Weighted-average shares outstanding	5,750,000	1,537,500	5,076,007	1,537,500
Basic and diluted net income per share	$ 0.01	$ 0.01	$ 0.06	$ 0.06

Offering Costs associated with the Initial Public Offering

The Company complies with the requirements of the ASC 340-10-S99-1 and SEC Staff Accounting Bulletin ("SAB") Topic 5A-"Expenses of Offering". Offering costs consist principally of professional and registration fees incurred through the balance sheet date that are related to the IPO and were charged to temporary equity upon the completion of the IPO. Accordingly, as of February 1, 2021, offering costs in the aggregate of $1,594,485 have been charged to temporary equity (consisting of $1,150,000 of underwriting discount and $444,485 of other offering costs).

Warrant Liabilities

The Company accounts for the Public Warrants and Private Warrants (as defined in Notes 3 and 4) collectively ("Warrants"), as either equity or liability-classified instruments based on an assessment of the specific terms of the Warrants and the applicable authoritative guidance in FASB Accounting Standards Codification ("ASC") 815, Derivatives and Hedging ("ASC 815"). The assessment considers whether the Warrants meet all of the requirements for equity classification under ASC 815, including whether the Warrants are indexed to the Company's own common stocks and whether the warrant holders could potentially require "net cash settlement" in a circumstance outside of the Company's control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of issuance of the Warrants and as of each subsequent quarterly period end date while the Warrants are outstanding.

For issued or modified warrants that meet all of the criteria for equity classification, such warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants
that do not meet all the criteria for equity classification, such warrants are required to be recorded at their initial fair value on the date of issuance, and each balance sheet date thereafter. Changes in the estimated fair value of liability-classified warrants are recognized as a non-cash gain or loss on the statements of operations.

The Company accounts for the Private Warrants in accordance with ASC 815-40 under which the Private Warrants do not meet the criteria for equity classification and must be recorded as liabilities. The fair value of the Private Warrants has been estimated using the Modified Black Scholes model. See Note 6 for further discussion of the pertinent terms of the Warrants used to determine the value of the Private Warrants and Representative's Warrants.

The Company accounts for the Public Warrants and Private Warrants (as defined in Notes 3 and 4) collectively ("Warrants"), as either equity or liability-classified instruments based on an assessment of the specific terms of the Warrants and the applicable authoritative guidance in Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 815, Derivatives and Hedging ("ASC 815"). The assessment considers whether the Warrants meet all of the requirements for equity classification under ASC 815, including whether the Warrants are indexed to the Company's own common stocks and whether the warrant holders could potentially require "net cash settlement" in a circumstance outside of the Company's control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of issuance of the Warrants and as of each subsequent quarterly period end date while the Warrants are outstanding.

For issued or modified warrants that meet all of the criteria for equity classification, such warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants
that do not meet all the criteria for equity classification, such warrants are required to be recorded at their initial fair value on the date of issuance, and each balance sheet date thereafter. Changes in the estimated fair value of liability-classified warrants are recognized as a non-cash gain or loss on the statements of operations.
The Company accounts for the Private Warrants in accordance with ASC 815-40 under which the Private Warrants do not meet the criteria for equity classification and must be recorded as liabilities. The fair value of the Private Warrants has been estimated using the Modified Black Scholes model. See Note 6 for further discussion of the pertinent terms of the Warrants used to determine the value of the Private Warrants and Representative's Warrants.

The Company evaluated the Public Warrants in accordance with ASC 815-40, "Derivatives and Hedging — Contracts in Entity's Own Equity" and concluded that they met the criteria for equity classification and are required to be recorded as part a component of additional paid-in capital at the time of issuance.

Income Taxes

The Company follows the asset and liability method of accounting for income taxes under ASC 740, "Income Taxes." Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statements carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that included the enactment date. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized.

ASC 740 prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more likely than not to be sustained upon examination by taxing authorities. The Company recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense. There were no unrecognized tax benefits and no amounts accrued for interest and penalties as of December 31, 2021. The Company is currently not aware of any issues under review that could result in significant payments, accruals or material deviation from its position. The Company is subject to income tax examinations by major taxing authorities since inception.

Risks and Uncertainties

On January 30, 2020, the World Health Organization ("WHO") announced a global health emergency because of a new strain of coronavirus (the "COVID-19 outbreak"). In March 2020, the WHO classified the COVID-19 outbreak as a pandemic, based on the rapid

The Company evaluated the Public Warrants in accordance with ASC 815-40, "Derivatives and Hedging—Contracts in Entity's Own Equity" and concluded that they met the criteria for equity classification and are required to be recorded as part a component of additional paid-in capital at the time of issuance.

Income Taxes

The Company accounts for income taxes under ASC 740, "Income Taxes." ASC 740 requires the recognition of deferred tax assets and liabilities for both the expected impact of differences between the unaudited condensed financial statements and tax basis of assets and liabilities and for the expected future tax benefit to be derived from tax loss and tax credit carry forwards. ASC 740 additionally requires a valuation allowance to be established when it is more likely than not that all or a portion of deferred tax assets will not be realized. As of September 30, 2022 and December 31, 2021, the Company's deferred tax asset had a full valuation allowance recorded against it. Our effective tax rate was (4.96)% and 0% for the three months ended September 30, 2022 and 2021, respectively, and 7.20% and 0% for the nine months ended September 30, 2022 and 2021, respectively. The effective tax rate differs from the statutory tax rate of 21% for the three months and nine months ended September 30, 2022 and 2021, due to changes in fair value in warrant liability, changes in fair value in the PIPE derivative liability, and the valuation allowance on the deferred tax assets.

ASC 740 also clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements and prescribes a recognition threshold and measurement process for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not to be sustained upon examination by taxing authorities. ASC 740 also provides guidance on derecognition, classification, interest and penalties, accounting in interim period, disclosure and transition.

The Company recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense. There were no unrecognized tax benefits and no amounts accrued for interest and penalties as of September 30, 2022 and December 31, 2021. The Company is currently not aware of any issues under review that could result in significant payments, accruals or material deviation from its position.

The Company has identified the United States as its only "major" tax jurisdiction. The Company is subject to income taxation by major taxing authorities since inception. These examinations may include questioning the timing and amount of deductions, the nexus of income among various tax jurisdictions and compliance with federal and state tax laws. The Company's management does not expect that the total amount of unrecognized tax benefits will materially change over the next twelve months

Risks and Uncertainties

In February 2022, the Russian Federation and Belarus commenced a military action with the country of Ukraine. As a result of this action, various nations, including the United States, have instituted economic sanctions against the Russian Federation and Belarus. Further, the impact of this action and related sanctions on the world economy are not determinable as of the date of these condensed financial statements. The specific impact on the Company's financial condition, results of operations, and cash flows is also not determinable as of the date of these condensed financial statements.

On January 30, 2020, the World Health Organization ("WHO") announced a global health emergency because of a new strain of coronavirus (the "COVID-19 outbreak"). In March 2020, the WHO classified the COVID-19 outbreak as a pandemic, based on the rapid increase in exposure globally. The full impact of the COVID-19 outbreak continues to evolve. The impact of the COVID-19 outbreak and Russian military action against Ukraine on the Company's financial position will depend on future increase in exposure globally. The full impact of the COVID-19 outbreak continues to evolve. The impact of the COVID-19 outbreak on the Company's financial position will depend on future developments, including the duration and spread of the outbreak and related advisories and restrictions. These developments and the impact of the COVID-19 outbreak on the financial markets and the overall economy are highly uncertain and cannot be predicted. If the financial markets and/or the overall economy are impacted for an extended period, the Company's financial position may be materially adversely affected. Additionally, the Company's ability to complete an initial Business Combination may be materially adversely affected due to significant governmental measures being implemented to contain the COVID-19 outbreak or treat its impact, including travel restrictions, the shutdown of businesses and quarantines, among others, which may limit the Company's ability to have meetings with potential investors or affect the ability of a potential target company's personnel, vendors and service providers to negotiate and consummate an initial Business Combination in a timely manner. The Company's ability to consummate an initial Business Combination may also be dependent on the ability to raise additional equity and debt financing, which may be impacted by the COVID-19 outbreak and the resulting market downturn. The financial statement does not include any adjustments that might result from the outcome of this uncertainty.

Recent Accounting Standards

In August 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2020-06, Debt — Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40) ("ASU 2020-06") to simplify accounting for certain financial instruments. ASU 2020-06 eliminates the current models that require separation of beneficial conversion and cash conversion features from convertible instruments and simplifies the derivative scope exception guidance pertaining to equity classification of contracts in an entity's own equity. The new standard also introduces additional disclosures for convertible debt and freestanding instruments that are indexed to and settled in an entity's own equity. ASU 2020-06 amends the diluted earnings per share guidance, including the requirement to use the if-converted method for all convertible instruments. ASU 2020-06 is effective January 1, 2024 and should be applied on a full or modified retrospective basis, with early adoption permitted beginning on January 1, 2021. The Company is currently assessing the impact, if any, that ASU 2020-06 would have on its financial position, results of operations or cash flows.

Management does not believe that any other recently issued, but not yet effective, accounting pronouncements, if currently adopted, would have a material effect on the Company's financial statements.

developments, including the duration and spread of the outbreak and related advisories and restrictions and the effects and duration of economic sanctions. These developments and the impact on the financial markets and the overall economy are highly uncertain and cannot be predicted. If the financial markets and/or the overall economy are impacted for an extended period, the Company's financial position may be materially adversely affected. Additionally, the Company's ability to complete an initial business combination may be materially adversely affected due to significant governmental measures being implemented to contain the COVID-19 outbreak or treat its impact, including travel restrictions, the shutdown of businesses and quarantines, among others, which may limit the Company's ability to have meetings with potential investors or affect the ability of a potential target company's personnel, vendors and service providers to negotiate and consummate an initial business combination in a timely manner. The Company's ability to consummate an initial business combination may also be dependent on the ability to raise additional equity and debt financing, which may be impacted by the COVID-19 outbreak and the effects and duration of economic sanctions and the resulting market downturn. The financial statements do not include any adjustments that might result from the outcome of these uncertainties.

Inflation Reduction Act of 2022

On August 16, 2022, the Inflation Reduction Act of 2022 (the "IR Act") was signed into federal law. The IR Act provides for, among other things, a new U.S. federal 1% excise tax on certain repurchases of stock by publicly traded U.S. domestic corporations and certain U.S. domestic subsidiaries of publicly traded foreign corporations occurring on or after January 1, 2023. The excise tax is imposed on the repurchasing corporation itself, not its shareholders from which shares are repurchased. The amount of the excise tax is generally 1% of the fair market value of the shares repurchased at the time of the repurchase. However, for purposes of calculating the excise tax, repurchasing corporations are permitted to net the fair market value of certain new stock issuances against the fair market value of stock repurchases during the same taxable year. In addition, certain exceptions apply to the excise tax. The U.S. Department of the Treasury (the "Treasury") has been given authority to provide regulations and other guidance to carry out and prevent the abuse or avoidance of the excise tax.

Any redemption or other repurchase that occurs after December 31, 2022, in connection with a Business Combination, extension vote or otherwise, may be subject to the excise tax. Whether and to what extent the Company would be subject to the excise tax in connection with a Business Combination, extension vote or otherwise would depend on a number of factors, including (i) the fair market value of the redemptions and repurchases in connection with the Business Combination, extension or otherwise, (ii) the structure of a Business Combination, (iii) the nature and amount of any "PIPE" or other equity issuances in connection with a Business Combination (or otherwise issued not in connection with a Business Combination but issued within the same taxable year of a Business Combination) and (iv) the content of regulations and other guidance from the Treasury. In addition, because the excise tax would be payable by the Company and not by the redeeming holder, the mechanics of any required payment of the excise tax have not been determined. The foregoing could cause a reduction in the cash available on hand to complete a Business Combination and in the Company's ability to complete a Business Combination.

Recent Accounting Standards

In August 2020, the FASB issued Accounting Standards Update ("ASU") 2020-06, Debt — Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own
Equity (Subtopic 815-40) ("ASU 2020-06") to simplify accounting for certain financial instruments. ASU 2020-06 eliminates the current models that require separation of beneficial conversion and cash conversion features from convertible instruments and simplifies the derivative scope exception guidance pertaining to

equity classification of contracts in an entity's own equity. The new standard also introduces additional disclosures for convertible debt and freestanding instruments that are indexed to and settled in an entity's own equity. ASU 2020-06 amends the diluted earnings per share guidance, including the requirement to use the if-converted method for all convertible instruments. ASU 2020-06 is effective January 1, 2024 and should be applied on a full or modified retrospective basis, with early adoption permitted beginning on January 1, 2021. The Company is currently assessing the impact, if any, that ASU 2020-06 would have on its financial position, results of operations or cash flows.

Management does not believe that any other recently issued, but not yet effective, accounting pronouncements, if currently adopted, would have a material effect on the Company's financial statements.

Initial Public Offering	9 Months Ended Sep. 30, 2022	12 Months Ended Dec. 31, 2021
Public Offering [Abstract]		
Initial Public Offering		

Note 3 — Initial Public Offering

On February 1, 2021, the Company sold 5,000,000 Units, at a purchase price of $10.00 per Unit. Each Unit consists of one share of common stock and one-half of one warrant to purchase one share of common stock ("Public Warrant"). Each whole Public Warrant entitles the holder to purchase one share of common stock at a price of $11.50 per share, subject to adjustment.

On February 2, 2021, the Underwriters exercised the over-allotment option in full to purchase 750,000 Units (the "Over-Allotment Units"), generating an aggregate of gross proceeds of $7,500,000, and incurred $150,000 in underwriting fees.

Public Warrants

Each whole warrant entitles the holder to purchase one share of Common Stock at a price of $11.50 per share, subject to adjustment as discussed herein. The warrants will become exercisable 30 days after the completion of the Company's initial Business Combination. However, no warrants will be exercisable for cash unless the Company has an effective and current registration statement covering the shares of common stock issuable upon exercise of the warrants and a current prospectus relating to such shares of common stock. Notwithstanding the foregoing, if a registration statement covering the shares of common stock issuable upon exercise of the public warrants is not effective within a specified period following the consummation of the initial Business Combination, warrant holders may, until such time as there is an effective registration statement and during any period when the Company shall have failed to maintain an effective registration statement, exercise warrants on a cashless basis pursuant to the exemption provided by Section 3(a)(9) of the Securities Act, provided that such exemption is available. If that exemption, or another exemption, is not available, holders will not be able to exercise their warrants on a cashless basis. In the event of such cashless exercise, each holder would pay the exercise price by surrendering the warrants for that number of

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shares of common stock equal to the quotient obtained by dividing (x) the product of the number of shares of common stock underlying the warrants, multiplied by the difference between the exercise price of the warrants and the "fair market value" (defined below) by (y) the fair market value. The "fair market value" for this purpose will mean the average reported last sale price of the shares of common stock for the 5 trading days ending on the trading day prior to the date of exercise. The warrants will expire on the fifth anniversary of the completion of an initial Business Combination, at 5:00 p.m., New York City time, or earlier upon redemption or liquidation.

The Company may call the warrants for redemption (excluding the Private Placement Warrants and any warrants underlying additional units issued to the Sponsor, initial stockholders, officers, directors or their affiliates in payment of Working Capital Loans made to the Company)

- in whole and not in part;
- at a price of $0.01 per warrant;
- at any time after the warrants become exercisable,
- upon not less than 30 days' prior written notice of redemption to each warrant holder; and
- if, and only if, the reported last sale price of the Common Stock equals or exceeds $18.00 per share (as adjusted for stock splits, stock dividends, reorganizations, recapitalizations) for any 20 trading days within a 30-tradingday period commencing at any time after the warrants become exercisable and ending on the third business day prior to the notice of redemption to warrant holders; and
- if, and only if, there is a current registration statement in effect with respect to the shares of common stock underlying such warrants.

If the Company calls the warrants for redemption as described above, the Company's management will have the option to require all holders that wish to exercise warrants to do so on a "cashless basis." In such event, each holder would pay the exercise price by surrendering the warrants for that number of shares of common stock equal to the quotient obtained by dividing (x) the product of the number of shares of common stock underlying the warrants, multiplied by the difference between the

shares of common stock equal to the quotient obtained by dividing (x) the product of the number of shares of common stock underlying the warrants, multiplied by the difference between the exercise price of the warrants and the "fair market value" (defined below) by (y) the fair market value. The "fair market value" for this purpose will mean the average reported last sale price of the shares of common stock for the 5 trading days ending on the trading day prior to the date of exercise. The warrants will expire on the fifth anniversary of the completion of an initial Business Combination, at 5:00 p.m., New York City time, or earlier upon redemption or liquidation.

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exercise price of the warrants and the "fair market value" (defined below) by (y) the fair market value. The "fair market value" for this purpose shall mean the average reported last sale price of the shares of common stock for the 5 trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders of warrants.

In addition, if (x) the Company issue additional shares of Common Stock or equity-linked securities for capital raising purposes in connection with the closing of the initial Business Combination at an issue price or effective issue price of less than $9.20 per share of common stock (with such issue price or effective issue price to be determined in good faith by the Company's board of directors, and in the case of any such issuance to the Sponsor, initial stockholders or their affiliates, without taking into account any founders' shares held by them prior to such issuance), (y) the aggregate gross proceeds from such issuances represent more than 60% of the total equity proceeds, and interest thereon, available for the funding of the initial Business Combination on the date of the consummation of the initial Business Combination (net of redemptions), and (z) the Market Value is below $9.20 per share, the exercise price of the warrants will be adjusted (to the nearest cent) to be equal to 115% of the greater of (i) the Market Value or (ii) the price at which the Company issues the additional shares of common stock or equity-linked securities.

market value" (defined below) by (y) the fair market value. The "fair market value" for this purpose shall mean the average reported last sale price of the shares of common stock for the 5 trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders of warrants.

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Private Placement	9 Months Ended Sep. 30, 2022	12 Months Ended Dec. 31, 2021
Private Placement [Abstract]		
Private Placement		

Note 4 — Private Placement

Simultaneously with the closing of the IPO, the Sponsor purchased an aggregate of 2,350,000 Private Placement Warrants at a price of $1.00 per Private Placement Warrant, for an aggregate purchase price of $2,350,000, in a private placement (the "Private Placement"). Each Private Placement Warrant will entitle the holder to purchase one share of common stock at a price of $11.50 per share, subject to adjustment. The proceeds from the Private Placement Warrants were added to the proceeds from the IPO held in the Trust Account. If the Company does not complete a Business Combination within the Combination Period, the proceeds from the sale of the Private Placement Warrants held in the Trust Account will be used to fund the redemption of the Public Shares (subject to the requirements of applicable law) and the Private Placement Warrants will expire worthless.

The Private Placement Warrants are identical to the Warrants underlying the Units sold in the IPO, except that the Private Placement Warrants are non-redeemable and may be exercised on a cashless basis, in each case so long as they continue to be held by the initial purchasers or their permitted transferees. Further, the Sponsor has agreed not to transfer, assign, or sell the Private Placement Warrants (including the shares of Common Stock issuable upon the exercise of the Private Placement Warrants), except to certain permitted transferees, until after the consummation of the Company's initial Business Combination.

Simultaneously with the closing of the exercise of the over-allotment option, the Company completed the private sale (the "Private Placement") of an aggregate of 150,000 private placement warrants (the "Private Placement Warrants") to Ignyte Sponsor LLC, a Delaware limited liability company (the "Sponsor"), at a purchase price of $1.00 per Private Placement Warrant, generating gross proceeds of $150,000.

Note 4 — Private Placement

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Related Party Transactions	9 Months Ended Sep. 30, 2022	12 Months Ended Dec. 31, 2021
Related Party Transactions [Abstract]		
Related Party Transactions	**Note 5 — Related Party Transactions**	**Note 5 — Related Party Transactions**
	Founder Shares	***Founder Shares***
	On August 12, 2020, the Sponsor paid $25,000, or approximately $0.02 per share, to cover certain offering costs in consideration for 1,437,500 shares of Common Stock, par value $0.0001 (the "Founder Shares"). Up to 187,500 Founder Shares are subject to forfeiture by the Sponsor depending on the extent to which the underwriters' over-allotment option is exercised. On February 2, 2021, the underwriter exercised its over-allotment option in full, hence, the 187,500 Founder Shares are no longer subject to forfeiture since then.	On August 12, 2020, the Sponsor paid $25,000, or approximately $0.02 per share, to cover certain offering costs in consideration for 1,437,500 shares of Common Stock, par value $0.0001 (the "Founder Shares"). Up to 187,500 Founder Shares were subject to forfeiture by the Sponsor depending on the extent to which the underwriters' over-allotment option is exercised. On February 2, 2021, the underwriter exercised its over-allotment option in full, hence, the 187,500 Founder Shares were no longer subject to forfeiture since then.
	The founders' shares were placed into an escrow account maintained in New York, New York by Continental Stock Transfer & Trust Company, acting as escrow agent. Subject to certain limited exceptions, these shares will not be transferred, assigned, sold or released from escrow (subject to certain limited exceptions set forth below) (i) with respect to 50% of such shares, for a period ending on the earlier of the one-year anniversary of the date of the consummation of the initial Business Combination and the date on which the closing price of the Company's common stock equals or exceeds $12.50 per share (as adjusted for share splits, share dividends, reorganizations and recapitalizations) for any 20 trading days within a30-tradingday period following the consummation of the initial Business Combination and (ii) with respect to the remaining 50% of such shares, for a period ending on the one-year anniversary of the date of the consummation of the initial Business Combination, or earlier, in either case, if, subsequent to the initial Business Combination, the Company consummates a liquidation, merger, stock exchange or other similar transaction which results in all of the Company's stockholders having the right to exchange their shares of common stock for cash, securities or other property.	The founders' shares were placed into an escrow account maintained in New York, New York by Continental Stock Transfer & Trust Company, acting as escrow agent. Subject to certain limited exceptions, these shares will not be transferred, assigned, sold or released from escrow (subject to certain limited exceptions set forth below) (i) with respect to 50% of such shares, for a period ending on the earlier of the one-year anniversary of the date of the consummation of the initial Business Combination and the date on which the closing price of the Company's common stock equals or exceeds $12.50 per share (as adjusted for share splits, share dividends, reorganizations and recapitalizations) for any 20 trading days within a 30- trading day period following the consummation of the initial Business Combination and (ii) with respect to the remaining 50% of such shares, for a period ending on the one-year anniversary of the date of the consummation of the initial Business Combination, or earlier, in either case, if, subsequent to the initial Business Combination, the Company consummates a liquidation, merger, stock exchange or other similar transaction which results in all of the Company's stockholders having the right to exchange their shares of common stock for cash, securities or other property.
	Promissory Note — Related Party	**Promissory Note — Related Party**
	On November 20, 2020, the Company's executive officers loaned the Company $80,000 to be used for a portion of the expenses of the	On November 20, 2020, the Company's executive officers loaned the Company $80,000

IPO. These loans were non-interest bearing, unsecured and are due at the earlier of June 30, 2021 or the closing of the IPO. The Company repaid the note in full on February 1, 2021. On March 21, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of up to $300,000 to the Company as required. On September 20, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of up to $100,000 to the Company as required. The Company has drawn $399,380 of the $400,000 Working Capital Loan, of which $399,380 is outstanding as of September 30, 2022.

Due to Related Party

As of September 30, 2022, the amount due to related party is $201,953 which represent the accrual of administrative service fee of $201,643 from January 26, 2021 to September 30, 2022 and formation cost of $310 paid by David Rosenberg (the "Officer"). As of December 31, 2021, the amount due to related party is $111,953 which represents the accrual of administrative service fee from January 26, 2021 to December 31, 2021 of $111,643 and formation cost of $310 paid by the Officer.

Related Party Loans

In order to meet the Company's working capital needs following the consummation of the IPO the Sponsor, officers, directors, the initial stockholders or their affiliates may, but are not obligated to, loan the Company funds ("Working Capital Loans"), from time to time or at any time, in whatever amount they deem reasonable in their sole discretion. Each loan would be evidenced by a promissory note. The notes would either be paid upon consummation of the initial Business Combination, without interest, or, at holder's discretion, up to $1,500,000 of the notes may be converted into warrants at a price of $1.00 per warrant. The warrants would be identical to the Private Placement Warrants. In the event that the initial Business Combination does not close, the Company may use a portion of the working capital held outside the Trust Account to repay such loaned amounts, but no proceeds from the Trust Account would be used for such repayment. As of September 30, 2022 and December 31, 2021, no such Working Capital Loans were outstanding.

On March 21, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of $300,000 to the Company evidenced by a promissory note (the "Note") as required. The

to be used for a portion of the expenses of the IPO. These loans are non-interest bearing, unsecured and are due at the earlier of June 30, 2021 or the closing of the IPO. As of February 1, 2021, the Company repaid the note in full. On March 21, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of $300,000 to the Company as required.

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Administrative Service Fee

The Company has agreed, commencing on the date of the securities of the Company are first listed on The Nasdaq Capital Market (the "Listing Date"), to pay the Sponsor $10,000 per month for office space, utilities and secretarial support. Upon completion of the initial Business Combination or the Company's liquidation, the Company will cease paying these monthly fees. The Company accrued $111,643 for the administrative service fee for the period from the Listing Date to December 31, 2021.

principal balance of the Note shall be payable in cash by the Company on the earlier of: (i) the date on which the Company consummates its initial business combination or (ii) the date that the winding up of the Company is effective. No interest shall accrue on the unpaid principal balance of the Note. The principal balance of the Note may be prepaid at any time, at the election of the Company.

On September 20, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of $100,000 to the Company evidenced by a promissory note (the "Note") as required. The principal balance of the Note shall be payable in cash by the Company on the earlier of: (i) the date on which the Company consummates its initial business combination or (ii) the date that the winding up of the Company is effective. No interest shall accrue on the unpaid principal balance of the Note. The principal balance of the Note may be prepaid at any time, at the election of the Company.

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The Company has agreed, commencing on the date of the securities of the Company are first listed on The Nasdaq Capital Market (the "Listing Date"), to pay the Sponsor $10,000 per month for office space, utilities and secretarial support. Upon completion of the initial Business Combination or the Company's liquidation, the Company will cease paying these monthly fees. The Company accrued $30,000 and $90,000, for the administrative service fee for the three and nine months ended September 30, 2022 and 2021, respectively, of which $201,643 and $81,643 is recorded in accrued expenses in the accompanying condensed balance sheets as of September 30, 2022 and 2021, respectively.

Recurring Fair Value Measurements	9 Months Ended Sep. 30, 2022	12 Months Ended Dec. 31, 2021
Fair Value Disclosures [Abstract]		
Recurring Fair Value Measurements		

Note 6 — Recurring Fair Value Measurements

The following table presents information about the Company's assets and liabilities that were measured at fair value on a recurring basis as of September 30, 2022 and December 31, 2021 and indicates the fair value hierarchy of the valuation techniques the Company utilized to determine such fair value.

	September 30, 2022	Quoted Prices In Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Assets:				
U.S. Money Market held in Trust Account	$57,849,285	$57,849,285	$ —	$ —
	$57,849,285	$57,849,285	$ —	$ —
Liabilities:				
Warrant liabilities-Private Placement Warrants	$ 300,000	$ —	$ —	$ 300,000
	$ 300,000	$ —	$ —	$ 300,000

	December 31, 2021	Quoted Prices In Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Assets:				
U.S. Money Market held in Trust Account	$57,506,299	$57,506,299	$ —	$ —
	$57,506,299	$57,506,299	$ —	$ —
Liabilities:				
Warrant liabilities-Private Placement Warrants	$ 1,975,000	$ —	$ —	$ 1,975,000
	$ 1,975,000	$ —	$ —	$ 1,975,000

The following table sets forth a summary of the changes in the fair value of the warrant liabilities for the three and nine months ended September 30, 2022 and for the period from February 1, 2021 through September 30, 2021:

	Warrant Liability
Fair value as of December 31, 2021	$ 1,975,000
Change in fair value(1)	(1,025,000)
Fair value as of March 31, 2022	$ 950,000
Change in fair value(1)	(400,000)
Fair value as of June 30, 2022	$ 550,000
Change in fair value(1)	(250,000)
Fair value as of September 30, 2022	$ 300,000

Note 6 — Recurring Fair Value Measurements

The following table presents information about the Company's assets and liabilities that were measured at fair value on a recurring basis as of December 31, 2021, and indicates the fair value hierarchy of the valuation techniques the Company utilized to determine such fair value.

	December 31, 2021	Quoted Prices In Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Assets:				
U.S. Money Market held in Trust Account	$57,506,299	$57,506,299	$ —	$ —
	$57,506,299	$57,506,299	$ —	$ —
Liabilities:				
Warrant liabilities-Private Placement Warrants	$ 1,975,000	$ —	$ —	$ 1,975,000
	$ 1,975,000	$ —	$ —	$ 1,975,000

The following table sets forth a summary of the changes in the fair value of the warrant liabilities for the period from February 1, 2021 through December 31, 2021:

	Warrant Liability
Fair value as of February 1, 2021	$2,303,000
Issuance of private warrants in connection with over-allotment as of February 2, 2021	147,000
Change in fair value (1)	(475,000)
Fair value as of December 31, 2021	$1,975,000

(1)Represents the non-cash gain on the change in valuation of Private Warrants and is included in the change in fair value of warrant liability on the statements of operations.

At December 31, 2021, the Public Warrants were determined to contain none of the features requiring liability treatment; therefore, the Public warrants were not included in the fair value reporting.

The Private Warrants were valued using a Modified Black Scholes Model. The Private Warrants are considered to be a Level 3 fair value measurements due to the use of unobservable inputs. The Black Scholes Model can be modified to value SPAC Private Warrants by discounting the Acquisition Date warrant value to the Valuation Date and multiplying the present value by the probability of a future transaction occurring.

Transfers to/from Levels 1, 2 and 3 are recognized at the end of the reporting period. There were no transfers between levels for the year ended December 31, 2021.
The following table provides quantitative information regarding Level 3 fair value measurements for Private Warrants as of December 31, 2021 and February 1, 2021.

	Warrant Liability
Fair value as of February 1, 2021	$2,303,000
Issuance of private warrants in connection with over-allotment as of February 2, 2021	147,000
Change in fair value(1)	(800,000)
Fair value as of September 30, 2021	$1,650,000

(1)Represents the non-cash gain on the change in valuation of Private Warrants and is included in the change in fair value of warrant liability on the statement of operations.

At September 30, 2022, the Public Warrants were determined to contain none of the features requiring liability treatment; therefore, the Public warrants were not included in the fair value reporting.

The Private Placement Warrants were valued using a Modified Black Scholes Option Pricing Model, which is considered to be a Level 3 fair value measurement. The Modified Black Scholes model's primary unobservable input utilized in determining the fair value of the Private Placement Warrants is the expected volatility of the common stock. The fair value of the Private Placement Warrants was discounted to present value at September 30, 2022, utilizing the Business Combination date of November 1, 2022, as the key unobservable input. The expected volatility as of the Initial Public Offering date was derived from observable public warrant pricing on comparable 'blank-check' companies without an identified target.

Transfers to/from Levels 1, 2 and 3 are recognized at the end of the reporting period. There were no transfers between levels for the period from January 1, 2022 through September 30, 2022.

The following table provides quantitative information regarding Level 3 fair value measurements for Private Warrants as of September 30, 2022 and December 31, 2021.

	September 30, 2022	December 31, 2021
Exercise price	$ 11.50	$ 11.50
Share price	$ 9.98	$ 9.74
Volatility	2.50%	13.75%
Expected life	3.19	5.33
Risk-free rate	4.06%	1.26%
Dividend yield	— %	— %

	December 31, 2021	February 1, 2021
Exercise price	$ 11.50	$ 11.50
Share price	$ 9.74	$ 10.00
Volatility	13.75%	19.00%
Expected life	5.33	5.99
Risk-free rate	1.26%	0.42%
Dividend yield	— %	— %

Commitments and Contingencies	9 Months Ended Sep. 30, 2022	12 Months Ended Dec. 31, 2021
Commitments and Contingencies Disclosure [Abstract]		
Commitments and Contingencies	**Note 7 — Commitments and Contingencies** **Registration Rights** The holders of the founders' shares issued and outstanding on the date of the IPO, as well as the holders of the representative shares, Private Placement Warrants and any warrants the Company's Sponsor, officers, directors or their affiliates may be issued in payment of Working Capital Loans made to the Company (and all underlying securities), will be entitled to registration rights pursuant to an agreement signed on January 27, 2021. The holders of a majority of these securities are entitled to make up to two demands that the Company registers such securities. The holders of the majority of the founders' shares can elect to exercise these registration rights at any time commencing three months prior to the date on which these shares of common stock are to be released from escrow. The holders of a majority of the representative shares, Private Placement Warrants and warrants issued to the Company's Sponsor, officers, directors or their affiliates in payment of Working Capital Loans made to the Company (or underlying securities) can elect to exercise these registration rights at any time after the Company consummates a Business Combination. Notwithstanding anything to the contrary, EarlyBirdCapital Inc. ("EarlyBirdCapital") may only make a demand on one occasion and only during the five-year period beginning on the Effective Date of the registration statement of which the IPO forms a part. In addition, the holders have certain "piggy-back" registration rights with respect to registration statements filed subsequent to the Company's consummation of a Business Combination; provided, however, that EarlyBirdCapital may participate in a "piggyback" registration only during the seven-year period beginning on the Effective Date of the registration statement of which the IPO forms a part. The Company will bear the expenses incurred in connection with the filing of any such registration statements. **Underwriting Agreement**	**Note 7 — Commitments and Contingencies** **Registration Rights** The holders of the founders' shares issued and outstanding on the date of the IPO, as well as the holders of the representative shares, Private Placement Warrants and any warrants the Company's Sponsor, officers, directors or their affiliates may be issued in payment of Working Capital Loans made to the Company (and all underlying securities), will be entitled to registration rights pursuant to an agreement signed on January 27, 2021. The holders of a majority of these securities are entitled to make up to two demands that the Company registers such securities. The holders of the majority of the founders' shares can elect to exercise these registration rights at any time commencing three months prior to the date on which these shares of common stock are to be released from escrow. The holders of a majority of the representative shares, Private Placement Warrants and warrants issued to the Company's Sponsor, officers, directors or their affiliates in payment of Working Capital Loans made to the Company (or underlying securities) can elect to exercise these registration rights at any time after the Company consummates a Business Combination. Notwithstanding anything to the contrary, EarlyBirdCapital may only make a demand on one occasion and only during the five-year period beginning on the Effective Date of the registration statement of which the IPO forms a part. In addition, the holders have certain "piggy-back" registration rights with respect to registration statements filed subsequent to the Company's consummation of a Business Combination; provided, however, that EarlyBirdCapital may participate in a "piggyback" registration only during the seven-year period beginning on the Effective Date of the registration statement of which the IPO forms a part. The Company will bear the expenses incurred in connection with the filing of any such registration statements. **Underwriting Agreement** The underwriters had a 45-day option beginning February 1, 2021 to purchase up to an additional

The underwriters had a 45-day option beginning February 1, 2021 to purchase up to an additional 750,000 units to cover over-allotments, if any, at the IPO price less the underwriting discounts.

The Company issued to the underwriter (and/or its designees) (the “Representative”) 100,000 shares of common stock for $0.0001 per share (the “Representative Shares”). The Company estimated the fair value of the stock to be $2,000 based upon the price of the founder shares issued to the Sponsor. The stock was treated as underwriters’ compensation and charged directly to stockholders’ equity. The underwriter (and/or its designees) agreed (i) to waive their conversion rights (or right to participate in any tender offer) with respect to such shares in connection with the completion of our initial Business Combination and (ii) to waive their rights to liquidating distributions from the trust account with respect to such shares if we fail to complete our initial Business Combination within 21 months from the closing of this offering.

On February 1, 2021, the Company paid a fixed underwriting fee of $1,000,000.
On February 2, 2021, the underwriters purchased an additional 750,000 units to exercise its over-allotment option in full. The proceeds of $7,500,000 from the over-allotment was deposited in the Trust Account after deducting the underwriting discounts.

Business Combination Marketing Agreement

The Company has engaged underwriters as advisors in connection with its Business Combination to assist it in holding meetings with the stockholders to discuss the potential Business Combination and the target business’s attributes, introduce the Company to potential investors that are interested in purchasing the Company’s securities in connection with the potential Business Combination, assist the Company in obtaining stockholder approval for the Business Combination and assist the Company with its press releases and public filings in connection with the Business Combination. The Company will pay the Marketing Fee for such services upon the consummation of the initial Business Combination in an amount equal to, in the aggregate, 3.5% of the gross proceeds of the IPO, or $2,012,500 including the proceeds from the full exercise of the over-allotment option on February 2, 2021.

750,000 units to cover over-allotments, if any, at the IPO price less the underwriting discounts.

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Business Combination Marketing Agreement

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Right of First Refusal

In connection with the pending Business Combination, two purported stockholders have sent a demand letter. No amount of damages is stated in the demand letter. The Company believes that the threatened lawsuit is without merit and, if filed, the Company intends to defend the matters vigorously. The Company is currently unable to reasonably determine the outcome of any potential litigation or estimate any potential losses, and, as such, have not recorded a loss contingency. There is no other material litigation, arbitration or governmental proceedings currently pending against the Company or any members of its management team in their capacity as such.

Right of First Refusal

If the Company determines to pursue any equity, equity-linked, debt or mezzanine financing relating to or in connection with a Business Combination or after a Business Combination, then EarlyBirdCapital shall have the right, but not the obligation, to act as book running manager, placement agent and/or arranger, as the case may be, in any and all such financing or financings and to receive at least 25% of the aggregate gross spread or fees from any and all such financings. This right of first refusal extends from the February 1, 2021 until the earlier of twelve (12) months after the consummation of an initial Business Combination or the liquidation of the Trust Account if the Company fails to consummate a Business Combination during the required time period.

If the Company determines to pursue any equity, equity-linked, debt or mezzanine financing relating to or in connection with a Business Combination or after a Business Combination, then EarlyBirdCapital shall have the right, but not the obligation, to act as book running manager, placement agent and/or arranger, as the case may be, in any and all such financing or financings and to receive at least 25% of the aggregate gross spread or fees from any and all such financings. This right of first refusal extends from the February 1, 2021 until the earlier of twelve (12) months after the consummation of an initial Business Combination or the liquidation of the Trust Account if the Company fails to consummate a Business Combination during the required time period.

Stockholders' Equity	9 Months Ended Sep. 30, 2022	12 Months Ended Dec. 31, 2021
Stockholders' Equity Note [Abstract]		
Stockholders' Equity		

Note 8 — Stockholders' Equity

Preferred Stock- The Company is authorized to issue 1,000,000 shares of preferred stock with a par value of $0.0001 and with such designations, voting and other rights and preferences as may be determined from time to time by the Company's board of directors. At September 30, 2022 and December 31, 2021, there were no shares of preferred stock issued or outstanding.

Common Stock- The Company is authorized to issue 50,000,000 shares of common stock with a par value of $0.0001 per share. On August 12, 2020, the Sponsor paid $25,000, or approximately $0.02 per share, to cover certain offering costs in consideration for 1,437,500 shares of Common Stock, par value $0.0001. Of the 1,437,500 shares of common stock, an aggregate of up to 187,500 shares are subject to forfeiture to the Company for no consideration to the extent that the underwriters' over-allotment option is not exercised in full or in part, so that the initial stockholders will collectively own 20% of the Company's issued and outstanding common stock after the IPO. On February 2, 2021, the underwriter exercised its over-allotment option in full, hence, the 187,500 Founder Shares are no longer subject to forfeiture since then. In August 2020, the Company also issued to designees of EarlyBirdCapital an aggregate of 100,000 shares of common stock ("representative shares"), at a price of $0.0001 per share. As of September 30, 2022 and December 31, 2021, there were 1,537,500 shares of common stock issued and outstanding.

Common stockholders of record are entitled to one vote for each share held on all matters to be voted on by stockholders. In connection with any vote held to approve the initial Business Combination, the initial stockholders, as well as all of the Company's officers and directors, have agreed to vote their respective shares of common stock owned by them immediately prior to the IPO and any shares purchased in the IPO or following the IPO in the open market in favor of the proposed Business Combination.

Note 8 — Stockholder's Equity (Deficit)

Preferred Stock — The Company is authorized to issue 1,000,000 shares of preferred stock with a par value of $0.0001 and with such designations, voting and other rights and preferences as may be determined from time to time by the Company's board of directors. At December 31, 2021 and 2020, there were no shares of preferred stock issued or outstanding.

Common Stock — The Company is authorized to issue 50,000,000 shares of common stock with a par value of $0.0001 per share. On August 12, 2020, the Sponsor paid $25,000, or approximately $0.02 per share, to cover certain offering costs in consideration for 1,437,500 shares of Common Stock, par value $0.0001. Of the 1,437,500 shares of common stock, an aggregate of up to 187,500 shares were subject to forfeiture to the Company for no consideration to the extent that the underwriters' over-allotment option is not exercised in full or in part, so that the initial stockholders will collectively own 20% of the Company's issued and outstanding common stock after the IPO. On February 2, 2021, the underwriter exercised its over-allotment option in full, hence, the 187,500 Founder Shares were no longer subject to forfeiture since then. In August 2020, the Company also issued to designees of EarlyBirdCapital an aggregate of 100,000 shares of common stock ("representative shares"), at a price of $0.0001 per share. As of December 31, 2021 and 2020, there were 1,537,500 shares of common stock issued and outstanding.

Common stockholders of record are entitled to one vote for each share held on all matters to be voted on by stockholders. In connection with any vote held to approve the initial Business Combination, the initial stockholders, as well as all of the Company's officers and directors, have agreed to vote their respective shares of common stock owned by them immediately prior to the IPO and any shares purchased in the IPO or following the IPO in the open market in favor of the proposed Business Combination.

Income Tax

12 Months Ended
Dec. 31, 2021

Income Tax Disclosure [Abstract]

Income Tax

Note 9 — Income Tax

The Company's net deferred tax assets are as follows:

	December 31, 2021	December 31, 2020
Deferred tax asset		
Organizational costs/Startup expenses	$ 169,369	$ —
Federal Net Operating loss	32,923	65
Total deferred tax asset	202,293	65
Valuation allowance	(202,293)	(65)
Deferred tax asset, net of allowance	$ —	$ —

The income tax provision consists of the following:

	December 31, 2021	December 31, 2020
Federal		
Current	$ —	$ —
Deferred	(202,228)	(65)
State		
Current	—	—
Deferred	—	—
Change in valuation allowance	202,228	65
Income tax provision	$ —	$ —

As of December 31, 2021 and December 31, 2020, the Company had $156,778 and $310, respectively of U.S. federal operating loss carryovers available to offset future taxable income, which do not expire.

In assessing the realization of the deferred tax assets, management considers whether it is more likely than not that some portion of all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which temporary differences representing net future deductible amounts become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. After consideration of all of the information available, management believes that significant uncertainty exists with respect to future realization of the deferred tax assets and has therefore established a full valuation allowance. For the year December 31, 2021 and December 31, 2020, the change in the valuation allowance was $202,228 and $65, respectively.

Reconciliations of the federal income tax rate to the Company's effective tax rate at December 31, 2021 and December 31, 2020 are as follows:

	December 31, 2021	December 31, 2020
Statutory federal income tax rate	21.0%	21.0%
State taxes, net of federal tax benefit	0.0%	0.0%
Change in FV of Warrant Liability	20.44%	0.0%

Change in valuation allowance	-41.44%	-21.0%
Income tax provision	— %	— %

The Company files income tax returns in the U.S. federal jurisdiction and is subject to examination by the various taxing authorities. The Company considers New York to be a significant tax jurisdiction.

Subsequent Events	9 Months Ended Sep. 30, 2022	12 Months Ended Dec. 31, 2021
Subsequent Events [Abstract]		
Subsequent Events		

Note 9 — Subsequent Events

The Company evaluated subsequent events and transactions that occurred after the balance sheet date up to the date that the unaudited condensed financial statements were issued. Based on this review, the Company did not identify any subsequent events that would have required adjustments or disclosure in the condensed financial statements.

On October 25, 2022, Ignyte Acquisition Corp. (the "Company") entered into a forward share purchase agreement (the "Purchase Agreement") with Frost Gamma Investments Trust (the "Investor") pursuant to which, provided that the Investor holds at least 450,000 shares of the Company's common stock (the "Shares") as of the closing of the Company's previously announced business combination (the "Business Combination") with Peak Bio Co., Ltd., a corporation organized under the laws of the Republic of Korea ("Peak Bio"), the Investor may elect to sell and transfer to the combined company following the Business Combination (the "Combined Company"), and the Combined Company will purchase from the Investor, on the date that is sixty (60) days from the closing of the Business Combination, the Shares (the "Share Repurchase").

On October 31, 2022, Ignyte entered into new subscription agreements (the "Warrant Share PIPE Subscription Agreements") whereby Ignyte agreed to issue and sell to the investors thereto, in private placements to close immediately prior to the closing of the Business Combination, at $10.00 per share, an aggregate of up to (i) 302,500 PIPE Shares and (ii) 281,325 warrants (the "PIPE Financing Warrants") to purchase shares of Common Stock, at an exercise price of $0.01 per share, for an aggregate purchase price of $3,025,000. The warrants would be on terms substantially the same as the outstanding warrants that were included in the units issued in Ignyte's initial public offering, except that the new warrants would not be redeemable, and the warrants shall be exercisable for one year.

Concurrently with Ignyte's entry into the Warrant Share PIPE Subscription Agreements, on October 31, 2022, Ignyte executed subscription agreements with certain of Peak Bio's lenders (the "Bridge Loan PIPE Subscription Agreements" and together with the Warrant Share PIPE Subscription Agreements, the "New PIPE Subscription Agreements") whereby Ignyte agreed to issue and sell to the Peak Bio lenders party thereto, in private placements to close immediately prior to the closing of the Business Combination, an aggregate of up to (i) 176,579 PIPE Shares and (ii) 164,218 PIPE Financing Warrants to purchase shares of Common Stock, at an exercise price of $0.01 per share, in consideration for their agreement to cancel an aggregate principal amount of $1,750,000 and the interest accrued thereon

Note 10 — Subsequent Events

The Company evaluated subsequent events and transactions that occurred after the balance sheet date up to the date that the audited financial statements were issued. Based on this review, except the description as below, the Company did not identify any subsequent events that would have required adjustments or disclosure in the financial statements.

On March 21, 2022, the Sponsor signed an agreement to provide a Working Capital Loan of $300,000 to the Company evidenced by a promissory note (the "Note") as required. The principal balance of the Note shall be payable in cash by the Company on the earlier of: (i) the date on which the Company consummates its initial business combination or (ii) the date that the winding up of the Company is effective. No interest shall accrue on the unpaid principal balance of the Note. The principal balance of the Note may be prepaid at any time, at the election of the Company.

in promissory notes evidencing the loans such lenders had extended to Peak Bio between July and September 2022. The warrants would be on terms substantially the same as the outstanding warrants that were included in the units issued in Ignyte's initial public offering, except that the new warrants would not be redeemable, and the warrants shall be exercisable for one year.

Additionally, pursuant to the terms of a Bridge Loan PIPE Subscription Agreement entered into with an Original PIPE Investor, the Original PIPE Subscription Agreement executed by such Original PIPE Investor, which provided for the sale of 1,500,000 PIPE Shares for an aggregate purchase price of $15,000,000, was terminated.

On November 1, 2022, Ignyte Sponsor LLC, a Delaware limited liability company (the "Sponsor") entered into a share purchase agreement with Knight Family Management, LLC ("Knight Family"), whereby the Sponsor agreed to transfer 20,167 shares of Common Stock held by it to Knight Family in consideration for Knight Family's services arranging for the commitment by certain other investors to fund the aggregate purchase price of $3,025,000 pursuant to the Warrant Share PIPE Subscription Agreements.

On November 1, 2022, Ignyte entered into payment agreements with each of (i) the Sponsor and (ii) Ingalls & Snyder, LLC ("Ingalls"). Collectively, these payment agreements are referred to as the "Payment Agreements." The Payment Agreements provide that Ignyte, at the closing of the Business Combination, would issue shares of Common Stock to each of the Sponsor and Ingalls, as consideration for (i) the working capital loans extended to Ignyte by the Sponsor and (ii) the marketing and consulting services provided to Ignyte by Ingalls. The dollar amount due and the number of shares of Common Stock issued as payment therefor is as follows: (i) 77,200 shares of the Company's common stock issued to the Sponsor for the $400,000 amount due and (ii) 28,950 shares of the Company's common stock issued to Ingalls for the $150,000 amount due.

On November 1, 2022 (the "Closing Date"), the Company completed its Business Combination with Peak Bio Co., Ltd.

In connection with the Business Combination, the holders of 5,159,287 shares of Ignyte common stock exercised their right to redeem their shares for cash at a redemption price of approximately $10.07, for an aggregate redemption amount of approximately $51,978,834, which was paid to such holders on the Closing Date.

As of the open of trading on November 2, 2022, the Company's common stock and public warrants, formerly those of Ignyte, began trading on the Nasdaq Capital market under the trading symbols "PKBO" and "PKBOW," respectively.

Accounting Policies, by Policy (Policies)	9 Months Ended Sep. 30, 2022	12 Months Ended Dec. 31, 2021
Accounting Policies [Abstract]		
Basis of Presentation	**Basis of Presentation** The accompanying unaudited condensed financial statements are presented in U.S. dollars and in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") for financial information and pursuant to the rules and regulations of the SEC. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP. In the opinion of management, the unaudited condensed financial statements reflect all adjustments, which include only normal recurring adjustments necessary for the fair statement of the balances and results for the periods presented. Operating results for the period for the three and nine months ended September 30, 2022 are not necessarily indicative of the results that may be expected through December 31, 2022. The accompanying unaudited condensed financial statements should be read in conjunction with the audited financial statements and notes thereto included in the Company's Annual Report on Form10-K for the year ended December 31, 2021, filed by the Company with the SEC on March 31, 2022.	**Basis of Presentation** The accompanying financial statements of the Company are presented in U.S. dollars in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") and pursuant to the rules and regulations of the SEC. In the opinion of management, all adjustments (consisting of normal recurring adjustments) have been made that are necessary to present fairly the financial position, and the results of its operations and its cash flows.
Emerging Growth Company	**Emerging Growth Company** The Company is an "emerging growth company," as defined in Section 2(a) of the Securities Act of 1933, as amended, (the "Securities Act"), as modified by the Jumpstart our Business Startups Act of 2012, (the "JOBS Act"), and it may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. The Company has elected not to opt out of such extended transition period which means that when a standard is issued or revised and it has different application dates for public or private companies, the Company, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of the Company's financial statement with another public company which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.	**Emerging Growth Company** The Company is an "emerging growth company," as defined in Section 2(a) of the Securities Act of 1933, as amended, (the "Securities Act"), as modified by the Jumpstart our Business Startups Act of 2012, (the "JOBS Act"), and it may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. The Company has elected not to opt out of such extended transition period which means that when a standard is issued or revised and it has different application dates for public or private companies, the Company, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of the Company's financial statement with another public company which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.
Use of Estimates	**Use of Estimates** The preparation of unaudited condensed financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the unaudited condensed financial statements and the reported amounts of expenses during the reporting period. Making estimates requires management to exercise significant judgment. It	**Use of Estimates** The preparation of audited financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the audited financial statements and the reported amounts of expenses during the reporting period. Making estimates requires management to exercise significant judgment. It is at least reasonably possible that the estimate of the

is at least reasonably possible that the estimate of the effect of a condition, situation or set of circumstances that existed at the date of the unaudited condensed financial statements, which management considered in formulating its estimate, could change in the near term due to one or more future confirming events. Actual results could differ from those estimates.

effect of a condition, situation or set of circumstances that existed at the date of the audited financial statements, which management considered in formulating its estimate, could change in the near term due to one or more future confirming events. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash and Cash Equivalents

The Company considers all short-term investments with an original maturity of three months or less when purchased to be cash equivalents. The Company did not have any cash equivalents as of September 30, 2022 and December 31, 2021.

Cash and Cash Equivalents

The Company considers all short-term investments with an original maturity of three months or less when purchased to be cash equivalents. The Company has $329,192 of cash held outside of the Trust Account as of December 31, 2021 and $0 as of December 31, 2020. The Company did not have any cash equivalents as of December 31, 2021 and 2020.

Marketable Securities Held in Trust Account

Marketable Securities Held in Trust Account

As of September 30, 2022 and December 31, 2021, the assets held in the Trust Account were invested in money market funds.

Marketable Securities Held in Trust Account

At December 31, 2021, the assets held in the Trust Account were invested in money market funds.

Fair Value Measurements

Fair Value Measurements

Financial Accounting Standards Board (“FASB”) ASC Topic 820 “Fair Value Measurements and Disclosures” (“ASC 820”) defines fair value, the methods used to measure fair value and the expanded disclosures about fair value measurements. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between the buyer and the seller at the measurement date. In determining fair value, the valuation techniques consistent with the market approach, income approach and cost approach shall be used to measure fair value. ASC 820 establishes a fair value hierarchy for inputs, which represent the assumptions used by the buyer and seller in pricing the asset or liability. These inputs are further defined as observable and unobservable inputs. Observable inputs are those that buyer and seller would use in pricing the asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs reflect the Company’s assumptions about the inputs that the buyer and seller would use in pricing the asset or liability developed based on the best information available in the circumstances.

The fair value hierarchy is categorized into three levels based on the inputs as follows:

Level 1 — Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access. Valuation adjustments and block discounts are not being applied. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of these securities does not entail a significant degree of judgment.

Level 2 — Valuations based on (i) quoted prices in active markets for similar assets and liabilities, (ii) quoted prices in markets that are not active for identical or similar assets, (iii) inputs other than quoted prices for the assets or liabilities, or (iv) inputs that are derived principally from or corroborated by market through correlation or other means.
Level 3 — Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

The fair value of the Company’s certain assets and liabilities, which qualify as financial instruments under ASC 820 approximates the carrying amounts represented in the balance sheet. The fair values of cash, prepaid assets, and accounts payable are estimated to approximate the carrying values as of December 31, 2021 due to the short maturities of such instruments.

The Company’s warrant liabilities are based on a valuation model utilizing management judgment and pricing inputs from observable and unobservable markets with less volume and transaction frequency than active markets. Significant deviations from these estimates and inputs could result in a material change in fair value. In some circumstances, the inputs used to measure fair value might be categorized within different levels of the fair value hierarchy. In

Fair Value Measurements

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The fair value hierarchy is categorized into three levels based on the inputs as follows:

Level 1 — Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access. Valuation adjustments and block discounts are not being applied. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of these securities does not entail a significant degree of judgment.

Level 2 — Valuations based on (i) quoted prices in active markets for similar assets and liabilities, (ii) quoted prices in markets that are not active for identical or similar assets, (iii) inputs other than quoted prices for the assets or liabilities, or (iv) inputs that are derived principally from or corroborated by market through correlation or other means.

Level 3 — Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

The fair value of the Company’s certain assets and liabilities, which qualify as financial instruments under ASC 820, “Fair Value Measurements and Disclosures,” approximates the carrying amounts represented in the balance sheet. The fair values of cash, prepaid assets, and accounts payable are estimated to approximate the carrying values as of December 31, 2021 due to the short maturities of such instruments.

The Company’s warrant liabilities are based on a valuation model utilizing management judgment and pricing inputs from observable and unobservable markets with less volume and transaction frequency than active markets. Significant deviations from these estimates and inputs could result in a material change in fair value. In some circumstances, the inputs used to measure fair value might be categorized within different levels of the fair value hierarchy. In those instances, the fair value measurement is categorized in its entirety in

those instances, the fair value measurement is categorized in its entirety in the fair value hierarchy based on the lowest level input that is significant to the fair value measurement. See Note 6 for additional information on assets and liabilities measured at fair value.

Concentration of Credit Risk

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist of a cash account in a financial institution, which, at times, may exceed the Federal Depository Insurance Coverage of $250,000. As of September 30, 2022 and December 31, 2021, the Company has not experienced losses on this account and management believes the Company is not exposed to significant risks on such account.

Common Stock Subject to Possible Redemption

Common Stock Subject to Possible Redemption

All of the 5,750,000 shares of common stock sold as part of the Units in the IPO contain a redemption feature which allows for the redemption of such public shares in connection with the Company's liquidation, if there is a stockholder vote or tender offer in connection with the Business Combination and in connection with certain amendments to the Company's amended and restated certificate of incorporation. In accordance with SEC and its staff's guidance on redeemable equity instruments, which has been codified in ASC 480-10-S99, redemption provisions not solely within the control of the Company require common stock subject to redemption to be classified outside of permanent equity. Therefore, all common stock, excluding the founder shares, has been classified outside of permanent equity.

The Company recognizes changes in redemption value immediately as they occur and adjusts the carrying value of redeemable common stock to equal the redemption value at the end of each reporting period. Increases or decreases in the carrying amount of redeemable common stock are affected by charges against additional paid in capital and accumulated deficit.

Net Income (Loss) Per Common Stock

Net Income (Loss) Per Common Stock

The Company recognizes two classes of shares for EPS purposes, which are referred to as redeemable common stock and outstanding common stock. Earnings and losses are shared pro rata between the two classes of shares. The 5,375,000 potential common shares for outstanding warrants to purchase the Company's stock were excluded from diluted earnings per share for the three and nine months ended September 30, 2022 and 2021 because the warrants are contingently exercisable, and the contingencies have not yet been met. As a result,
diluted net income (loss) per common share is the same as basic net income (loss) per common share for the periods. The table below presents a reconciliation of the numerator and denominator used to compute basic and diluted net income (loss) per share for each class of common stock:

	For the Three Months Ended September 30,			
	2022		2021	
	Redeemable Common Stock	Outstanding Common Stock	Redeemable Common Stock	Outstanding Common Stock
Basic and diluted net (loss) income per share:				
Numerator:				
Allocation of net (loss) income	$ (134,928)	$ (36,079)	$ 95,763	$ 25,606
Denominator:				
Weighted-average shares outstanding	5,750,000	1,537,500	5,750,000	1,537,500

the fair value hierarchy based on the lowest level input that is significant to the fair value measurement. See Note 6 for additional information on assets and liabilities measured at fair value.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist of a cash account in a financial institution, which, at times, may exceed the Federal Depository Insurance Coverage of $250,000. At December 31, 2021 and 2020, the Company has not experienced losses on this account and management believes the Company is not exposed to significant risks on such account.

Common Stock Subject to Possible Redemption

All of the 5,750,000 shares of common stock sold as part of the Units in the IPO contain a redemption feature which allows for the redemption of such public shares in connection with the Company's liquidation, if there is a stockholder vote or tender offer in connection with the Business Combination and in connection with certain amendments to the Company's amended and restated certificate of incorporation. In accordance with SEC and its staff's guidance on redeemable equity instruments, which has been codified in ASC 480-10-S99, redemption provisions not solely within the control of the Company require common stock subject to redemption to be classified outside of permanent equity. Therefore, all common stock, excluding the founder shares, has been classified outside of permanent equity.

The Company recognizes changes in redemption value immediately as they occur and adjusts the carrying value of redeemable common stock to equal the redemption value at the end of each reporting period. Increases or decreases in the carrying amount of redeemable common stock are affected by charges against additional paid in capital and accumulated deficit.

Net Loss Per Common Stock

The Company recognizes two classes of shares for EPS purposes, which are referred to as redeemable common stock and outstanding common stock. Earnings and losses are shared pro rata between the two classes of shares. The 5,750,000 potential common stocks for outstanding warrants to purchase the Company's shares were excluded from diluted earnings per share for the period from August 6, 2020 (inception) through December 31, 2020 and for the year ended December 31, 2021 because the warrants are contingently exercisable, and the contingencies have not yet been met. As a result, diluted net loss per common stock is the same as basic net loss per common stock for the periods. The table below presents a reconciliation of the numerator and denominator used to compute basic and diluted net loss per share for each class of common stock:

	For the year ended December 31, 2021		For the period from August 6, 2020 (inception) through December 31, 2020	
	Redeemable Common Stock	Outstanding Common Stock	Redeemable Common Stock	Outstanding Common Stock
Basic and diluted net loss per share:				
Numerator:				
Allocation of net loss	$ (377,606)	$ (110,383)	$ —	$ (310)
Denominator:				
Weighted-average shares outstanding	5,259,589	1,537,500	—	1,537,500
Basic and diluted net loss per share	$ (0.07)	$ (0.07)	$ —	$ (0.00)

Basic and diluted net (loss) income per share	$ (0.02)	$ (0.02)	$ 0.02	$ 0.02

	For the Nine Months Ended September 30,			
	2022		2021	
	Redeemable Common Stock	Outstanding Common Stock	Redeemable Common Stock	Outstanding Common Stock
Basic and diluted net income per share:				
Numerator:				
Allocation of net income	$ 82,203	$ 21,980	$ 300,326	$ 90,967
Denominator:				
Weighted-average shares outstanding	5,750,000	1,537,500	5,076,007	1,537,500
Basic and diluted net income per share	$ 0.01	$ 0.01	$ 0.06	$ 0.06

Offering Costs associated with the Initial Public Offering

Offering Costs associated with the Initial Public Offering

The Company complies with the requirements of the ASC 340-10-S99-1 and SEC Staff Accounting Bulletin ("SAB") Topic 5A-"Expenses of Offering". Offering costs consist principally of professional and registration fees incurred through the balance sheet date that are related to the IPO and were charged to temporary equity upon the completion of the IPO. Accordingly, as of February 1, 2021, offering costs in the aggregate of $1,594,485 have been charged to temporary equity (consisting of $1,150,000 of underwriting discount and $444,485 of other offering costs).

Offering Costs associated with the Initial Public Offering

The Company complies with the requirements of the ASC 340-10-S99-1 and SEC Staff Accounting Bulletin ("SAB") Topic 5A — "Expenses of Offering". Offering costs consist principally of professional and registration fees incurred through the balance sheet date that are related to the IPO and were charged to temporary equity upon the completion of the IPO. Accordingly, as of February 1, 2021, offering costs in the aggregate of $1,594,485 have been charged to temporary equity (consisting of $1,150,000 of underwriting discount and $444,485 of other offering costs).

Warrant Liabilities

Warrant Liabilities

The Company accounts for the Public Warrants and Private Warrants (as defined in Notes 3 and 4) collectively ("Warrants"), as either equity or liability-classified instruments based on an assessment of the specific terms of the Warrants and the applicable authoritative guidance in FASB Accounting Standards Codification ("ASC") 815, Derivatives and Hedging ("ASC 815"). The assessment considers whether the Warrants meet all of the requirements for equity classification under ASC 815, including whether the Warrants are indexed to the Company's own common stocks and whether the warrant holders could potentially require "net cash settlement" in a circumstance outside of the Company's control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of issuance of the Warrants and as of each subsequent quarterly period end date while the Warrants are outstanding.

For issued or modified warrants that meet all of the criteria for equity classification, such warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants
that do not meet all the criteria for equity classification, such warrants are required to be recorded at their initial fair value on the date of issuance, and each balance sheet date thereafter. Changes in the estimated fair value of liability-classified warrants are recognized as a non-cash gain or loss on the statements of operations.

The Company accounts for the Private Warrants in accordance with ASC 815-40 under which the Private Warrants do not meet the criteria for equity classification and must be recorded as liabilities. The fair value of the Private Warrants has been estimated using the Modified Black Scholes model. See Note 6 for further discussion of the pertinent terms of the Warrants used to determine the value of the Private Warrants and Representative's Warrants.

Warrant Liabilities

The Company accounts for the Public Warrants and Private Warrants (as defined in Notes 3 and 4) collectively ("Warrants"), as either equity or liability-classified instruments based on an assessment of the specific terms of the Warrants and the applicable authoritative guidance in Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 815, Derivatives and Hedging ("ASC 815"). The assessment considers whether the Warrants meet all of the requirements for equity classification under ASC 815, including whether the Warrants are indexed to the Company's own common stocks and whether the warrant holders could potentially require "net cash settlement" in a circumstance outside of the Company's control, among other conditions for equity classification. This assessment, which requires the use of professional judgment, is conducted at the time of issuance of the Warrants and as of each subsequent quarterly period end date while the Warrants are outstanding.

For issued or modified warrants that meet all of the criteria for equity classification, such warrants are required to be recorded as a component of additional paid-in capital at the time of issuance. For issued or modified warrants

that do not meet all the criteria for equity classification, such warrants are required to be recorded at their initial fair value on the date of issuance, and each balance sheet date thereafter. Changes in the estimated fair value of liability-classified warrants are recognized as a non-cash gain or loss on the statements of operations.
The Company accounts for the Private Warrants in accordance with ASC 815-40 under which the Private Warrants do not meet the criteria for equity classification and must be recorded as liabilities. The fair value of the Private Warrants has been estimated using the Modified Black Scholes model. See Note 6 for further discussion of the pertinent terms of the Warrants used to determine the value of the Private Warrants and Representative's Warrants.

The Company evaluated the Public Warrants in accordance with ASC 815-40, “Derivatives and Hedging—Contracts in Entity’s Own Equity” and concluded that they met the criteria for equity classification and are required to be recorded as part a component of additional paid-in capital at the time of issuance.

Income Taxes

Income Taxes

The Company accounts for income taxes under ASC 740, “Income Taxes.” ASC 740 requires the recognition of deferred tax assets and liabilities for both the expected impact of differences between the unaudited condensed financial statements and tax basis of assets and liabilities and for the expected future tax benefit to be derived from tax loss and tax credit carry forwards. ASC 740 additionally requires a valuation allowance to be established when it is more likely than not that all or a portion of deferred tax assets will not be realized. As of September 30, 2022 and December 31, 2021, the Company’s deferred tax asset had a full valuation allowance recorded against it. Our effective tax rate was (4.96)% and 0% for the three months ended September 30, 2022 and 2021, respectively, and 7.20% and 0% for the nine months ended September 30, 2022 and 2021, respectively. The effective tax rate differs from the statutory tax rate of 21% for the three months and nine months ended September 30, 2022 and 2021, due to changes in fair value in warrant liability, changes in fair value in the PIPE derivative liability, and the valuation allowance on the deferred tax assets.

ASC 740 also clarifies the accounting for uncertainty in income taxes recognized in an enterprise’s financial statements and prescribes a recognition threshold and measurement process for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not to be sustained upon examination by taxing authorities. ASC 740 also provides guidance on derecognition, classification, interest and penalties, accounting in interim period, disclosure and transition.

The Company recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense. There were no unrecognized tax benefits and no amounts accrued for interest and penalties as of September 30, 2022 and December 31, 2021. The Company is currently not aware of any issues under review that could result in significant payments, accruals or material deviation from its position.

The Company has identified the United States as its only “major” tax jurisdiction. The Company is subject to income taxation by major taxing authorities since inception. These examinations may include questioning the timing and amount of deductions, the nexus of income among various tax jurisdictions and compliance with federal and state tax laws. The Company’s management does not expect that the total amount of unrecognized tax benefits will materially change over the next twelve months

Risks and Uncertainties

Risks and Uncertainties

In February 2022, the Russian Federation and Belarus commenced a military action with the country of Ukraine. As a result of this action, various nations, including the United States, have instituted economic sanctions against the Russian Federation and Belarus. Further, the impact of this action and related sanctions on the world economy are not determinable as of the date of these condensed financial statements. The specific impact on the Company’s financial condition, results of operations, and cash flows is also not determinable as of the date of these condensed financial statements.

On January 30, 2020, the World Health Organization (“WHO”) announced a global health emergency because of a new strain of coronavirus (the “COVID-19 outbreak”). In March 2020, the WHO classified the COVID-19 outbreak as a pandemic, based on the rapid increase in exposure globally. The full impact of the COVID-19 outbreak continues to evolve. The impact of the COVID-19 outbreak and Russian military action against Ukraine on the Company’s financial position will depend on future

The Company evaluated the Public Warrants in accordance with ASC 815-40, “Derivatives and Hedging — Contracts in Entity’s Own Equity” and concluded that they met the criteria for equity classification and are required to be recorded as part a component of additional paid-in capital at the time of issuance.

Income Taxes

The Company follows the asset and liability method of accounting for income taxes under ASC 740, “Income Taxes.” Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statements carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that included the enactment date. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized.

ASC 740 prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more likely than not to be sustained upon examination by taxing authorities. The Company recognizes accrued interest and penalties related to unrecognized tax benefits as income tax expense. There were no unrecognized tax benefits and no amounts accrued for interest and penalties as of December 31, 2021. The Company is currently not aware of any issues under review that could result in significant payments, accruals or material deviation from its position. The Company is subject to income tax examinations by major taxing authorities since inception.

Risks and Uncertainties

On January 30, 2020, the World Health Organization (“WHO”) announced a global health emergency because of a new strain of coronavirus (the “COVID-19 outbreak”). In March 2020, the WHO classified the COVID-19 outbreak as a pandemic, based on the rapid increase in exposure globally. The full impact of the COVID-19 outbreak continues to evolve. The impact of the COVID-19 outbreak on the Company’s financial position will depend on future developments, including the duration and spread of the outbreak and related advisories and restrictions. These developments and the impact of the COVID-19 outbreak on the financial markets and the overall economy are highly uncertain and cannot be predicted. If the financial markets and/or the overall economy are impacted for an extended period, the Company’s financial position may be materially adversely affected. Additionally, the Company’s ability to complete an initial Business Combination may be materially adversely affected due to significant governmental measures being implemented to contain the COVID-19 outbreak or treat its impact, including travel restrictions, the shutdown of businesses and quarantines, among others, which may limit the Company’s ability to have meetings with

developments, including the duration and spread of the outbreak and related advisories and restrictions and the effects and duration of economic sanctions. These developments and the impact on the financial markets and the overall economy are highly uncertain and cannot be predicted. If the financial markets and/or the overall economy are impacted for an extended period, the Company's financial position may be materially adversely affected. Additionally, the Company's ability to complete an initial business combination may be materially adversely affected due to significant governmental measures being implemented to contain the COVID-19 outbreak or treat its impact, including travel restrictions, the shutdown of businesses and quarantines, among others, which may limit the Company's ability to have meetings with potential investors or affect the ability of a potential target company's personnel, vendors and service providers to negotiate and consummate an initial business combination in a timely manner. The Company's ability to consummate an initial business combination may also be dependent on the ability to raise additional equity and debt financing, which may be impacted by the COVID-19 outbreak and the effects and duration of economic sanctions and the resulting market downturn. The financial statements do not include any adjustments that might result from the outcome of these uncertainties.

Inflation Reduction Act of 2022

Inflation Reduction Act of 2022

On August 16, 2022, the Inflation Reduction Act of 2022 (the "IR Act") was signed into federal law. The IR Act provides for, among other things, a new U.S. federal 1% excise tax on certain repurchases of stock by publicly traded U.S. domestic corporations and certain U.S. domestic subsidiaries of publicly traded foreign corporations occurring on or after January 1, 2023. The excise tax is imposed on the repurchasing corporation itself, not its shareholders from which shares are repurchased. The amount of the excise tax is generally 1% of the fair market value of the shares repurchased at the time of the repurchase. However, for purposes of calculating the excise tax, repurchasing corporations are permitted to net the fair market value of certain new stock issuances against the fair market value of stock repurchases during the same taxable year. In addition, certain exceptions apply to the excise tax. The U.S. Department of the Treasury (the "Treasury") has been given authority to provide regulations and other guidance to carry out and prevent the abuse or avoidance of the excise tax.

Any redemption or other repurchase that occurs after December 31, 2022, in connection with a Business Combination, extension vote or otherwise, may be subject to the excise tax. Whether and to what extent the Company would be subject to the excise tax in connection with a Business Combination, extension vote or otherwise would depend on a number of factors, including (i) the fair market value of the redemptions and repurchases in connection with the Business Combination, extension or otherwise, (ii) the structure of a Business Combination, (iii) the nature and amount of any "PIPE" or other equity issuances in connection with a Business Combination (or otherwise issued not in connection with a Business Combination but issued within the same taxable year of a Business Combination) and (iv) the content of regulations and other guidance from the Treasury. In addition, because the excise tax would be payable by the Company and not by the redeeming holder, the mechanics of any required payment of the excise tax have not been determined. The foregoing could cause a reduction in the cash available on hand to complete a Business Combination and in the Company's ability to complete a Business Combination.

Recent Accounting Standards

Recent Accounting Standards

In August 2020, the FASB issued Accounting Standards Update ("ASU") 2020-06, Debt — Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own
Equity (Subtopic 815-40) ("ASU 2020-06") to simplify accounting for certain financial instruments. ASU 2020-06 eliminates the current models that require separation of beneficial conversion and cash conversion features from convertible instruments and simplifies the derivative scope exception guidance pertaining to

potential investors or affect the ability of a potential target company's personnel, vendors and service providers to negotiate and consummate an initial Business Combination in a timely manner. The Company's ability to consummate an initial Business Combination may also be dependent on the ability to raise additional equity and debt financing, which may be impacted by the COVID-19 outbreak and the resulting market downturn. The financial statement does not include any adjustments that might result from the outcome of this uncertainty.

Recent Accounting Standards

In August 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2020-06, Debt — Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40) ("ASU 2020-06") to simplify accounting for certain financial instruments. ASU 2020-06 eliminates the current models that require separation of beneficial conversion and cash conversion features from convertible instruments and simplifies the derivative scope exception guidance pertaining to equity classification of contracts in an entity's own equity. The new standard also introduces additional disclosures for convertible debt and freestanding

equity classification of contracts in an entity's own equity. The new standard also introduces additional disclosures for convertible debt and freestanding instruments that are indexed to and settled in an entity's own equity. ASU 2020-06 amends the diluted earnings per share guidance, including the requirement to use the if-converted method for all convertible instruments. ASU 2020-06 is effective January 1, 2024 and should be applied on a full or modified retrospective basis, with early adoption permitted beginning on January 1, 2021. The Company is currently assessing the impact, if any, that ASU 2020-06 would have on its financial position, results of operations or cash flows.

Management does not believe that any other recently issued, but not yet effective, accounting pronouncements, if currently adopted, would have a material effect on the Company's financial statements.

instruments that are indexed to and settled in an entity's own equity. ASU 2020-06 amends the diluted earnings per share guidance, including the requirement to use the if-converted method for all convertible instruments. ASU 2020-06 is effective January 1, 2024 and should be applied on a full or modified retrospective basis, with early adoption permitted beginning on January 1, 2021. The Company is currently assessing the impact, if any, that ASU 2020-06 would have on its financial position, results of operations or cash flows.

Management does not believe that any other recently issued, but not yet effective, accounting pronouncements, if currently adopted, would have a material effect on the Company's financial statements.

Summary of Significant Accounting Policies (Tables)	9 Months Ended Sep. 30, 2022	12 Months Ended Dec. 31, 2021
Accounting Policies [Abstract]		

Schedule of Net Income (Loss) Per Common Share

The table below presents a reconciliation of the numerator and denominator used to compute basic and diluted net income (loss) per share for each class of common stock:

	For the Three Months Ended September 30,			
	2022		2021	
	Redeemable Common Stock	Outstanding Common Stock	Redeemable Common Stock	Outstanding Common Stock
Basic and diluted net (loss) income per share:				
Numerator:				
Allocation of net (loss) income	$ (134,928)	$ (36,079)	$ 95,763	$ 25,606
Denominator:				
Weighted-average shares outstanding	5,750,000	1,537,500	5,750,000	1,537,500
Basic and diluted net (loss) income per share	$ (0.02)	$ (0.02)	$ 0.02	$ 0.02

	For the Nine Months Ended September 30,			
	2022		2021	
	Redeemable Common Stock	Outstanding Common Stock	Redeemable Common Stock	Outstanding Common Stock
Basic and diluted net income per share:				
Numerator:				
Allocation of net income	$ 82,203	$ 21,980	$ 300,326	$ 90,967
Denominator:				
Weighted-average shares outstanding	5,750,000	1,537,500	5,076,007	1,537,500
Basic and diluted net income per share	$ 0.01	$ 0.01	$ 0.06	$ 0.06

The Company recognizes two classes of shares for EPS purposes, which are referred to as redeemable common stock and outstanding common stock. Earnings and losses are shared pro rata between the two classes of shares. The 5,750,000 potential common stocks for outstanding warrants to purchase the Company's shares were excluded from diluted earnings per share for the period from August 6, 2020 (inception) through December 31, 2020 and for the year ended December 31, 2021 because the warrants are contingently exercisable, and the contingencies have not yet been met. As a result, diluted net loss per common stock is the same as basic net loss per common stock for the periods. The table below presents a reconciliation of the numerator and denominator used to compute basic and diluted net loss per share for each class of common stock:

	For the year ended December 31, 2021		For the period from August 6, 2020 (inception) through December 31, 2020	
	Redeemable Common Stock	Outstanding Common Stock	Redeemable Common Stock	Outstanding Common Stock
Basic and diluted net loss per share:				
Numerator:				
Allocation of net loss	$ (377,606)	$ (110,383)	$ —	$ (310)
Denominator:				
Weighted-average shares outstanding	5,259,589	1,537,500	—	1,537,500
Basic and diluted net loss per share	$ (0.07)	$ (0.07)	$ —	$ (0.00)

Recurring Fair Value Measurements (Tables)

Fair Value Disclosures [Abstract]

Schedule of Fair Value on a Recurring Basis

	September 30, 2022	Quoted Prices In Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Assets:				
U.S. Money Market held in Trust Account	$57,849,285	$57,849,285	$ —	$ —
	$57,849,285	$57,849,285	$ —	$ —
Liabilities:				
Warrant liabilities-Private Placement Warrants	$ 300,000	$ —	$ —	$ 300,000
	$ 300,000	$ —	$ —	$ 300,000

	December 31, 2021	Quoted Prices In Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Assets:				
U.S. Money Market held in Trust Account	$57,506,299	$57,506,299	$ —	$ —
	$57,506,299	$57,506,299	$ —	$ —
Liabilities:				
Warrant liabilities-Private Placement Warrants	$ 1,975,000	$ —	$ —	$ 1,975,000
	$ 1,975,000	$ —	$ —	$ 1,975,000

Schedule of Fair Value of Warrants liabilities

	Warrant Liability
Fair value as of December 31, 2021	$ 1,975,000
Change in fair value(1)	(1,025,000)
Fair value as of March 31, 2022	$ 950,000
Change in fair value(1)	(400,000)
Fair value as of June 30, 2022	$ 550,000
Change in fair value(1)	(250,000)
Fair value as of September 30, 2022	$ 300,000

	Warrant Liability
Fair value as of February 1, 2021	$2,303,000
Issuance of private warrants in connection with over-allotment as of February 2, 2021	147,000
Change in fair value(1)	(800,000)
Fair value as of September 30, 2021	$1,650,000

9 Months Ended Sep. 30, 2022

12 Months Ended Dec. 31, 2021

The following table presents information about the Company's assets and liabilities that were measured at fair value on a recurring basis as of December 31, 2021, and indicates the fair value hierarchy of the valuation techniques the Company utilized to determine such fair value.

	December 31, 2021	Quoted Prices In Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
Assets:				
U.S. Money Market held in Trust Account	$57,506,299	$57,506,299	$ —	$ —
	$57,506,299	$57,506,299	$ —	$ —
Liabilities:				
Warrant liabilities-Private Placement Warrants	$ 1,975,000	$ —	$ —	$ 1,975,000
	$ 1,975,000	$ —	$ —	$ 1,975,000

The following table sets forth a summary of the changes in the fair value of the warrant liabilities for the period from February 1, 2021 through December 31, 2021:

	Warrant Liability
Fair value as of February 1, 2021	$2,303,000
Issuance of private warrants in connection with over-allotment as of February 2, 2021	147,000
Change in fair value (1)	(475,000)
Fair value as of December 31, 2021	$1,975,000

(1)Represents the non-cash gain on the change in valuation of Private Warrants and is included in the change in fair value of warrant liability on the statement of operations.

Schedule of level 3 fair value measurements for private warrants

The following table provides quantitative information regarding Level 3 fair value measurements for Private Warrants as of December 31, 2021 and February 1, 2021.

	December 31, 2021	February 1, 2021
Exercise price	$ 11.50	$ 11.50
Share price	$ 9.74	$ 10.00
Volatility	13.75%	19.00%
Expected life	5.33	5.99
Risk-free rate	1.26%	0.42%
Dividend yield	— %	— %

	September 30, 2022	December 31, 2021
Exercise price	$ 11.50	$ 11.50
Share price	$ 9.98	$ 9.74
Volatility	2.50%	13.75%
Expected life	3.19	5.33
Risk-free rate	4.06%	1.26%
Dividend yield	— %	— %

Income Tax (Tables)

12 Months Ended
Dec. 31, 2021

Income Tax Disclosure [Abstract]

Schedule of Net Deferred Tax Assets

The Company's net deferred tax assets are as follows:

	December 31, 2021	December 31, 2020
Deferred tax asset		
Organizational costs/ Startup expenses	$ 169,369	$ —
Federal Net Operating loss	32,923	65
Total deferred tax asset	202,293	65
Valuation allowance	(202,293)	(65)
Deferred tax asset, net of allowance	$ —	$ —

Schedule of Income Tax Provision

The income tax provision consists of the following:

	December 31, 2021	December 31, 2020
Federal		
Current	$ —	$ —
Deferred	(202,228)	(65)
State		
Current	—	—
Deferred	—	—
Change in valuation allowance	202,228	65
Income tax provision	$ —	$ —

Schedule of Reconciliation of the Federal Income Tax Effective Rate

Reconciliations of the federal income tax rate to the Company's effective tax rate at December 31, 2021 and December 31, 2020 are as follows:

	December 31, 2021	December 31, 2020
Statutory federal income tax rate	21.0%	21.0%
State taxes, net of federal tax benefit	0.0%	0.0%
Change in FV of Warrant Liability	20.44%	0.0%
Change in valuation allowance	-41.44%	-21.0%
Income tax provision	— %	— %

Organization and Business Operations (Details)	Feb. 02, 2021 USD ($) $ / shares shares	Feb. 01, 2021 USD ($) $ / shares shares	3 Months Ended Mar. 31, 2021 USD ($)	9 Months Ended Sep. 30, 2022 USD ($) $ / shares shares	9 Months Ended Sep. 30, 2021 USD ($)	12 Months Ended Dec. 31, 2021 USD ($) $ / shares shares	Nov. 01, 2022 shares	Oct. 31, 2022 shares	Sep. 30, 2022 ₩ / shares	Sep. 20, 2022 USD ($)	Mar. 21, 2022 USD ($)	Dec. 31, 2020 $ / shares shares
Organization and Business Operations (Details) [Line Items]												
Gross proceeds from Initial public offering	$ 2,012,500			$ 0	$ 56,350,000	$ 56,350,000						
Share price (in Dollars per share) | $ / shares		$ 10		$ 9.98		$ 9.74						
Proceeds from private placement				$ 0	$ 2,500,000	$ 2,500,000						
Amount held in trust accounts		$ 7,500,000										
Payment of underwriting discount		150,000										
Transaction costs		1,594,485										
Underwriting discount		1,150,000										
Other offering costs		444,485	$ 444,485			444,485						
Cash held in outside trust account		$ 975,465										
Net tangible assets						5,000,001						
Dissolution expenses						50,000						
Amount in operating bank account				75,974		329,192						
Working capital				1,629,184		125,317					$ 300,000	
Accrued delaware franchise tax				320,483								
Offering costs				25,000		25,000						
Unsecured promissory note				$ 80,000		$ 80,000						
Common Stock, Par or Stated Value Per Share (in Dollars per share) | $ / shares				$ 0.0001		$ 0.0001						$ 0.0001
Common Stock, Shares, Issued | shares				1,537,500		1,537,500						0
Common stock, exchange ratio								2.07188599				
Stock redeemed during the period, shares | shares				5,159,287								
Redemption price per share | $ / shares				$ 10.07								
Stock redeemed during the period, value			$ (57,457,258)	$ 51,978,834		$ (57,500,000)						
Common Stock, Shares, Outstanding | shares				1,537,500		1,537,500						0
Private Warrants [Member]												
Organization and Business Operations (Details) [Line Items]												
Initial public offering shares (in Shares) | shares						10						
Subsequent Event [Member]												
Organization and Business Operations (Details) [Line Items]												
Working capital											300,000	

Peak Bio Company Limited [Member]				
Organization and Business Operations (Details) [Line Items]				
Common Stock, Shares, Outstanding | shares	17,295,044			
Percentage of shares holding	86.22%			
Sponsor [Member]				
Organization and Business Operations (Details) [Line Items]				
Working capital				$ 100,000
Common Stock, Shares, Outstanding | shares	1,514,700			
Percentage of shares holding	7.60%			
Sponsor [Member] | Subsequent Event [Member]				
Organization and Business Operations (Details) [Line Items]				
Common Stock, Shares, Issued | shares		77,200		
Directors And Executive Officers [Member]				
Organization and Business Operations (Details) [Line Items]				
Common Stock, Shares, Outstanding | shares	9,378,710			
Percentage of shares holding	46.70%			
Business Agreement [Member]				
Organization and Business Operations (Details) [Line Items]				
Purchase of shares (in Shares) | shares	1,750,967			
Common Stock, Par or Stated Value Per Share (in Dollars per share) | ~~₩~~ / shares			~~₩~~ 500	
Common Stock, Shares, Issued | shares	20,058,486	17,295,044		
Common Stock, Shares, Outstanding | shares	20,058,486			
Percentage of common shares outstanding	86.22%			
Business Agreement [Member] | PIPE Investment [Member]				
Organization and Business Operations (Details) [Line Items]				
Common Stock, Shares, Issued | shares	635,229			
Class of warrant or right issued | shares	445,545			
IPO [Member]				
Organization and Business Operations (Details) [Line Items]				

Initial public offering shares (in Shares) | shares		5,000,000		
Share price per units (in Dollars per share) | $ / shares		$ 10		
Gross proceeds from Initial public offering		$ 50,000,000		
Share price (in Dollars per share) | $ / shares	$ 11.5	$ 11.5		
Working capital			$ 400,000	$ 300,000
Private Placement Warrants [Member]				
Organization and Business Operations (Details) [Line Items]				
Share price per units (in Dollars per share) | $ / shares		$ 10		
Number of shares issue (in Shares) | shares	150,000	2,350,000		
Share price (in Dollars per share) | $ / shares	$ 1	$ 1		
Proceeds from private placement	$ 150,000	$ 2,350,000		
Underwriters [Member]				
Organization and Business Operations (Details) [Line Items]				
Share price per units (in Dollars per share) | $ / shares	$ 10			
Number of shares issue (in Shares) | shares	750,000			
Gross proceeds from underwriters	$ 7,500,000			
Public Shares [Member]				
Organization and Business Operations (Details) [Line Items]				
Company's obligation to redeemed, percentage		100.00%	100.00%	

Summary of Significant Accounting Policies (Details) - USD ($)		3 Months Ended				9 Months Ended		12 Months Ended	
	Aug. 16, 2022	Feb. 01, 2021	Sep. 30, 2022	Dec. 31, 2021	Sep. 30, 2021	Mar. 31, 2021	Sep. 30, 2022	Sep. 30, 2021	Dec. 31, 2021	Dec. 31, 2020
Summary of Significant Accounting Policies (Details) [Line Items]										
Federal depository insurance coverage			$ 250,000	$ 250,000			$ 250,000		$ 250,000	
Number of shares subject to redemption (in Shares)			5,750,000	5,750,000			5,750,000		5,750,000	0
Offering costs		$ 1,594,485								
Underwriting discount		1,150,000								
Other offering costs		$ 444,485				$ 444,485			$ 444,485	
Statutory tax rate			21.00%		21.00%		21.00%	21.00%	21.00%	21.00%
Effective Income Tax Rate Reconciliation, Percent			4.96%		0.00%		7.20%	0.00%	0.00%	0.00%
Percentage of excise tax on certain repurchasesof stock by publicly traded U.S. domestic corporations	1.00%									
Percentage of fair market value of the shares repurchased at the time of the repurchase	1.00%									
Warrant [Member]										
Summary of Significant Accounting Policies (Details) [Line Items]										
Potential common shares for outstanding warrants (in Shares)				5,750,000			5,375,000			

Summary of Significant Accounting Policies (Details) - Schedule of Net Income (Loss) Per Common Share - USD ($)	3 Months Ended		5 Months Ended	9 Months Ended		12 Months Ended
	Sep. 30, 2022	Sep. 30, 2021	Dec. 31, 2020	Sep. 30, 2022	Sep. 30, 2021	Dec. 31, 2021
Denominator:						
Weighted-average shares outstanding	5,750,000	5,750,000		5,750,000	5,076,007	5,259,589
Basic and diluted net (loss) income per share	$ (0.02)	$ 0.02		$ 0.01	$ 0.06	$ (0.07)
Earnings Per Share, Diluted	$ (0.02)	$ 0.02	$ 0	$ 0.01	$ 0.06	$ (0.07)
Redeemable common stock [Member]						
Numerator:						
Allocation of net (loss) income	$ (134,928)	$ 95,763		$ 82,203	$ 300,326	$ (377,606)
Denominator:						
Weighted-average shares outstanding	5,750,000	5,750,000		5,750,000	5,076,007	5,259,589
Basic and diluted net (loss) income per share	$ (0.02)	$ 0.02		$ 0.01	$ 0.06	$ 0.07
Earnings Per Share, Diluted						$ 0.07
Outstanding common stock [Member]						
Numerator:						
Allocation of net (loss) income	$ (36,079)	$ 25,606	$ (310)	$ 21,980	$ 90,967	$ (110,383)
Denominator:						
Weighted-average shares outstanding	1,537,500	1,537,500	1,537,500	1,537,500	1,537,500	1,537,500
Basic and diluted net (loss) income per share	$ (0.02)	$ 0.02	$ 0	$ 0.01	$ 0.06	$ 0.07
Earnings Per Share, Diluted			$ 0			$ 0.07

Initial Public Offering (Details) - USD ($)	Feb. 02, 2021	Feb. 01, 2021	9 Months Ended		12 Months Ended
			Sep. 30, 2022	Sep. 30, 2021	Dec. 31, 2021
Initial Public Offering (Details) [Line Items]					
Initial public offering per share (in Dollars per share)		$ 10	$ 9.98		$ 9.74
Gross proceeds (in Dollars)	$ 2,012,500		$ 0	$ 56,350,000	$ 56,350,000
Underwriting fees (in Dollars)		$ 150,000			
Warrant redemption price per share			$ 0.01		$ 0.01
Last sale price of Common Stock			18		18
Minimum [Member]					
Initial Public Offering (Details) [Line Items]					
Initial public offering per share (in Dollars per share)			$ 9.2		$ 9.2
IPO [Member]					
Initial Public Offering (Details) [Line Items]					
Initial public offering shares (in Shares)		5,000,000			
Initial public offering per share		$ 10			
Initial public offering per share (in Dollars per share)	$ 11.5	$ 11.5			
Gross proceeds (in Dollars)		$ 50,000,000			
Over-Allotment Units [Member]					
Initial Public Offering (Details) [Line Items]					
Initial public offering shares (in Shares)	750,000				
Gross proceeds (in Dollars)	$ 7,500,000				
Underwriting fees (in Dollars)	$ 150,000				

Private Placement (Details) - USD ($)	9 Months Ended		12 Months Ended	
	Sep. 30, 2022	Sep. 30, 2021	Dec. 31, 2021	Feb. 01, 2021
Private Placement (Details) [Line Items]				
Stock price	$ 9.98		$ 9.74	$ 10
Aggregate purchase price, amount	$ 0	$ 2,500,000	$ 2,500,000	
Private Placement [Member]				
Private Placement (Details) [Line Items]				
Purchase price	2,350,000		2,350,000	
Stock price	$ 1		$ 1	
Aggregate purchase price, amount	$ 2,350,000		$ 2,350,000	
Private placement, description	Each Private Placement Warrant will entitle the holder to purchase one share of common stock at a price of $11.50 per share, subject to adjustment.		Each Private Placement Warrant will entitle the holder to purchase one share of common stock at a price of $11.50 per share, subject to adjustment.	
Private Placement [Member] | Ignyte Sponsor LLC [Member]				
Private Placement (Details) [Line Items]				
Stock price	$ 1		$ 1	
Sale of private placement warrants	150,000		150,000	
Proceeds from sale of warrants	$ 150,000		$ 150,000	

Related Party Transactions (Details) - USD ($)	Feb. 02, 2021	Aug. 12, 2020	Aug. 12, 2020	3 Months Ended			9 Months Ended		11 Months Ended		12 Months Ended		20 Months Ended						
				Sep. 30, 2022	Sep. 30, 2021	Mar. 31, 2021	Sep. 30, 2022	Sep. 30, 2021	Dec. 31, 2021	Dec. 31, 2021	Dec. 31, 2021	Dec. 31, 2020	Sep. 30, 2022	Nov. 01, 2022	Sep. 20, 2022	Mar. 21, 2022	Feb. 01, 2021	Nov. 20, 2020
Related Party Transactions (Details) [Line Items]																		
Purchase price of founder shares						$ 57,500,000					$ 57,500,000							
Par value of common shares issued (in Dollars per share)				$ 0.0001			$ 0.0001		$ 0.0001	$ 0.0001	$ 0.0001	$ 0.0001	$ 0.0001					
Working capital				$ 1,629,184			$ 1,629,184		$ 125,317	$ 125,317	$ 125,317		$ 1,629,184			$ 300,000		
Drawn amount of outstanding promissory note				399,380			399,380						399,380					
Amount due to related party				201,953			201,953		111,953	111,953	111,953		201,953					
Converted amount							1,500,000				1,500,000							
Accrued expenses				201,643	$ 81,643		201,643	$ 81,643					201,643					
Notes payable, related parties, current				399,380			399,380					$ 80,000	399,380					
Subsequent Event [Member]																		
Related Party Transactions (Details) [Line Items]																		
Working capital																300,000		
Sponsor [Member]																		
Related Party Transactions (Details) [Line Items]																		
Working capital															$ 100,000			
Sponsor [Member] | Subsequent Event [Member]																		
Related Party Transactions (Details) [Line Items]																		
Amount due to related party														$ 400,000				
Over-Allotment Option [Member]																		
Related Party Transactions (Details) [Line Items]																		
Forfeiture of founder shares (in Shares)			187,500															
IPO [Member]																		
Related Party Transactions (Details) [Line Items]																		
Share price per units (in Dollars per share)																	$ 10	
Working capital				400,000			400,000						400,000			$ 300,000		
Office space, utilities and secretarial support [Member]																		
Related Party Transactions (Details) [Line Items]																		
Per month amount							$ 10,000				$ 10,000							
Executive Officers [Member] | IPO [Member]																		
Related Party Transactions (Details) [Line Items]																		
Promissory note, outstanding																		$ 80,000
Founder Shares [Member]																		
Related Party Transactions (Details) [Line Items]																		
Purchase price of founder shares		$ 25,000	$ 25,000															
Share price per units (in Dollars per share)		$ 0.02	$ 0.02															
Issuance of common stock to founder, shares (in Shares)		1,437,500	1,437,500				1,437,500											
Par value of common shares issued (in Dollars per share)		$ 0.0001	$ 0.0001															
Shares not subject to forfeiture (in Shares)	187,500																	
Founder shares, description							Subject to certain limited exceptions, these shares will not be transferred, assigned, sold or released from escrow (subject to certain limited				Subject to certain limited exceptions, these shares will not be transferred, assigned, sold or released from escrow (subject to certain limited							

			exceptions set forth below) (i) with respect to 50% of such shares, for a period ending on the earlier of the one-year anniversary of the date of the consummation of the initial Business Combination and the date on which the closing price of the Company's common stock equals or exceeds $12.50 per share (as adjusted for share splits, share dividends, reorganizations and recapitalizations) for any 20 trading days within a30-tradingday period following the consummation of the initial Business Combination and (ii) with respect to the remaining 50% of such shares, for a period ending on the one-year anniversary of the date of the consummation of the initial Business Combination, or earlier, in either case, if, subsequent to the initial Business Combination, the Company consummates a liquidation, merger, stock exchange or other similar transaction which results in all of the Company's stockholders having the right to exchange their shares of common stock for cash, securities or other property.				exceptions set forth below) (i) with respect to 50% of such shares, for a period ending on the earlier of the one-year anniversary of the date of the consummation of the initial Business Combination and the date on which the closing price of the Company's common stock equals or exceeds $12.50 per share (as adjusted for share splits, share dividends, reorganizations and recapitalizations) for any 20 trading days within a 30-trading day period following the consummation of the initial Business Combination and (ii) with respect to the remaining 50% of such shares, for a period ending on the one-year anniversary of the date of the consummation of the initial Business Combination, or earlier, in either case, if, subsequent to the initial Business Combination, the Company consummates a liquidation, merger, stock exchange or other similar transaction which results in all of the Company's stockholders having the right to exchange their shares of common stock for cash, securities or other property.		
Accrual of Administrative Service Fees [Member]									
Related Party Transactions (Details) [Line Items]									
Related party transaction amount	$ 30,000	$ 30,000	$ 90,000	$ 90,000	111,643	111,643	$ 111,953		$ 201,643
Formation cost [Member] | Officer [Member]									
Related Party Transactions (Details) [Line Items]									
Related party cost			$ 310		$ 310	$ 310			$ 310
Warrants [Member]									

Related Party Transactions (Details) [Line Items]						
Sale of price per share (in Dollars per share)	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1

Recurring Fair Value Measurements (Details) - Schedule of Fair Value on a Recurring Basis - USD ($)	Sep. 30, 2022	Dec. 31, 2021
Assets:		
U.S. Money Market held in Trust Account	$ 57,849,285	$ 57,506,299
Assets	57,849,285	57,506,299
Liabilities:		
Warrant liabilities-Private Placement Warrants	300,000	1,975,000
Liabilities	300,000	1,975,000
Quoted Prices In Active Markets (Level 1) [Member]		
Assets:		
U.S. Money Market held in Trust Account	57,849,285	57,506,299
Assets	57,849,285	57,506,299
Liabilities:		
Warrant liabilities-Private Placement Warrants	0	0
Liabilities	0	0
Significant Other Observable Inputs (Level 2) [Member]		
Assets:		
U.S. Money Market held in Trust Account	0	0
Assets	0	0
Liabilities:		
Warrant liabilities-Private Placement Warrants	0	0
Liabilities	0	0
Significant Other Unobservable Inputs (Level 3) [Member]		
Assets:		
U.S. Money Market held in Trust Account	0	0
Assets	0	0
Liabilities:		
Warrant liabilities-Private Placement Warrants	300,000	1,975,000
Liabilities	$ 300,000	$ 1,975,000

Recurring Fair Value Measurements (Details) - Schedule of Fair Value of Warrants liabilities - USD ($)	3 Months Ended			8 Months Ended	9 Months Ended		11 Months Ended	12 Months Ended
	Sep. 30, 2022	Jun. 30, 2022	Mar. 31, 2022	Sep. 30, 2021	Sep. 30, 2022	Sep. 30, 2021	Dec. 31, 2021	Dec. 31, 2021
Recurring Fair Value Measurements (Details) - Schedule of Fair Value of Warrants liabilities [Line Items]								
Change in fair value					$ (1,675,000)	$ (800,000)		$ (475,000)
Warrant Liability [Member]								
Recurring Fair Value Measurements (Details) - Schedule of Fair Value of Warrants liabilities [Line Items]								
Fair value as of beginning	$ 550,000	$ 950,000	$ 1,975,000	$ 2,303,000	1,975,000		$ 2,303,000	
Issuance of private warrants in connection with over-allotment as of February 2, 2021				147,000			147,000	
Change in fair value	(250,000) [1]	(400,000) [1]	(1,025,000) [1]	(800,000) [1]			(475,000) [2]	
Fair value as of ending	$ 300,000	$ 550,000	$ 950,000	$ 1,650,000	$ 300,000	$ 1,650,000	$ 1,975,000	$ 1,975,000

[1] Represents the non-cash gain on the change in valuation of Private Warrants and is included in the change in fair value of warrant liability on the statement of operations.

[2] Represents the non-cash gain on the change in valuation of Private Warrants and is included in the change in fair value of warrant liability on the statements of operations.

Recurring Fair Value Measurements (Details) - Schedule of level 3 fair value measurements for private warrants - $ / shares	Feb. 01, 2021	9 Months Ended Sep. 30, 2022	12 Months Ended Dec. 31, 2021
Schedule of level 3 fair value measurements for private warrants [Abstract]			
Exercise price (in Dollars per share)	$ 11.5	$ 11.5	$ 11.5
Share price (in Dollars per share)	$ 10	$ 9.98	$ 9.74
Volatility	19.00%	2.50%	13.75%
Expected life	5 years 11 months 26 days	3 years 2 months 8 days	5 years 3 months 29 days
Risk-free rate	0.42%	4.06%	1.26%
Dividend yield	0.00%	0.00%	0.00%

Commitments and Contingencies (Details) - USD ($)	Feb. 02, 2021	Feb. 01, 2021	3 Months Ended Mar. 31, 2021	9 Months Ended Sep. 30, 2022	9 Months Ended Sep. 30, 2021	12 Months Ended Dec. 31, 2021
Commitments and Contingencies (Details) [Line Items]						
Purchase price of founder shares			$ 57,500,000			$ 57,500,000
Underwriting fee		$ 1,000,000				(1,150,000)
Proceeds from Issuance Initial Public Offering	$ 2,012,500			$ 0	$ 56,350,000	$ 56,350,000
Gross proceeds percentage	3.50%	3.50%				
Percentage of aggregate gross spread or fees from any and all such financings		25.00%				
Loss contingency, damages sought, value				0		
Loss contingency				$ 0		
Over-Allotment Option [Member]						
Commitments and Contingencies (Details) [Line Items]						
Aggregate purchase units (in Shares)	750,000	750,000				
Proceeds from Issuance Initial Public Offering	$ 7,500,000					
Underwriter (and/or its designees) [Member]						
Commitments and Contingencies (Details) [Line Items]						
Representative Shares issued price per share (in Dollars per share)		$ 0.0001				
Purchase price of founder shares		$ 2,000				
Underwriter (and/or its designees) [Member] | Over-Allotment Option [Member]						
Commitments and Contingencies (Details) [Line Items]						
Number of shares issue (in Shares)		100,000				
Representative Shares issued price per share (in Dollars per share)		$ 0.0001				
Purchase price of founder shares		$ 2,000				

Stockholders' Equity (Details) - USD ($)	Aug. 12, 2020	Aug. 12, 2020	3 Months Ended Mar. 31, 2021	9 Months Ended Sep. 30, 2022	12 Months Ended Dec. 31, 2021	Feb. 02, 2021	Feb. 01, 2021	Dec. 31, 2020	Aug. 31, 2020	Aug. 30, 2020
Stockholders' Equity (Details) [Line Items]										
Preference shares, shares authorized				1,000,000	1,000,000			1,000,000		
Preferred stock, par value (in Dollars per share)				$ 0.0001	$ 0.0001			$ 0.0001		
Common stock, shares authorized				50,000,000	50,000,000			50,000,000		
Common stock, par value (in Dollars per share)				$ 0.0001	$ 0.0001			$ 0.0001		
Stock Issued During Period, Value, New Issues			$ 57,500,000		$ 57,500,000					
Common Stock Shares Forfeiture				187,500	187,500					
Percentage of shares owned by stockholders in issued and outstanding common stock after IPO				20.00%	20.00%					
Number of Founder Shares are no longer subject to forfeiture since IPO						187,500	187,500			
Common stock, shares issued				1,537,500	1,537,500			0		
Common stock, shares outstanding				1,537,500	1,537,500			0		
Designees of EarlyBirdCapital [Member]										
Stockholders' Equity (Details) [Line Items]										
Common stock, par value (in Dollars per share)									$ 0.0001	$ 0.0001
Common stock, shares issued								1,537,500	100,000	100,000
Common stock, shares outstanding								1,537,500		
Founder Shares [Member]										
Stockholders' Equity (Details) [Line Items]										
Common stock, par value (in Dollars per share)	$ 0.0001	$ 0.0001								
Stock Issued During Period, Value, New Issues	$ 25,000	$ 25,000								
Share price per units (in Dollars per share)	$ 0.02	$ 0.02								
Stock Issued During Period, Shares, New Issues	1,437,500	1,437,500		1,437,500						

Income Tax (Details) - USD ($)	12 Months Ended	
	Dec. 31, 2021	Dec. 31, 2020
Income Tax Disclosure [Abstract]		
Net operating loss carryovers	$ 156,778	$ 310
Change in the valuation allowance	$ 202,228	$ 65

Income Tax (Details) - Schedule of net deferred tax assets - USD ($)	Dec. 31, 2021	Dec. 31, 2020
Deferred Tax Asset [Abstract]		
Organizational costs/Startup expenses	$ 169,369	$ 0
Federal Net Operating loss	32,923	65
Total deferred tax asset	202,293	65
Valuation allowance	(202,293)	(65)
Deferred tax asset, net of allowance	$ 0	$ 0

Income Tax (Details) - Schedule of income tax provision - USD ($)	3 Months Ended		9 Months Ended		12 Months Ended	
	Sep. 30, 2022	Sep. 30, 2021	Sep. 30, 2022	Sep. 30, 2021	Dec. 31, 2021	Dec. 31, 2020
Federal						
Current					$ 0	$ 0
Deferred					(202,228)	(65)
State						
Current					0	0
Deferred					0	0
Change in valuation allowance					202,228	65
Income tax provision	$ 8,083	$ 0	$ 8,083	$ 0	$ 0	$ 0

Income Tax (Details) - Schedule of reconciliation of the federal income tax effective rate	3 Months Ended		9 Months Ended		12 Months Ended	
	Sep. 30, 2022	Sep. 30, 2021	Sep. 30, 2022	Sep. 30, 2021	Dec. 31, 2021	Dec. 31, 2020
Schedule Of Reconciliation Of The Federal Income Tax Effective Rate [Abstract]						
Statutory federal income tax rate	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%
State taxes, net of federal tax benefit					0.00%	0.00%
Change in FV of Warrant Liability					20.44%	0.00%
Change in valuation allowance					(41.44%)	(21.00%)
Income tax provision	4.96%	0.00%	7.20%	0.00%	0.00%	0.00%

Subsequent Events (Details) - USD ($)	Nov. 01, 2022	Oct. 31, 2022	Oct. 25, 2022	3 Months Ended Mar. 31, 2021	9 Months Ended Sep. 30, 2022	12 Months Ended Dec. 31, 2021	Sep. 20, 2022	Mar. 21, 2022	Feb. 01, 2021	Dec. 31, 2020
Subsequent Events (Details) [Line Items]										
Share price (in Dollars per share)					$ 9.98	$ 9.74			$ 10	
Common Stock, Shares, Issued					1,537,500	1,537,500				0
Due to related parties					$ 201,953	$ 111,953				
Stock redeemed during the period, shares					5,159,287					
Redemption price per share					$ 10.07					
Stock redeemed during the period, value				$ (57,457,258)	$ 51,978,834	(57,500,000)				
Working capital					$ 1,629,184	$ 125,317		$ 300,000		
Common Stock [Member]										
Subsequent Events (Details) [Line Items]										
Stock Issued During Period, Shares, New Issues				5,750,000		5,750,000				
Stock redeemed during the period, shares				(5,750,000)		(5,750,000)				
Stock redeemed during the period, value				$ (575)		$ (575)				
Sponsor [Member]										
Subsequent Events (Details) [Line Items]										
Working capital							$ 100,000			
Subsequent Event [Member]										
Subsequent Events (Details) [Line Items]										
Stock terminated during period, shares		1,500,000								
Stock terminated during period, value		$ 15,000,000								
Working capital								$ 300,000		
Subsequent Event [Member] | Knight Family [Member]										
Subsequent Events (Details) [Line Items]										
Stock transferred during period shares	20,167									
Subsequent Event [Member] | Ingalls [Member]										
Subsequent Events (Details) [Line Items]										

Common Stock, Shares, Issued	28,950	
Due to related parties	$ 150,000	
Subsequent Event [Member] | Warrant Shares PIPE Subscription Agreements [Member]		
Subsequent Events (Details) [Line Items]		
Sale of stock, pricer per share		$ 10
Subsequent Event [Member] | Warrant Shares PIPE Subscription Agreements [Member] | Common Stock [Member]		
Subsequent Events (Details) [Line Items]		
Aggregate amount (in Dollars)	$ 3,025,000	$ 3,025,000
Share price (in Dollars per share)		$ 0.01
Subsequent Event [Member] | Warrant Shares PIPE Subscription Agreements [Member] | PIPE Financing Warrants [Member]		
Subsequent Events (Details) [Line Items]		
Sale of stock, number of shares issued in transaction		281,325
Subsequent Event [Member] | Warrant Shares PIPE Subscription Agreements [Member] | PIPE Shares [Member]		
Subsequent Events (Details) [Line Items]		
Sale of stock, number of shares issued in transaction		302,500
Subsequent Event [Member] | Bridge Loan PIPE Subscription Agreements [Member]		
Subsequent Events (Details) [Line Items]		
Aggregate amount (in Dollars)		$ 1,750,000
Share price (in Dollars per share)		$ 0.01
Subsequent Event [Member] | Bridge Loan PIPE Subscription Agreements [Member] | PIPE Financing Warrants [Member]		

Subsequent Events (Details) [Line Items]			
Sale of stock, number of shares issued in transaction	164,218		
Subsequent Event [Member] | Bridge Loan PIPE Subscription Agreements [Member] | PIPE Shares [Member]			
Subsequent Events (Details) [Line Items]			
Sale of stock, number of shares issued in transaction	176,579		
Subsequent Event [Member] | Frost Gamma Investments Trust [Member]			
Subsequent Events (Details) [Line Items]			
Stock Issued During Period, Shares, New Issues		450,000	
Number of business days to repurchase shares from the closing of the Business Combination		60 days	
Subsequent Event [Member] | Sponsor [Member]			
Subsequent Events (Details) [Line Items]			
Common Stock, Shares, Issued	77,200		
Due to related parties	$ 400,000		