FORM 10-K

Annual report pursuant to section 13 and 15(d)

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

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2024

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number 001-39244

Vincerx Pharma, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware	**83-3197402**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
1825 S. Grant Street San Mateo, CA	**94402**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (650) 800-6676

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.0001 par value per share	**VINC**	**The Nasdaq Stock Market LLC**

Securities registered pursuant to Section 12(g) of the Act:
None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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 of the Exchange Act.

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 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of common stock held by non-affiliates (based on the closing sale price on The Nasdaq Capital Market on June 30, 2024) was approximately $21.0 million.

As of March 21, 2025, there were 5,234,277 shares of the registrant's common stock outstanding.

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Forward-Looking Statements

This report contains forward-looking statements that involve risks and uncertainties. These statements relate to future periods, future events or our future operating or financial plans or performance. When used in this report, the words "anticipate," "believe," "continue," "could," "estimate," "expect," "intends," "forecast," "goal," "may," "might," "plan," "possible," "potential," "predict," "project," "should," "seeks," "suggests," "scheduled," "target," or "will," and similar expressions are intended to identify forward-looking statements, and include but are not limited to:

- our proposed business combination transaction and/or other strategic alternatives;
- our future financial and business performance;
- plans for our business and product candidates;
- the attributes of, and our ability to develop or commercialize, our product candidates;
- our ability to comply with the terms of the Bayer License Agreement;
- our future capital requirements and sufficiency of available cash, including our expected cash runway, timing of those requirements, and sources and uses of cash;
- our ability to obtain funding for our operations and continue as a going concern;
- our ability to adjust our operating plan spending levels;
- our ability to maintain compliance with the continued listing requirements of The Nasdaq Capital Market;
- developments and expectations relating to our competitors and industry;
- our expectations regarding our ability to obtain, develop, and maintain intellectual property protection and not infringe on the rights of others;
- our ability to retain key scientific or management personnel;
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act;
- the outcome of any regulatory proceedings; and
- changes in applicable laws or regulations.

These statements are subject to known and unknown risks, uncertainties, and assumptions that could cause actual results to differ materially from those projected or otherwise implied by the forward-looking statements, including the following:

- risks associated with the proposed business combination and/or other strategic alternatives;
- risks associated with preclinical or clinical development and trials;
- changes in the assumptions underlying our expectations regarding our future business or business model;
- our ability to develop, manufacture, and commercialize product candidates;
- our need for additional capital and ability to raise such capital and continue as a going concern;
- risks related to the timing of expected business and product development milestones;
- the size and growth potential of the markets for our products, and our ability to compete in those markets;
- general economic, financial, legal, political, and business conditions and changes in domestic and foreign markets, including the impact of inflation and the wars in Ukraine and Israel;

- changes in applicable laws or regulations, including the impact of the Inflation Reduction Act of 2022 and potential legislation restricting the use of foreign third-party service providers;
- the impact of natural disasters, including climate change, and the impact of health pandemics and epidemics on our business; and
- other risks and uncertainties set forth in this report in the section entitled "Risk Factors."

Given these and other risks and uncertainties described in this report, you should not place undue reliance on these forward-looking statements.

Forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from those expected. These risks and uncertainties include, but are not limited to, those risks discussed in Item 1A of this report. These forward-looking statements made by us in this report speak only as of the date of this report. Except as required under the federal securities laws and rules and regulations of the Securities and Exchange Commission (the "SEC"), we expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations with regard thereto or any change in events, conditions, or circumstances on which any such statement is based. You should, however, review additional disclosures we make in our definitive proxy statements (including the definitive proxy statement for the 2025 Annual Meeting of Stockholders), Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K filed with the SEC.

You should read this report completely and with the understanding that our actual future results, levels of activity, and performance as well as other events and circumstances may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

Frequently Used Terms

Unless the context indicates otherwise, references in this report to the "Company," "Vincerx," "we," "us," "our," and similar terms refer to Vincerx Pharma, Inc. (f/k/a Vincera Pharma, Inc. f/k/a LifeSci Acquisition Corp.) and its consolidated subsidiaries. References to "LSAC" refer to our predecessor company prior to the consummation of the LSAC Business Combination (as defined below). Additional terms frequently used in this report include the following:

- "ADC" means antibody-drug conjugate.
- "Affordable Care Act" means the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act.
- "AML" means acute myeloid leukemia.
- "ANDA" means an abbreviated new drug application.
- "Bayer License Agreement" means that certain License Agreement, dated October 7, 2020, by and among Legacy Vincera Pharma, Bayer Aktiengesellschaft, and Bayer Intellectual Property GmbH.
- "BLA" means a biologics license application.
- "BPCIA" means the Biologics Price Competition and Innovation Act of 2009.
- "Bylaws" means our amended and restated bylaws.
- "CDK9" means cyclin-dependent kinase 9.
- "CDX" means cell-derived xenograft.
- "Certificate of Incorporation" means our second amended and restated certificate of incorporation, as amended.

- "cGMP" means current Good Manufacturing Practice.
- "CLL" means chronic lymphocytic leukemia.
- "common stock" means our common stock, $0.0001 par value per share.
- "CPT" means camptothecin.
- "DLBCL" means diffuse large B-cell lymphoma.
- "DH-DLBCL" means double-hit DLBCL (i.e., DLBCL characterized by translocations of MYC and BCL-2).
- "Earnout Shares" means certain rights to common stock after the closing of the LSAC Business Combination that Legacy Holders may be entitled to receive pursuant to the LSAC Merger Agreement.
- "Exchange Act" means the Securities Exchange Act of 1934, as amended.
- "FDA" means the U.S. Food and Drug Administration.
- "FDCA" means the Federal Food, Drug and Cosmetic Act.
- "GAAP" means accounting principles generally accepted in the United States of America.
- "HER2" means human epidermal growth factor receptor 2.
- "IL3RA" means Interleukin 3 receptor subunit alpha.
- "HIPAA" means the Health Insurance Portability and Accountability Act.
- "IND" means an investigational new drug application.
- "JOBS Act" means the Jumpstart Our Business Startups Act of 2012.
- "KSPi" means kinesin spindle protein inhibitor.
- "Legacy Holders" means the stockholders of Legacy Vincera Pharma immediately prior to the LSAC Business Combination.
- "Legacy Vincera Pharma" means Vincera Pharma, Inc. prior to the consummation of the LSAC Business Combination, which changed its name to VNRX Corp. following the LSAC Business Combination.
- "Legacy Vincera Pharma Common Stock" means Legacy Vincera Pharma common stock, par value $0.0001 per share.
- "legacy warrants" means the warrants issued simultaneously with the closing of the initial public offering of LSAC in a private placement to LifeSci Holdings LLC and Rosedale Park, LLC and the warrants issued pursuant to Section 8.6 of the LSAC Merger Agreement.
- "Letter of Intent" means the non-binding letter of intent entered into with Global Digital Holdings Inc., a Georgia corporation that conducts business under the name QumulusAI ("QumulusAI") on March 14, 2025.
- "LSAC Business Combination" means the LSAC Merger and the other transactions described in the LSAC Merger Agreement.
- "LSAC Merger" means the merger of LSAC Merger Sub with and into Legacy Vincera Pharma, with Legacy Vincera Pharma surviving as the surviving company and as a wholly-owned subsidiary of LSAC, which occurred on December 23, 2020.
- "LSAC Merger Agreement" means that certain Merger Agreement, dated September 25, 2020, by and among LSAC, LSAC Merger Sub, Legacy Vincera Pharma and Raquel E. Izumi, as the representative of the Legacy Holders.

- "LSAC Merger Sub" means LifeSci Acquisition Merger Sub, Inc., a Delaware corporation and wholly-owned subsidiary of LSAC at the time of the LSAC Business Combination.
- "MCL" means mantle cell lymphoma.
- "MCL1" means a protein coding gene.
- "MYC" means a family of regulator genes and proto-oncogenes that code for transcription factors.
- "NDA" means a new drug application.
- "P-TEFb" means positive transcription elongation factor beta.
- "Proposed Business Combination" means the proposed business combination between us and QumulusAI.
- "Securities Act" means the Securities Act of 1933, as amended.
- "SMDC" means small molecule drug conjugate.
- "USPTO" means the United States Patent and Trademark Office.
- "Warrant Agreement" means that certain Warrant Agreement, dated March 5, 2020, between LSAC and the Continental Stock Transfer & Trust Company.

Vincerx®, Vincerx Pharma®, the Vincerx Wings logo design, CellTrapper®, and VersAptx™ are our trademarks or registered trademarks. This report also contains trademarks and trade names that are the property of their respective owners.

Summary Risk Factors

Our business is subject to numerous risks and uncertainties that could affect our ability to successfully implement our business strategy and affect our financial results. You should carefully consider all of the information in this report and, in particular, the following principal risks and all of the other specific factors described in Item 1A of this report, "Risk Factors," before deciding whether to invest in the Company.

- The Proposed Business Combination may not be consummated on the terms described in the non-binding Letter of Intent or at all.
- Failure to consummate the Proposed Business Combination could negatively affect our business, and result in the total loss of your investment.
- Vincerx and QumulusAI will be subject to various uncertainties while the Proposed Business Combination is pending that could adversely affect the anticipated benefits of the Proposed Business Combination.
- We rely on the Bayer License Agreement to provide rights to the core intellectual property relating to all of our current product candidates, which agreement imposes significant payment and other obligations on us. Any failure by us to perform our obligations under the Bayer License Agreement could give Bayer AG ("Bayer") the right to terminate or seek other remedies under the agreement, and any termination or loss of important rights under the Bayer License Agreement would significantly and adversely affect our ability to develop, partner and/or commercialize our current product candidates and our VersAptx platform, raise capital, or continue our operations.
- We are currently substantially dependent on the success of VIP943, our lead product candidate, and our other current product candidates. If we are unable to complete development of, obtain approval for, partner, or commercialize these product candidates in a timely manner, our business will be harmed.
- We are at an early stage in development efforts for our product candidates, and we may not be able to successfully develop, manufacture, complete clinical trials, partner, or commercialize our product candidates on a timely basis or at all.

- Results from early-stage clinical trials may not be predictive of results from late-stage or other clinical trials.
- Interim, "topline," and preliminary data from our clinical trials that we announce or publish 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.
- We previously announced that we are exploring strategic alternatives and also implemented certain workforce reductions and other cost-control measures to streamline our operations and focus our resources, and there can be no assurance that such measures will achieve the intended objectives, or that they will not adversely affect our business.
- We have incurred net losses since inception and expect to continue to incur significant net losses for the foreseeable future, and there can be no assurance we will be able to raise capital.
- We require substantial capital to finance our operations. If we are unable to raise capital when needed, or on acceptable terms, we may be forced to significantly reduce our operations and expenses, may not be able to continue as a going concern, and may be forced to cease operations.
- Even if approved, our product candidates may not achieve adequate market acceptance among physicians, patients, healthcare payors, and others in the medical community necessary for commercial success.
- If the market opportunity for any product candidate is smaller than we believe, our potential commercial opportunity may be adversely affected and our business may suffer.
- We face significant competition, and if our competitors develop and market technologies or products more rapidly or that are more effective, safer, or less expensive than our product candidates, our commercial opportunities will be negatively impacted.
- Clinical trials are expensive, time consuming, subject to enrollment and other delays, and may be required to continue beyond our available funding, and we cannot be certain that we will be able to raise sufficient funds to successfully complete the development, clinical trials, and commercialization of any of our product candidates.
- Our business entails a significant risk of product liability, and if we are unable to obtain sufficient insurance coverage such inability could have an adverse effect on our business.
- The Bayer License Agreement obligates us to make significant milestone and royalty payments, some of which would be triggered prior to the commercialization of our product candidates, and we may not be able to raise additional capital or enter into strategic alliances at levels sufficient to pay these amounts when due.
- We may be unable to obtain U.S. or foreign regulatory approvals and, as a result, may be unable to partner and/or commercialize our product candidates.
- Our product candidates may cause adverse events, toxicities, or other undesirable side effects when used alone or in combination with other approved products or investigational new drugs that may result in a safety profile that could inhibit regulatory approval, prevent market acceptance, limit their commercial potential, or result in significant negative consequences.
- If we are not able to maintain compliance with the continued listing requirements of The Nasdaq Capital Market, our common stock may be delisted, which could negatively impact the liquidity and price of our common stock, our ability to complete a business combination or access the capital markets, and the confidence of investors and others.

PART I

ITEM 1. Business.

Corporate History and Background

We were initially formed on December 19, 2018 as a Delaware corporation for the purpose of effecting a merger, share exchange, asset acquisition, share purchase, reorganization, or similar business combination with one or more businesses. From the time of our formation to the time of the consummation of the LSAC Business Combination, our name was "LifeSci Acquisition Corp."

On September 25, 2020, we entered into the LSAC Merger Agreement. At the effective time of the LSAC Merger, each share of Legacy Vincera Pharma Common Stock, other than any Dissenting Shares (as defined in the LSAC Merger Agreement), was canceled and the Legacy Holders received (i) 0.028545 shares of our common stock, for each share of Legacy Vincera Pharma Common Stock held by them immediately prior to the effective time of the LSAC Merger and (ii) the right to receive Earnout Shares under certain conditions following the closing of the LSAC Business Combination.

The Legacy Holders are entitled to receive Earnout Shares if the daily volume-weighted average price of our common stock equals or exceeds the following prices (as adjusted for the Company's 1-for-20 reverse stock split) for any 20 trading days within any 30 trading-day period (the "Trading Period"), following the closing of the LSAC Business Combination: (1) during any Trading Period prior to the six year anniversary of the closing, upon achievement of a daily volume-weighted average price of at least $700.00 per share, such number of shares of our common stock as equals the quotient of $20.0 million divided by the Closing Price Per Share; and (3) during any Trading Period prior to the eight year anniversary of the closing, upon achievement of a daily volume-weighted average price of at least $900.0 per share, such number of shares of our common stock as equals the quotient of $20.0 million divided by the Closing Price Per Share. A total of 90.6% (rounded to the nearest whole share) of the Earnout Shares then earned and issuable shall be issued to the Legacy Holders on a pro-rata basis based on the percentage of the number of shares of Legacy Vincera Pharma Common Stock owned by them immediately prior to the closing of the LSAC Business Combination, and the remaining Earnout Shares that would otherwise have been issuable shall not be issuable to the Legacy Holders but in lieu thereof the number of authorized shares available for issuance under the Vincerx Pharma, Inc. 2020 Stock Incentive Plan shall be automatically increased by an equivalent number of shares of our common stock.

Recent Development, Including Pursuit of Strategic Alternatives

On March 14, 2025, we entered the Letter of Intent relating the Proposed Business Combination. QumulusAI is a fully-integrated provider of high-performance compute cloud services through ownership and operation of data centers and management of a diversified power generation portfolio. The parties currently contemplate a reverse triangular merger structure, pursuant to which (i) a subsidiary of the Company would merge into QumulusAI, (ii) QumulusAI stockholders would receive shares of our common stock in exchange for their shares of QumulusAI capital stock ("QumulusAI Capital Stock") based on the Exchange Ratio (defined below), and (iii) outstanding options, warrants, and other rights to acquire QumulusAI Capital Stock ("QumulusAI Stock Rights") would be assumed by the Company and converted into options, warrants, and rights to acquire our common stock based on the Exchange Ratio.

The conversion of the QumulusAI Capital Stock and QumulusAI Stock Rights would be pursuant to an exchange ratio (the "Exchange Ratio") intended to result in the following aggregate post-closing percentage ownership: (i) the equity holders of QumulusAI immediately prior to the closing (including all QumulusAI Stock Rights) would own 95% of the equity of the combined company, and (ii) the equity holders of Vincerx immediately prior to the closing (including all outstanding options and warrants) would own 5% of the equity of the combined company. These ownership percentages assume a valuation of $285 million for QumulusAI and $15 million for Vincerx and "net cash" (defined as cash minus liabilities) of zero at closing. To the extent

requested by Vincerx, QumulusAI or its designees will invest up to $1.5 million in the equity of Vincerx prior to the closing.

Following the closing of the Proposed Business Combination, the combined company's board of directors would consist of seven members, all of whom would be designated by QumulusAI. QumulusAI would also determine the composition of senior management of the combined company following the closing.

The parties intend to negotiate a definitive business combination agreement that will incorporate the provisions of the Letter of Intent as well as other terms and conditions typical for transactions of this nature. During the 30-day period from the date of the Letter of Intent, the parties have agreed not to solicit or encourage submission of, or participate in discussions or enter into any agreement regarding, any other acquisition proposal.

Conditions to execution of a definitive business combination agreement include satisfactory completion of due diligence by the parties, execution of appropriate voting support agreements, and approval by the boards of directors of the parties. Conditions to the closing of the Proposed Business Combination include approval by the stockholders of both parties, receipt of government, regulatory, and other third-party approvals, effectiveness of a registration statement relating to the issuance of our common stock in the Proposed Business Combination, listing of the combined company's common stock on The Nasdaq Stock Market ("Nasdaq"), and satisfaction of other customary conditions to closing for transactions of this type.

There can be no assurances the parties will enter into a definitive business combination agreement, the actual terms of any such agreement, or that any transaction will ultimately be consummated.

The Company previously announced that it is exploring strategic alternatives, including out-licensing, merger and acquisition opportunities (including reverse mergers), the sale of assets and technologies, and winding down operations. In the fourth quarter of 2024, the Company executed a series of workforce reductions to streamline operations and control ongoing costs as it pursues strategic alternatives. Regardless of whether the Proposed Business Combination is consummated, the Company is continuing to pursue monetizing its assets. There can be no assurances that its efforts will be successful.

Unless specifically noted or the context clearly requires otherwise, all information set forth in this Annual Report on Form 10-K relates to the Company without regard to the Proposed Business Combination.

Overview

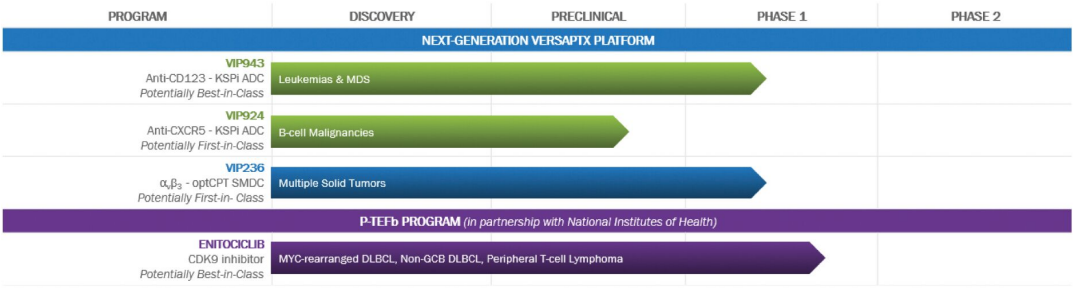
We are a clinical-stage biopharmaceutical company that has been developing differentiated and novel therapies to address the unmet medical needs of patients with cancer.

We have a versatile and adaptable, next generation bioconjugation platform, called VersAptx. The modular nature of this innovative platform allows us to combine targeting, linker, and payload technologies to develop bespoke bioconjugates to address different cancer biologies. The VersAptx platform has the following features:

- Antibodies and small molecules that target different tumor antigens, including non-internalizing targets
- Linkers designed to:
  - reduce non-specific release of the payload
  - cleave intracellularly or extracellularly
  - conjugate to single or multiple payloads
- Payloads designed to:
  - reduce permeability using our CellTrapper™ technology to ensure accumulation in cancer cells
  - increase permeability with low efflux for release in the TME.

By integrating these features, VersAptx enables precise tuning of bioconjugates to improve safety, efficacy, and therapeutic potential beyond first-generation bioconjugates.

The following graphic summarizes our pipeline as of February 28, 2025:



Our Technology

The VersAptx Platform

The VersAptx platform is a versatile and adaptable, next generation bioconjugation platform. The modular nature of this platform allows us to combine different targeting, linker, and payload technologies to develop unique ADCs and SMDCs that address the safety and efficacy challenges of first-generation bioconjugates.

The VersAptx platform has the following features:

Targets. We use antibodies or small molecules to target different tumor antigens. Currently, we have disclosed the following hematologic and solid tumor targets:

- **CD123:** A protein mainly produced by activated T-cells and expressed at high levels in AML, classical Hodgkin lymphoma, B-cell acute lymphoblastic leukemia (B-ALL), and MDS. Targeting CD123 allows for selective destruction of cancer cells while sparing normal cells, potentially minimizing side effects.
- **CXCR5**: A receptor that regulates chemotaxis, germinal center formation, and plasma and memory B-cell differentiation and is highly expressed on the tumor cells of DLBCL, FL, MCL, and CLL. The specific expression pattern of CXCR5 prevents general effects on the B-cell population commonly observed with other compounds in this disease area. Targeting CXCR5 can also address the issue of cancer cell masking, by preventing homing into lymphatic systems (e.g., lymph nodes), keeping the cells exposed to the treatment.
- **$\alpha_v\beta_3$**: A small molecule integrin binder and well-established target in solid tumors. $\alpha_v\beta_3$ is found on tumor cells and in the TME and is overexpressed in advanced and metastatic solid tumors. High expression of $\alpha_v\beta_3$ is commonly associated with poor survival prognosis.

Linkers. Linkers designed to reduce non-specific release of the payload, cleave intracellularly or extracellularly, and conjugate to single or multiple payloads. Currently, we have disclosed the following linker technologies:

- **Legumain Linker**: A novel linker that cleaves specifically by legumain, a protein that is present and overactive inside cancer cells. The stability and mechanism of action of this linker allows for targeted payload release within tumor cells after internalization.
- **Neutrophil Elastase Linker**: A novel linker that selectively cleaves in the TME by neutrophil elastase, a protein highly expressed in the TME of advanced and metastatic solid tumors and associated with

poor survival. Neutrophil elastase retains its structural integrity while circulating in the body and avoids cleavage in non-target tissues, allowing for a targeted payload release inside the TME.

Payloads. Highly potent and optimized payloads, designed to address common challenges in their class. Currently, we have disclosed the following payloads:

- **Optimized Camptothecin (CPT)**: Designed to have (i) high permeability, so it can efficiently enter cancer cells, and (ii) low efflux, so it stays in the cancer cell to inhibit topoisomerase 1—causing DNA damage and cell death. Camptothecins are an established payload class. The structural optimization of our camptothecin is designed to address the issue of transporter effect, a common resistance mechanism seen in this payload class.
- **Kinesin Spindle Protein Inhibitor (KSPi)**: This highly potent and selective KSPi payload specifically targets the kinesin spindle protein, a protein that is essential for mitotic spindle formation and only expressed during cell division. This novel payload is designed to allow us to only target dividing cells while sparing healthy cells, effectively circumventing common side effects associated with other payload classes.

CellTrapper. Our proprietary CellTrapper technology is designed to reduce payload cellular permeability, so the released payload accumulates within the target cell. This accumulation enables precise targeting of transiently expressed KSP, thereby inducing cell death. Moreover, the inability of the released payload to diffuse through membranes ensures non-target cells remain unaffected.

Our Product Candidates

Antibody Drug Conjugate: VIP943 (CD123-KSPi)

VIP943, developed using our VersAptx platform, combines an anti-CD123 antibody, a novel legumain-cleavable linker, and a KSPi payload enhanced with CellTrapper technology. CD123, overexpressed in AML, B-ALL, Hodgkin lymphoma, and MDS, is a key target for selectively addressing leukemic stem cells while minimizing off-target effects.

Preclinical Results

At the 2022 American Society of Hematology (ASH) Annual Meeting, we presented preclinical data on VIP943, highlighting the advantages of our effector chemistry in non-human primates. This safety study compared VIP943 to Mylotarg (gemtuzumab ozogamicin, the FDA-approved ADC for AML) and to Mylotarg's anti-CD33 monoclonal antibody conjugated with our VIP943 effector chemistry (legumain linker + KSPi payload with CellTrapper). Following a single dose of each agent (n=2 per group), the Mylotarg-treated group experienced severe hematologic toxicity, including a marked decline in platelet and red blood cell counts with insufficient recovery, as well as a continuous decrease in white blood cells and lymphocytes. These animals also exhibited critical reductions in hemoglobin and hematocrit, underscoring significant adverse effects. In contrast, ADCs utilizing our VIP943 effector chemistry had no impact on platelet or red blood cell counts, demonstrating a clear safety advantage. Additionally, Mylotarg treatment led to elevated liver enzymes, severe hyperbilirubinemia (indicative of liver toxicity), and a sharp increase in urea nitrogen (suggesting kidney toxicity). These adverse effects resulted in the euthanasia of one Mylotarg-treated monkey, while another died on day 13. Notably, all animals treated with ADCs incorporating our VIP943 effector chemistry survived and remained healthy throughout the study, reinforcing its favorable safety profile.

The ASH presentation also included results from an efficacy study in a MOLM-13 mouse model, demonstrating the superior anti-tumor activity of VIP943 compared to Mylotarg. In this study, VIP943 induced tumor regression after just two treatment cycles, whereas Mylotarg failed to control disease progression, with all treated mice experiencing continued tumor growth.

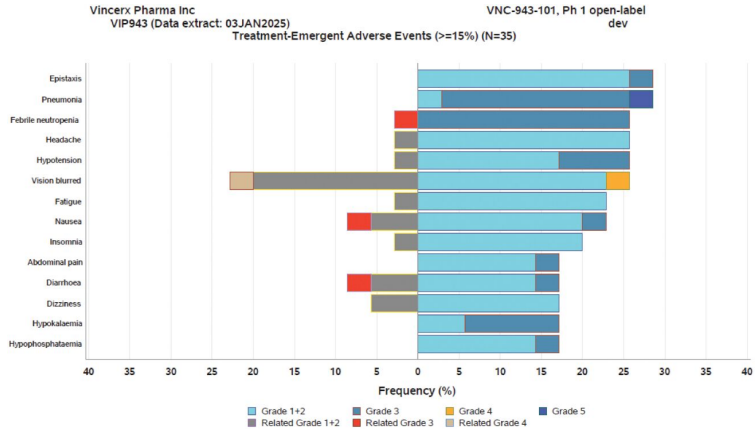
Clinical Studies

VIP943 has demonstrated encouraging clinical results in its ongoing Phase 1 dose-escalation study for relapsed/refractory AML, higher-risk MDS, and B-ALL (NCT06034275). The study focuses on assessing safety, tolerability, and preliminary efficacy across dose cohorts (0.2 to 1.7 mg/kg).

Safety Results:

- To date, one subject in Cohort 6 (1.7 mg/kg; once weekly) experienced a dose-limiting toxicity (DLT) of Grade 2 non-serious eye disorders, including bilateral microcysts and bilateral dry eyes. Additionally, one subject in Cohort 4a (1.0 mg/kg; twice weekly) experienced a Grade 4 non-serious DLT of blurred vision and itchy eyes.
- Treatment-related adverse events (AEs) have been manageable, with most being Grade 1-2. Common AEs include eye toxicity (blurred vision, dry eyes, itchy eyes), chills, hot flashes, aspartate aminotransferase and alanine aminotransferase increase, nausea, and transient mild hematologic effects.
- Notably, no cases of severe myelosuppression, cytokine release syndrome, interstitial lung disease, or peripheral neuropathy were reported.

Treatment -Emergent Adverse Events (>15%) (N=35)



Efficacy Results:

- Antitumor Activity:
  - Responses were observed starting at doses ≥1.0 mg/kg, including:
    - **Complete remission with incomplete hematologic improvement (CRi):** Achieved in relapsed AML patients at 1.0 mg/kg.
    - **Complete remission with limited count recovery (CRL):** Observed in higher-risk MDS patients at 1.3 mg/kg.
- Bone Marrow Blast Reductions:
  - Significant and sustained reductions in CD123+ blasts were noted, with blast clearance evident during early treatment cycles.
  - In some cases, blast reductions correlated with meaningful clinical improvement, such as restored hematologic function.

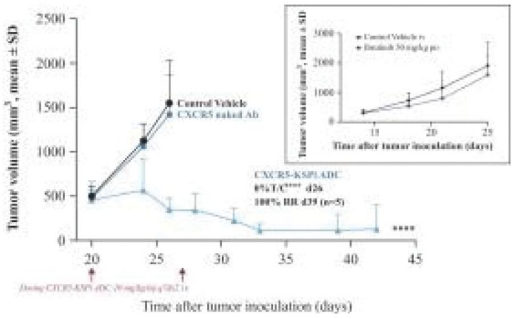
Antibody Drug Conjugate: VIP924 (CXCR5-KSPi)

Developed using our VersAptx platform, VIP924 is a first-in-class anti-CXCR5 ADC that leverages the same effector chemistry as VIP943 (legumain linker + KSPi payload with CellTrapper). CXCR5 governs crucial processes including chemotaxis, germinal center formation, and differentiation of plasma and memory B-cells. It is highly expressed on tumor cells of DLBCL, FL, MCL and CLL. As with VIP943, our VIP924 effector chemistry is designed to reduce non-specific release and uptake of the payload and ensure payload accumulation in cancer cells.

Preclinical Results

In preclinical studies, VIP924 induced sustained tumor regression in MCL and DLBCL models, including ibrutinib-refractory MCL cell-derived models, with only 1 or 2 doses.

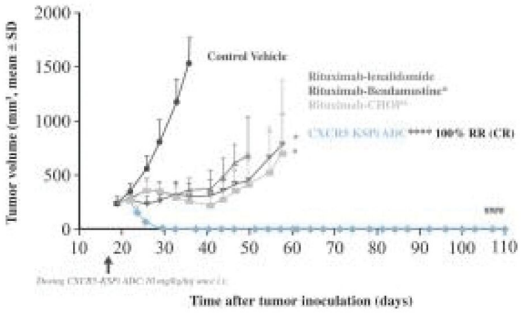
VIP924 Is Active in Ibrutinib-Refractory MCL In Vivo Model



- Ibrutinib-refractory MCL CDX CXCR5+ REC-1 model (inset)
- VIP924 achieved complete remission after 2 doses

**** P=0.0001 vs vehicle. Tumor volumes on day 26.

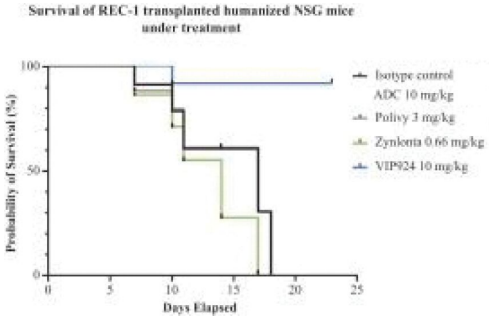
Single Dose of VIP924 in DLBCL In Vivo Model Achieved Durable Complete Regressions

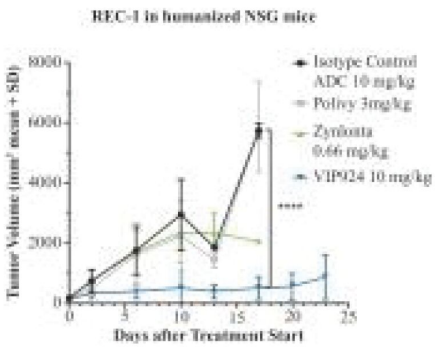


- Complete regression with single dose of VIP924 in CXCR5+ model OCI-LY1 (day 114)
- Superior activity versus standard of care

* P<0.05. **** P=0.0001 vs vehicle. #### P<0.0001 vs rituximab-bendamustine/ lenalidomide or CHOP. Tumor volumes on day 36. RR, response rate.

Additionally, evaluation in an MCL mouse model showed that VIP924 had superior efficacy and safety compared with Polivy® and Zynlonta® (FDA approved ADCs for B-cell lymphoma). In the study, we observed that animals treated with VIP924 exhibited significant inhibition of tumor growth and experienced a survival benefit compared with Zynlonta- and Polivy-treated animals. Additionally, Zynlonta-treated animals demonstrated reductions in white blood counts, monocytes, and lymphocytes at the end of the treatment, whereas VIP924 treatment showed minimal to no effects on these cell populations.





**** On day 17, tumor volumes of VIP924 treated animals were significantly lower (P<0.00002) compared with control.

Small Molecule Drug Conjugate: VIP236

VIP236, a first-in-class small molecule-drug conjugate (SMDC) developed with the VersAptx platform, targets αvß3 integrin, an established marker of advanced and metastatic solid tumors. VIP236 utilizes a neutrophil elastase-cleavable linker in the tumor microenvironment (TME) to deliver an optimized camptothecin (CPT) payload with enhanced efficacy and safety.

Preclinical Studies

Preclinical Efficacy:

- VIP236 demonstrated superior tumor regression across multiple xenograft and patient-derived models compared to standard chemotherapies such as irinotecan, doxorubicin, and cisplatin.
- In a TNBC (MX-1) model, VIP236 significantly outperformed these chemotherapies, showing marked tumor regression.
- In a liver metastasis model of colorectal cancer, VIP236 achieved statistically significant tumor growth inhibition and delayed tumor regrowth.

Enhanced Activity Over ENHERTU® in Gastric Cancer Models:

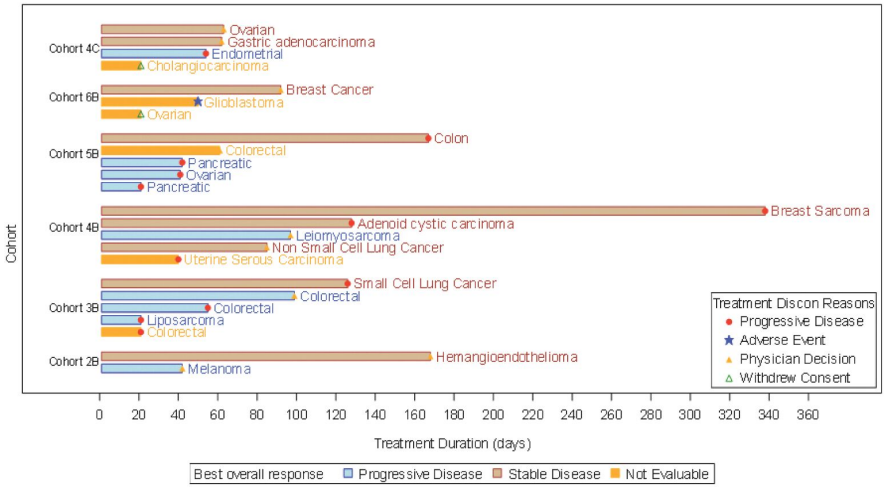
- VIP236 showed greater efficacy in gastric cancer models, including HER2-high, HER2-negative, and HER2-low settings, compared to ENHERTU®. Tumor regression was observed regardless of HER2 expression, highlighting its potential in a broader patient population.

Clinical Studies

VIP236 completed its Phase 1 dose-escalation study in patients with advanced or metastatic solid tumors (NTC05371054) in October 2024, identifying a viable dose for continued development in combination studies.

A total of 29 patients were enrolled in the Phase 1 study, resulting in a 45% disease control rate. The drug demonstrated a favorable safety profile, distinguishing itself from other CPTs by showing no instances of common dose-limiting side effects such as life-threatening diarrhea, severe stomatitis/ mucositis, or interstitial lung disease. Also notable is VIP236's tolerability, showing a durability of >120 days in challenging cancers and in heavily pretreated patients.

Promising Durability (>120 Days) in Challenging Cancers and in Heavily Pretreated Patient Populations



Enitociclib (P-TEFb/CDK9 inhibitor)

Enitociclib is a highly selective CDK9 inhibitor. Enitociclib blocks P-TEFb-mediated activation of RNA polymerase II, preventing transcription of MCL1 and MYC, proteins associated with poor prognosis in various types of cancer. Enitociclib's mechanism of action is different from other CDK9 inhibitors, offering a more targeted approach, ultimately leading to cell death and reduction in tumor cell proliferation.

Preclinical Results

Preclinical studies strongly suggest that enitociclib is highly selective and has a favorable safety profile, potentially making it a strong combination partner in aggressive B-cell lymphomas and pediatric indications. Select preclinical studies are shown below:

Multiple Myeloma (MM) Studies:

- In collaboration with the University of Calgary, enitociclib showed potent cytotoxic activity (IC50: 36–78 nM) as a single agent and in combination with multiple anti-MM agents.
- In a JJN-3 MM xenograft model, enitociclib monotherapy inhibited MYC and MCL1 transcription, triggering pro-caspase-3 and PARP cleavage within an hour and leading to 96–99% tumor reduction by day 20.
- Enhanced efficacy was observed when combined with lenalidomide, reinforcing findings from small-molecule screening studies.

Pediatric Leukemia Studies:

- In KMT2A-rearranged leukemia models, enitociclib achieved durable tumor inhibition and complete remission as a monotherapy.
- In vitro, low-dose enitociclib combined with chemotherapies, prednisolone, and a KMT2A inhibitor showed synergistic cytotoxicity.
- These findings provide proof-of-concept for integrating targeted cytotoxic agents with enitociclib in future clinical trials, particularly for pediatric KMT2A-rearranged leukemia.

Clinical Studies

Bayer Study 18117: Enitociclib Dose-Escalation Study in Relapsed and Refractory Leukemia

This open-label Phase 1 trial evaluated enitociclib's safety, tolerability, and preliminary efficacy in 21 patients with relapsed/refractory AML. Enitociclib maintained a consistent safety profile across dose levels, with gastrointestinal side effects and cytopenia being the most common adverse events. No dose-limiting toxicities (DLTs) were observed. The study was discontinued early and did not include other hematologic malignancies (e.g., CLL or MDS).

Study VNC-152-101 (Formerly Bayer Study 17496): Safety, Efficacy, and Expanded Cohorts

Originally conducted by Bayer and later continued by Vincerx, this open-label Phase 1 dose-escalation and expansion study evaluated enitociclib monotherapy in patients with advanced solid tumors and non-Hodgkin lymphoma. A total of 63 patients were enrolled (37 by Bayer, 26 by Vincerx) across dose-escalation and expansion cohorts. Key findings include:

- Favorable safety profile, with no new safety signals observed and a manageable adverse event profile.
- Dose-proportional pharmacokinetics, confirming predictable drug exposure.
- On-target pharmacodynamic activity, including inhibition of CDK9-dependent transcription.
- Encouraging clinical activity, particularly in double-hit diffuse large B-cell lymphoma (DH-DLBCL):
    - Two patients with DH-DLBCL achieved durable complete metabolic remissions, which persisted for ~2 years after stopping treatment due to the COVID-19 pandemic.
    - One patient with transformed follicular lymphoma remained on treatment for 27 cycles, achieving prolonged stable disease.
    - 13 additional patients across various solid tumors also achieved stable disease as their best response.

Study VNC-152-801: NIH Sponsored Study in R/R Lymphoid Malignancies

In April 2023, we launched a Phase 1 dose-escalation study in collaboration with the National Institutes of Health (NIH) to determine the maximum tolerated dose (MTD), recommended Phase 2 dose (RP2D), and safety profile of enitociclib + venetoclax + prednisone (VVIP) in relapsed/refractory lymphoid malignancies.

As of January 2024, five patients had been dosed:

- 2 of 3 PTCL patients (67%) achieved partial responses (PR), with tumor reductions of 91% and 86%.
- 1 DH-DLBCL patient experienced a PR (71% tumor regression) after just one cycle, highlighting a faster response than enitociclib monotherapy.
- No dose-limiting toxicities (DLTs) were observed.

Sales and Marketing

Because we are a clinical-stage company, we do not have our own marketing, sales, or distribution capabilities. To commercialize any of our product candidates, if approved for commercial sale and marketing, we would have to develop a sales and marketing infrastructure.

Manufacturing

We do not own or operate manufacturing facilities for the production of clinical or commercial quantities of our drug substances or drug products, and there are a limited number of manufacturers that operate under the

cGMP requirements of the FDA that might be capable of manufacturing for us. We currently intend to rely on contract manufacturing organizations, for both drug substance and drug product, as well as our own qualified personnel with experience to manage these contract manufacturing organizations. Similarly, we do not own or operate a laboratory with expertise in diagnostic assessment of cancer subpopulations and would need to contract with specific commercial diagnostic labs to develop companion diagnostics to accompany our drug products as well as our own qualified personnel with experience to manage these commercial diagnostic companies.

Our outsourced approach to manufacturing relies on contract manufacturing organizations to first develop cell lines and manufacturing processes that are compliant with cGMP requirements and then produce material for preclinical studies and clinical trials. Our agreements with contract manufacturing organizations may obligate them to develop a production cell line, establish master and working cell banks, develop and qualify upstream and downstream processes, develop drug product processes, validate (and in some cases develop) suitable analytical methods for test and release as well as stability testing, produce drug substance for preclinical testing, produce cGMP-compliant drug substance, or produce cGMP-compliant drug product. We conduct audits of contract manufacturing organizations prior to initiation of activities under these agreements and monitor operations to ensure compliance with these agreements, the mutually agreed process descriptions, and cGMP regulations.

Competition

The biotechnology industry, especially the oncology sector, is characterized by fast-paced technological evolution, substantial competition, and a strong emphasis on intellectual property. Competitors may come from multiple sources, including specialty, pharmaceutical and biotechnology companies, public and private research organizations, academic research institutions, and governmental agencies. Product candidates that we may develop and potentially get approved will face competitive pressures from incumbent therapies as well as new therapies that may become available in the future.

Many global pharmaceutical companies, as well as medium and small biotechnology companies, are pursuing new cancer treatments, whether small molecules, biologics, bioconjugates, or cell or gene therapies. Any of these treatments could prove to be superior clinically to our products or product candidates and render them obsolete or non-competitive.

Although we believe our bioconjugation product candidates and VersAptx platform are highly differentiated, many companies continue to invest in innovation in the bioconjugate field, including new payload classes, new conjugation approaches, and new targeting moieties. Additionally, many companies have products and/or platforms that target the same indications our programs target. Any of these initiatives could lead to products that have superior properties to our VersAptx platform and bioconjugation product candidates. Some of the companies that may compete with us include, AbbVie Inc., ADC Therapeutics SA, Astellas Pharma Inc., Astra-Zeneca PLC, Bicycle Therapeutics plc, Bristol-Myers Squibb Company, CytomX Therapeutics, Inc., Daiichi Sankyo Company, Limited, Duality Biologics Co. Ltd., Eli Lilly and Company, Genentech, Inc., Gilead Sciences, Inc., GSK plc, Iksuda Therapeutics Ltd, Innovent Biologics, Inc., ImmunoGen, Inc. (acquired by AbbVie, Inc.), Immunomedics, Inc., Johnson & Johnson Inc, Klus Pharma, Inc, LigoChem Biosciences, Inc., MacroGenics, Inc., Merck & Co., Inc, Merck KgaA, Mersana Therapeutics Inc., Novartis International AG, ProfoundBio Inc, Pyxis (which acquired Pfizer, Inc.'s ADC technology), Roche Holding AG, Sanofi S.A., and Takeda Pharmaceutical Company Limited.

While we believe enitociclib is a highly selective CDK9 inhibitor that stands apart from other programs, several CDK9 programs are showing clinical efficacy and some are further along in development. Clinical-stage competitors include Cyclacel Pharmaceuticals Inc., Kronos Bio, Inc., Merck & Co., Inc., Prelude Therapeutics Inc., SELLAS Life Sciences Group, Inc., and Sumitomo Dainippon Pharma Co., Ltd. Additionally, these companies and their partners may develop CDK9 inhibitor programs to compete with enitociclib, and others pursuing targets around P-TEFb, CDK7, CDK2, MYC, BRD4, PRMT, and related regulators could also compete in the same indications.

Our product candidates would need to compete on the basis of efficacy, safety, and tolerability, and if they are not demonstrably superior in these respects compared with other approved therapies, they would be rendered obsolete or non-competitive.

Many of our potential competitors, either alone or in partnership with others, have significantly greater financial, technical, and human resource capabilities than us. This in turn might allow them to become more successful in achieving treatment approvals and market acceptance, reducing the competitiveness of our product candidates, and accelerating their obsolescence. In addition, merger and acquisition activity in the pharmaceutical and biotechnology space may result in an increased concentration of resources among a smaller number of competitors. Earlier stage companies may also become relevant competitors, especially through collaborations with established companies. The areas of competition also extend to scientific and managerial talent recruitment and retention, clinical trial sites, patient registration for clinical trials, and acquisition or development of technologies that might be complementary or necessary for our drug programs.

Government Regulation

Regulatory authorities, in the United States as well as in foreign countries, extensively regulate, among other things, the research, development, testing, manufacture, quality control, import, export, safety, efficacy, labeling, packaging, storage, distribution, record keeping, approval, advertising, promotion, marketing, post-approval monitoring and post-approval reporting of small molecule drugs and biologics such as those we are developing.

FDA Drug Approval Process

In the United States, drug products are subject to regulation by the FDA under the FDCA and the regulations promulgated thereunder. Biological products, such as our ADC product candidates, are approved for marketing under provisions of the Public Health Service Act, via a BLA. The application process and requirements for approval of BLAs are very similar to those for NDAs, and biologics are associated with similar approval risks and costs. Failure to comply with applicable U.S. requirements may subject a company to a variety of administrative or judicial sanctions, such as clinical hold, FDA refusal to approve pending NDAs or BLAs, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties, and criminal prosecution.

The process required by the FDA before drug product candidates may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests and animal studies performed in accordance with FDA's current Good Laboratory Practices (GLP) requirements;
- submission to the FDA of an IND, which must be reviewed by the FDA before clinical trials may begin;
- approval by an independent Institutional Review Board or ethics committee for each clinical protocol before clinical trials may begin at each clinical trial site;
- performance of adequate and well-controlled human clinical trials in accordance with FDA requirements, to establish the safety and efficacy of the product candidate for its intended purpose;
- preparation of and submission to the FDA of an NDA or BLA after completion of all pivotal clinical trials, and satisfactory completion of an FDA Advisory Committee review, if applicable;
- satisfactory completion of one or more FDA pre-approval inspection(s) of the manufacturing facility or facilities at which the product candidate is produced, tested, and released to assess compliance with cGMP and to assure that the facilities, methods and controls are adequate to preserve the product candidate's continued safety, purity, and potency, and of selected clinical investigation sites to assess compliance with good clinical practice requirements; and

- FDA review and approval, or licensure, of the NDA/BLA to permit commercial marketing of the drug product for particular indications for use in the United States.

Preclinical and Clinical Development

Prior to beginning the first clinical trial with an investigational product in the United States, we must submit an IND to the FDA. An IND is a request for authorization from the FDA to administer an investigational product to humans. The central focus of an IND submission is on an evaluation of safety to support the protocol(s) for clinical studies. The IND also includes results of studies assessing the toxicology, pharmacokinetics, pharmacology, and pharmacodynamic characteristics of the product candidate; chemistry, manufacturing, and controls information; and any available human data or literature to support its use. An IND must become effective before human clinical trials may begin. The submission of an IND may or may not result in FDA authorization to begin a clinical trial. At any point, if the FDA has questions or concerns regarding an ongoing clinical trial, they may impose a clinical hold, for example, until such time as adjustments can be made to that clinical trial to resolve such concerns.

Clinical trials are studies that involve the administration of an investigational drug product to human subjects under the supervision of qualified investigators in accordance with good clinical practices, which include the requirement that all research subjects provide informed consent for their participation. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study and the parameters to be used in monitoring safety and efficacy. A separate submission to an existing IND must be made for each successive clinical trial conducted during drug product development and for any subsequent protocol amendments. For new indications, a separate, new IND may be required. Furthermore, an independent Institutional Review Board for each site proposing to conduct the clinical trial must review and approve the plan for any clinical trial and its informed consent form before the clinical trial begins at that site and must monitor the study until completed. Regulatory authorities, the Institutional Review Board or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk or that the clinical trial is unlikely to meet its stated objectives. Some studies also include oversight by an independent group of qualified experts organized by the sponsor, known as a data safety monitoring board, which provides recommendations for whether or not a clinical trial may move forward based on access to certain data from that clinical trial and may recommend a discontinuation if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy. There are also requirements governing the reporting of ongoing clinical studies and clinical trial results to public registries. For purposes of NDA/BLA approval, human clinical trials are typically conducted in three sequential phases that may overlap.

- *Phase 1*—The investigational drug product is introduced into healthy human subjects or patients with the target disease or condition. These studies test the safety, dosage tolerance, absorption, metabolism, distribution, and elimination of the investigational product, the side effects associated with increasing doses, and, if possible, to gain early evidence of efficacy. For certain investigational drug products targeting life-threatening diseases, such as cancer, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, initial human testing is conducted in patients with the target disease or condition.
- *Phase 2*—The investigational product is administered to a limited patient population with a specified disease or condition to evaluate the preliminary efficacy, optimal dosage, and dosing schedule, and to identify possible adverse side effects and safety risks. Multiple Phase 2 clinical trials may be conducted to obtain information prior to beginning larger and more expensive Phase 3 clinical trials.
- *Phase 3*—The investigational drug product is administered to an expanded patient population to further evaluate dosage, to provide statistically significant evidence of clinical efficacy, and to further test for safety, generally at multiple geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the investigational drug product and to provide an adequate basis for product approval.

Post-approval trials, sometimes referred to as Phase 4 or post-approval commitment studies, may be conducted after initial marketing approval. These trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication. In certain instances, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval of an NDA/BLA.

During the development of a drug product candidate, sponsors are given opportunities to meet with the FDA. These meetings may be prior to submission of an IND, at the end of Phase 1 or Phase 2, and before an NDA/BLA is submitted. Meetings at other times may also be requested. These meetings can provide an opportunity for the sponsor to share information about data gathered to date, for the FDA to provide advice, and for sponsor and the FDA to reach agreement on the next phase of development.

Additional meetings and correspondence with the FDA can also occur to summarize progress in the clinical trials, to review written IND safety reports, and to develop strategies (for example in accordance with FDA initiatives such as Project Optimus) for dose finding and dose optimization that leverage preclinical and clinical data in dose selection, including randomized evaluations of a range of doses in clinical trials. An emphasis of such strategies is placed on performing these studies as early and as efficiently as possible in the development program.

U.S. Submission, Review and Approval

Assuming successful completion of required testing in accordance with applicable regulatory requirements, the results of drug product development, and preclinical and clinical studies are submitted to the FDA as part of an NDA/BLA requesting approval to market the product. The NDA/BLA must include all relevant data available from pertinent preclinical and clinical studies, together with detailed information relating to the drug product candidate's chemistry, manufacturing, controls, and proposed labeling. The submission of an NDA/BLA requires payment of substantial fees to the FDA, unless a waiver or exemption applies. Additionally, no user fees are assessed on NDA/BLAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

The FDA reviews an NDA/BLA to determine, among other things, whether a drug product is safe, pure, and potent and the facility in which it is manufactured, tested, processed, packed, or held meets standards designed to assure its continued safety, purity, and potency. The FDA may convene an advisory committee to provide clinical insight on application review questions. This review typically takes twelve months from the date the NDA is submitted and the FDA has approximately two months to make a "filing" decision after submission.

Before approving an NDA/BLA, the FDA will typically inspect the facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the drug product within required specifications. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

After the FDA evaluates an NDA/BLA and conducts inspections of manufacturing facilities where the drug product candidate and/or its drug substance will be produced, the FDA may issue an approval letter or a Complete Response Letter (CRL). An approval letter authorizes commercial marketing of the drug product with specific prescribing information for specific indications. A CRL would describe all deficiencies that FDA has identified in the NDA/BLA, except that where FDA determines that the data supporting the application are inadequate to support approval, it may issue the CRL without first conducting required inspections, testing submitted product lots, and/or reviewing proposed labeling. In issuing the CRL, the FDA may recommend actions that the applicant might take to place the NDA/BLA in condition for approval, including requests for additional information or clarification. The FDA may delay or refuse approval of an NDA/BLA if applicable

regulatory criteria are not satisfied, require additional testing or information, and/or require post-marketing testing and surveillance to monitor safety or efficacy of a drug product.

If regulatory approval of a drug product is granted, such approval will be granted for particular indications and may entail limitations on the indicated uses for which such drug product may be marketed. For example, the FDA may approve an NDA/BLA with a Risk Evaluation and Mitigation Strategy to ensure the benefits of the drug product outweigh its risks. A Risk Evaluation and Mitigation Strategy is a safety strategy developed to manage a known or potential serious risk associated with a drug product and to enable patients to have continued access to such medicines by managing their safe use, and could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries, and other risk minimization tools. The FDA may also conditionally approve a drug product based on, for example, changes to proposed labeling or the development of adequate controls and specifications. Once approved, the FDA may withdraw the drug product approval if compliance with pre- and post-marketing requirements is not maintained or if problems occur after the drug product reaches the marketplace. The FDA may require one or more Phase 4 post-marketing studies and surveillance to further assess and monitor the product's safety and efficacy after commercialization, and may limit further marketing based on the results of these post-marketing studies. In addition, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could impact the timeline for regulatory approval or otherwise impact ongoing development programs.

In addition, the Pediatric Research Equity Act, requires a sponsor to conduct pediatric clinical trials for most drugs. Under this Act, original NDAs/BLAs and supplements must contain a pediatric assessment unless the sponsor has received a deferral or waiver. For molecularly targeted oncology drugs, the Research to Accelerate Cures and Equity (RACE) for Children Act (2017) requires an agreement reached with the FDA on which pediatric indications are to be fully assessed with a pediatric study plan. The required assessment must evaluate the safety and efficacy of the product for the selected indications in all relevant pediatric subpopulations and support dosing and administration for each pediatric subpopulation for which the product is safe and effective. A deferral may be requested and granted for several reasons, including a finding that the drug is ready for approval for use in adults before pediatric clinical trials are complete or that additional safety or effectiveness data needs to be collected before the pediatric clinical trials begin. The FDA must send a non-compliance letter to any sponsor that fails to submit the required assessment, keep a deferral current, or submit a request for approval of a pediatric formulation.

Expedited Development and Review Programs

- Any drug product candidate submitted to the FDA for approval may be eligible for programs intended to expedite FDA review and approval process, such as priority review, fast track designation, breakthrough therapy designation, and accelerated approval. Priority review designation may be granted for a drug product candidate that treats a serious condition and, if approved, would provide a significant improvement in safety or effectiveness.
- If the FDA determines, based on the request of a sponsor, that a product candidate is intended to treat a serious or life-threatening disease or condition and demonstrates the potential to address an unmet medical need by providing a therapy where none exists or a therapy that may be potentially superior to existing therapy based on efficacy or safety factors, that drug product candidate may be eligible for fast-track designation.
- A breakthrough therapy designation is granted to drugs or biologics that are intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that a drug or biologic may demonstrate substantial improvement over existing therapies.
- An accelerated approval determination may be granted for drug product candidates studied for their safety and effectiveness in treating serious or life-threatening diseases or conditions.

Even if a product candidate qualifies for one or more of these programs, the FDA may later decide that it no longer meets the conditions for qualification or decide that the time period for the FDA review and approval will not be shortened. Furthermore, priority review, fast track designation, breakthrough therapy designation and accelerated approval do not change the standards for approval but may expedite the development or approval process.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition (a disease or condition that affects fewer than 200,000 individuals in the United States) for which there is no reasonable expectation that the cost of developing and making available such a drug or biologic would be recovered from sales in the United States for that drug or biologic). Orphan drug designation may offer a seven-year period of marketing exclusivity, with exceptions. Orphan drug designation does not convey any advantage in, or automatically shorten the duration of, the regulatory review or approval process.

Post-Approval Requirements

Any drug products manufactured or distributed by us pursuant to FDA approvals are subject to continuing regulation by the FDA, including, among other things, requirements relating to quality control and quality assurance, record-keeping, reporting of adverse experiences, product sampling and distribution, and advertising and promotion of the product. After approval, most changes to the drug product, such as adding new indications or other labeling claims, are subject to FDA review and approval. There are also continuing user fee requirements, under which the FDA assesses an annual program fee for each drug product identified in an approved NDA/BLA. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP requirements, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP requirements and impose reporting requirements upon us and any of our third-party manufacturers. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain compliance with cGMP requirements and other aspects of regulatory compliance.

The FDA may withdraw approval if compliance with regulatory requirements and standards are not maintained or if problems occur after the drug product reaches the market. Later discovery of previously unknown problems with a drug product, including adverse events of unanticipated severity or frequency, 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 studies to assess new safety risks, or imposition of distribution restrictions or other restrictions under a Risk Evaluation and Mitigation Strategy program. Other potential consequences include, for example:

- restrictions on the marketing or manufacturing of a drug product, mandated modification of promotional materials or issuance of corrective information, issuance by the FDA or other regulatory authorities of safety alerts, Dear Healthcare Provider letters, press releases, or other communications containing warnings or other safety information, or complete withdrawal or recall of the drug product from the market;
- fines, warning letters, or holds on post-approval clinical studies;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of existing approvals;
- product seizure or detention, or refusal of the FDA to permit the import or export of drug products; or
- injunctions, consent decrees, or the imposition of civil or criminal penalties.

The FDA closely regulates and actively enforces the marketing, labeling, advertising, and promotion of drug products. A company can make only those claims relating to safety, efficacy, purity, and potency that are approved by the FDA and in accordance with the provisions of the approved label. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising, and potential civil and criminal penalties. Physicians may prescribe legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. The FDA does not regulate such off-label uses, but it does restrict a manufacturer's communications on the subject of off-label use of its products.

Marketing Exclusivity

The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity. During the exclusivity period, the FDA may not approve or even accept for review an ANDA or an NDA submitted under Section 505(b)(2), or 505(b)(2) by another company for another drug based on the same active moiety, regardless of whether the drug is intended for the same indication as the original innovative drug or for another indication, where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator NDA holder.

The FDCA alternatively provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA, if new clinical studies (other than bioavailability studies) that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages, or strengths of an existing drug. This three-year exclusivity covers only the modification for which the drug product received approval on the basis of the new clinical studies and does not prohibit the FDA from approving ANDAs or 505(b)(2) NDAs for drugs containing the active agent for the original indication or condition of use. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to any preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and efficacy.

In the United States, pediatric exclusivity provides for an additional six months of marketing exclusivity attached to another period of exclusivity if a sponsor conducts clinical trials in children in response to a written request from the FDA. The issuance of a written request does not require the sponsor to undertake such clinical trials.

Biosimilars and Reference Product Exclusivity

The U.S. Affordable Care Act (2010) includes a subtitle called the BPCIA, which creates an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-approved reference drug product. To date, a number of biosimilars have been licensed under the BPCIA. The FDA has issued several guidance documents outlining its approach to the review and approval of biosimilars.

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 drug product was first licensed by the FDA. In addition, the approval of a biosimilar may not be made effective by the FDA until 12 years from the date on which the reference drug product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference drug product if the FDA approves a full BLA for that competing product containing that applicant's own preclinical data and data from adequate and well-controlled clinical trials

The BPCIA is complex and continues to be interpreted and implemented by the FDA. In addition, government proposals have sought to reduce the 12-year reference product exclusivity period. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. As a result, the implementation and impact of the BPCIA is subject to significant uncertainty.

Other U.S. Healthcare Laws and Compliance Requirements

In the United States, our operations are subject to regulation by various federal, state, and local authorities in addition to the FDA, including but not limited to, the Centers for Medicare and Medicaid Services and other divisions of the U.S. Department of Health and Human Services (such as the Office of Inspector General). For example, we may have to comply with:

- the anti-fraud and abuse provisions of the Social Security Act;
- the false claims laws;
- the privacy and security provisions of HIPAA and similar state laws;
- state and federal anti-kickback and fraud and abuse laws; or
- price reporting and physician sunshine laws.

If our operations are found to be in violation of any such laws or any regulations, we may be subject to administrative, civil, and criminal penalties, for example damages, fines, disgorgement, and exclusion from participation in government programs, such as Medicare and Medicaid, any of which could adversely affect our ability to operate our business.

Coverage, Pricing and Reimbursement

In the United States and foreign markets, sales of any drug products for which we receive regulatory approval will depend, in part, on the extent to which third-party payors provide coverage and establish adequate reimbursement levels for such drug products. In the United States, third-party payors include federal and state healthcare programs, private managed care providers, health insurers, and other organizations. Adequate coverage and reimbursement from governmental healthcare programs, such as Medicare and Medicaid in the United States, and commercial payors are critical to new product acceptance.

We cannot be sure that coverage or reimbursement will be available for any of our product candidates and, if coverage and reimbursement are available, what the level of reimbursement would be. Coverage may also be more limited than the purposes for which the product is approved by the FDA or comparable foreign regulatory authorities. Reimbursement may impact the demand for, or the price of, any drug product. Third-party payors are increasingly challenging the price, examining the medical necessity, and reviewing the cost-effectiveness of drug products, in addition to questioning safety and efficacy.

Different pricing and reimbursement schemes exist in other countries. For example, in the EU, governments influence the price of drug products through pricing and reimbursement rules and control of national health care systems that fund a large part of the cost of drug products to consumers. Some jurisdictions operate positive and negative list systems under which drug products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some countries may require the completion of clinical studies that compare the cost effectiveness of a particular product candidate to currently available therapies. Others allow companies to establish their own prices for medicines, but monitor and control company profits.

The marketability of any of our product candidates would suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. In addition, emphasis on managed care, the influence of health maintenance organizations, and additional legislative changes in the United States, including the U.S. Inflation Reduction Act, is increasing the pressure on healthcare pricing. The downward pressure on the rise in healthcare costs in general, particularly prescription medicines, has become very intense. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained, less favorable coverage policies and reimbursement rates may be implemented in the future.

Healthcare Reform

In the United States and certain foreign jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes to the healthcare system, for example, the U.S. Affordable Care Act (2010), which substantially changed the way healthcare is financed by both government and private insurers in the United States. By way of example, certain aspects of the Affordable Care Act seek to lower Medicare and Medicaid spending, potentially including prescription drug spending. We are continuing to monitor any changes to the Affordable Care Act that, in turn, may potentially impact our business in the future.

The U.S. Inflation Reduction Act ("IRA") was signed into law in December 2022, and among other things, it will regulate out-of-pocket costs for Medicare patients with respect to prescription drugs. The discovery and development of both small molecule and biologic drug compounds may be affected with respect to licensing, production, and marketing of such drugs. The FDA will, in the near-term, propose regulations through its rulemaking process, and while that may take several years, the effect on manufacturer rebates to Medicare, Medicare drug price negotiations, catastrophic drug cost coverage, and other aspects of the commercialization of drug products could be significant.

In addition to the foregoing, individual states in the United States have also become increasingly active in implementing regulations designed to control drug 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, mechanisms to encourage importation from other countries and bulk purchasing.

Furthermore, there has been increased interest by third-party payors and governmental authorities in reference pricing systems and publication of discounts and list prices.

FDA Approval and Regulation of Companion Diagnostics

If safe and effective use of a drug product depends on an in vitro companion diagnostic, then the FDA generally will require approval or clearance of that diagnostic at the same time that it approves the drug product. According to FDA guidance, if it determines that a companion diagnostic device is essential to the safe and effective use of a novel therapeutic product or indication, it generally will not approve the drug product or new drug product indication if the companion diagnostic device is not approved or cleared for that indication. The review of in vitro companion diagnostics in conjunction with the review of our proposed treatments for cancer will, therefore, likely involve coordination of review by the FDA's Center for Drug Evaluation and Research and the FDA's Center for Devices and Radiological Health Office of In Vitro Diagnostics and Radiological Health.

Under the FDCA, in vitro diagnostics, including companion diagnostics, are regulated as medical devices. In the United States, the FDCA and its implementing regulations and other federal and state statutes and regulations govern, among other things, medical device design and development, preclinical and clinical testing, premarket clearance or approval, registration and listing, manufacturing, labeling, storage, advertising and promotion, sales and distribution, export and import, and post-market surveillance. Unless an exemption applies, diagnostic tests require marketing clearance or approval from the FDA prior to commercial distribution. The two primary types of FDA marketing authorization applicable to a medical device are premarket notification, also called 510(k) clearance, and premarket approval.

The premarket approval process, including the gathering of clinical and preclinical data and the submission to and review by the FDA, can take several years or longer. It involves a rigorous premarket review during which the applicant must prepare and provide the FDA with reasonable assurance of the device's safety and efficacy and information about the device and its components regarding, among other things, device design, manufacturing and labeling.

Premarket approval is not guaranteed, and the FDA may ultimately respond to a premarket approval submission with a not approvable determination based on deficiencies in the application and require additional

clinical trials or other data that may be expensive and time-consuming to generate, and that can substantially delay approval. A not approvable letter will outline the deficiencies in the application and, where practical, identify what is necessary to make the premarket approval application approvable. The FDA may also determine that additional clinical trials are necessary, in which case approval of the premarket approval application may be delayed for several months or years while such clinical trials are conducted and the data submitted in an amendment to the premarket approval application. If the FDA's evaluation of the premarket approval application is favorable, it typically issues an approvable letter requiring the applicant's agreement to specific conditions, such as changes in labeling, or specific additional information, such as submission of final labeling, to secure final approval of the premarket approval application. If the FDA concludes that the applicable criteria have been met, it will issue a premarket approval for the approved indications, which can be more limited than those originally sought by the applicant. Premarket approval can include post-approval conditions that the FDA believes necessary to ensure the safety and efficacy of the device, including, among other things, restrictions on labeling, promotion, sale and distribution. Once granted, approval of the premarket approval application may be withdrawn by the FDA if compliance with post-approval requirements, conditions of approval or other regulatory standards are not maintained or problems are identified following initial marketing.

Devices, once placed on the market, remain subject to significant regulatory requirements, including for example, the applicable portions of the Quality System Regulation, which cover the methods and documentation of the design, testing, production, processes, controls, quality assurance, labeling, packaging, and shipping.

The Foreign Corrupt Practices Act

The Foreign Corrupt Practices Act prohibits any U.S. individual or business from paying, offering, or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party, or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. This Act also obligates companies whose securities are listed in the United States to comply with accounting provisions requiring us to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

Additional Regulation

In addition to the foregoing, state and federal laws regarding environmental protection and hazardous substances, including the Occupational Safety and Health Act, the Resource Conservancy and Recovery Act, and the Toxic Substances Control Act, affect our business. We believe that our suppliers are in material compliance with applicable environmental health and safety laws and that continued compliance will not have a material adverse effect on our business.

Other Regulations

We may also be subject to numerous federal, state and local laws relating to such matters as safe working conditions, manufacturing practices, environmental protection, fire hazard control and disposal of hazardous or potentially hazardous substances.

Intellectual Property

Our business depends in part on our ability to obtain and maintain proprietary protection for our product candidates, novel discoveries, product development technologies, and know-how; to operate without infringing on the proprietary rights of others; and to prevent others from infringing our proprietary rights. Our strategy is to seek to protect our proprietary position by, among other methods, filing or in-licensing U.S. and foreign patents and patent applications related to our proprietary technology, inventions, and improvements that are important to the development of our business. We also rely on trademarks, trade secrets, know-how, continuing technological innovation, and potential in-licensing opportunities to develop and maintain our proprietary position.

We have a license to patents and other intellectual property relating to VIP236, VIP943, VIP924, enitociclib, VIP217, and our other current drug product candidates and technologies from Bayer on an exclusive, worldwide basis under the Bayer License Agreement. In 2024, as part of our overall efforts to control costs, we strategically focused our patent priorities. Our in-licensed portfolio, as of December 31, 2024, included approximately 33 issued U.S. patents, eight pending U.S. non-provisional patent applications, one Patent Cooperation Treaty (PCT) application, and 119 issued patents and pending patent applications in jurisdictions outside of the United States.

With respect to VIP236, we have pending applications in the U.S., Europe, China, Japan, India, Argentina, Brazil, Mexico, and other markets covering the composition of matter of VIP236. Any patent that may issue from our pending patent applications related to VIP236 is expected to expire in October 2039, absent any patent term adjustments or extensions. With respect to VIP943 and VIP924, we have pending applications in the U.S., Europe, China, Japan, India, Argentina, Brazil, and Mexico, along with issued patents and pending applications in other markets covering the composition of matter and uses of VIP943 and VIP924. Any patent that may issue from our pending patent applications related to VIP943 and VIP924 are expected to expire by July 2044, absent any patent term adjustments or extensions. Our in-licensed patent portfolio covering enitociclib consists of issued patents in the U.S., Europe, China, Japan, India, and Mexico, along with issued patents and pending applications in other markets. The issued U.S. patent covering the composition of matter of enitociclib is expected to expire in November 2033, absent any patent term extensions for regulatory delay.

As of December 31, 2024, we owned approximately four pending U.S. non-provisional patent applications, three PCT applications, and five pending patent applications in jurisdictions outside of the United States. Our strategy has been to pursue patent protection covering, when possible, compositions, methods of use, dosing, and formulations.

We also rely upon trade secrets, know-how, and continuing technological innovation. We seek to protect our proprietary information, in part, by using confidentiality and invention assignment agreements with our commercial partners, collaborators, employees, and consultants. These agreements are designed to protect our proprietary information and, in the case of the invention assignment agreements, to grant us ownership of technologies that are developed through a relationship with a third party. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our commercial partners, collaborators, employees, and consultants use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

Bayer License Agreement

On October 7, 2020, we entered into the Bayer License Agreement, pursuant to which we have been granted an exclusive, worldwide, royalty-bearing, worldwide license under certain Bayer patents and know-how to develop, use, manufacture, commercialize, sublicense, and distribute, for all uses in the cure, mitigation, treatment, or prevention of diseases or disorders in humans or animals, (i) a versatile and adaptable bioconjugation platform, now referred to as the VersAptx Platform, including VIP943 and VIP924, next-generation ADCs, and VIP236, an SMDC, and (ii) a small molecule drug program, including enitociclib, a P-TEFb/CDK9 inhibitor. The VersAptx Platform and these product candidates, currently comprise our entire product pipeline. The Bayer License Agreement became effective upon the closing of the LSAC Business Combination.

Under the Bayer License Agreement, we paid Bayer an upfront license fee of $5.0 million upon the closing of the LSAC Business Combination. In addition, we are obligated to make significant future payments to Bayer upon the achievement of certain development and commercial sales milestones involving license products as well as ongoing royalties on net commercial sales. The size and timing of these milestone payments vary greatly depending on factors such as the particular licensed product, whether it involves a P-TEFb licensed product or

bioconjugation licensed product (and which bioconjugation program – IL3RA, CXCR5, SMDC, or additional programs), the number of distinct disease indications, the number of different countries with respect to which the milestone is achieved and the level of net commercial sales, and it is therefore difficult to estimate the total payments that may become payable to Bayer and when those payments would be due. If we achieve all of the milestones for each of the countries and disease indications, we would be obligated to pay development and commercial sales milestone payments that range from $110.0 million to up to $318.0 million per licensed product, and upon successful commercialization of at least five licensed products, we could be required to pay aggregate milestone payments in excess of $1.0 billion. If we partner with a third party and receive development milestone payments from such third party that exceed the development milestone payments we are required to pay Bayer for the same milestones, we are required to pay Bayer a small portion of that excess.

Under the Bayer License Agreement, we are also obligated to pay Bayer tiered royalties on worldwide net commercial sales of licensed products at royalty rates ranging from single digit to low double digit percentages based on escalating levels of net commercial sales in a calendar year, subject to standard offsets and reductions. These royalty obligations apply on a product-by-product and country-by-country basis and end upon the latest of (i) the date on which the last valid claim of any licensed patents expire, and (ii) 10 years after the first commercial sale of the licensed product, in each case, with respect to a given licensed product in a given country.

Under the Bayer License Agreement, we have sole control of, and are responsible for, at our expense, the development, manufacture and commercialization of licensed products. We have agreed to use commercially reasonable efforts, consistent with our business judgment and for a similarly situated company, to develop and commercialize at least one P-TEFb licensed product and two ADC licensed products in certain major markets. We have the sole right, but not the obligation, to control the prosecution, defense, and enforcement of the licensed patents, and Bayer has backup rights to prosecution, defense and enforcement with respect to any licensed patents for which we elect not to exercise such rights.

The Bayer License Agreement will expire on a country-by-country and licensed product-by-licensed product basis on the expiration of the last royalty term with respect to a given licensed product in a given country, unless earlier terminated. We may terminate the agreement for convenience upon 90 days' written notice. Either party may terminate the agreement, either in its entirety or on a licensed technology-by-licensed technology or licensed product-by-licensed product basis depending on the nature of the breach, if the other party materially breaches its material obligations under the agreement and fails to cure such material breach within 180 days of written notice of such material breach, with termination tolled during any period during which a good faith dispute resolution process is being pursued with respect to material breaches other than non-payment. In addition, either party may terminate the agreement immediately upon written notice if the other party files a voluntary bankruptcy petition, is subject to an involuntary bankruptcy petition, or for certain other insolvency events. Bayer may terminate the agreement if we challenge the validity or enforceability of any of the licensed patents.

Human Capital/Employees

In the fourth quarter of 2024, we executed a series of workforce reductions to streamline operations and control ongoing costs as we pursue strategic alternatives. As part of these streamlining and cost-control measures, members of our senior management transitioned out of full-time employment but continue to support the Company on a consulting basis. As a result, as of December 31, 2024, we employed a total of 12 full-time employees and one part-time employee in roles deemed essential to ongoing business operations. None of our employees were represented by labor unions or covered by collective bargaining agreements.

For full-time employees, we offer compensation aligned with industry benchmarks, taking into account job responsibilities, level of seniority, and geographic location. Additionally, we provide a 401(k) plan with an employer matching contribution, equity awards, and an employee stock purchase plan. Our benefits program includes comprehensive medical, dental, and vision coverage, paid time off, and company-designated holidays. We consider our relationship with our employees to be good.

Legal Proceedings

We are not currently a party to any legal proceedings, and are not aware of any pending or threatened legal proceedings against us, that we believe could have a material adverse effect on our business, operating results, or financial condition. We may from time to time become involved in legal proceedings arising in the ordinary course of business.

Available Information

Our principal executive offices are located at 1825 S. Grant Street, San Mateo, CA 94402, and our telephone number is (650) 800-6676. Our website address is www.vincerx.com. The information contained on, or that can be accessed through, our website is not part of this Annual Report on Form 10-K.

We make available free of charge on our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports, as soon as reasonably practicable after we electronically file or furnish such materials to the SEC. You may obtain a free copy of these reports in the Investor Relations section of our website, www.vincerx.com. All reports that we file are also available at www.sec.gov.

ITEM 1A. Risk Factors.

Risks Related to the Proposed Business Combination

The Proposed Business Combination may not be consummated on the terms described in the non-binding Letter of Intent or at all.

On March 14, 2025, we entered into the Letter of Intent relating to the Proposed Business Combination. Although we anticipate entering into a definitive business combination agreement in April 2025, no assurance can be given that we will be able to do so within that timeframe or at all. Execution of a definitive business combination agreement with QumulusAI is subject to a number of conditions in the Letter of Intent, including satisfactory completion of due diligence by each party and, if we so request prior to such execution, receipt of up to $1.5 million in equity financing from QumulusAI or its designees, which due diligence and financing have not been completed as of the date of this report, as well as successful negotiation of the terms and conditions of the definitive business combination agreement. In addition, even if we were to negotiate and enter into a definitive business combination agreement, there is no assurance that the Proposed Business Combination would be consummated on the terms described in the Letter of Intent, or at all.

Failure to consummate the Proposed Business Combination could negatively affect our business, and result in the total loss of your investment.

The terms of a definitive business combination agreement are subject to negotiation, and we cannot guarantee that we will be able to reach acceptable terms. Execution of the definitive business combination agreement is subject to various conditions in the Letter of Intent, including satisfactory completion of due diligence by us and QumulusAI and, if we request it prior to such execution, our receipt of financing from QumulusAI. On February 28, 2025, we announced that a prior binding term sheet for a reverse merger with another party was terminated before the parties to that term sheet were able to enter into a definitive merger agreement, and we announced that we were seeking strategic alternatives, including out-licensing, merger and acquisition opportunities (including reverse mergers), the sale of assets and technologies, and winding down operations. In the event we are unable to negotiate a definitive business combination agreement or consummate the Proposed Business Combination, it will have a material adverse effect on our business, financial condition, and results of operations, including the following:

- Incurring costs related to the negotiation of the business combination agreement, such as legal, accounting, and financial advisory fees;
- Declines in the market price of our common stock to the extent that such market price reflects an assumption that the Proposed Business Combination will be consummated;
- The diversion of management's attention from day-to-day business operations and the potential disruption to each company's employees and other personnel and business relationships during the period the definitive business combination agreement is being negotiated and stockholder approval is being solicited; and
- Becoming subject to litigation related to the Proposed Business Combination.

Even if we do enter into a definitive business combination agreement with QumulusAI, we cannot guarantee that the terms will be as described in the Letter of Intent or that the closing conditions set forth in such business combination agreement, including obtaining the requisite stockholder approval and listing the combined company's shares on Nasdaq, will be satisfied. If we are unable to satisfy our closing conditions, or if other mutual closing conditions are not satisfied, QumulusAI will not be obligated to complete the Proposed Business Combination.

If the Proposed Business Combination is not completed, our board of directors would need to evaluate other available strategic alternatives, which alternatives may not be as favorable to our stockholders as the Proposed

Business Combination or available at all and could include winding down our operations, which may result in a total loss of stockholders' investment.

Vincerx and QumulusAI will be subject to various uncertainties while the Proposed Business Combination is pending that could adversely affect the anticipated benefits of the Proposed Business Combination.

Uncertainty about the effect of the Proposed Business Combination on counterparties to contracts, employees, consultants, and other parties may have an adverse effect on us and QumulusAI. These uncertainties could cause contract counterparties and others who deal with us or QumulusAI to seek to change existing business relationships and may impair the ability of us and QumulusAI to attract, retain, and motivate key personnel until the Proposed Business Combination is completed and for a period of time thereafter. Retention and recruitment of employees and consultants may be particularly challenging prior to the completion of the Proposed Business Combination. Our employees and consultants, and the employees and consultants and prospective employees and consultants of QumulusAI, may experience uncertainty about their future roles following the Proposed Business Combination.

The negotiations to enter into a definitive business combination agreement, pursuit of the Proposed Business Combination, and the preparation for the combination of the two companies may place a significant burden on management and internal resources. Any significant diversion of management attention away from our business and any difficulties encountered in the negotiations, transition, and integration process could affect each of our businesses and limit us from pursuing other business opportunities and making other changes to our business prior to the entry into a definitive business combination agreement and/or completion of the Proposed Business Combination.

We expect to incur substantial transaction costs in connection with the Proposed Business Combination.

We expect to incur a significant amount of non-recurring expenses in connection with the Proposed Business Combination, including legal, accounting, financial advisory, consulting, printing, mailing, and other expenses. In general, these expenses are payable by us whether or not the Proposed Business Combination is completed. Additional unanticipated costs may be incurred following consummation of the Proposed Business Combination.

Risks Related to the Discovery, Development and Commercialization of Our Product Candidates

We rely on the Bayer License Agreement to provide rights to the core intellectual property relating to all of our current product candidates, which agreement imposes significant payment and other obligations on us. Any failure by us to perform our obligations under the Bayer License Agreement could give Bayer the right to terminate or seek other remedies under the agreement, and any termination or loss of important rights under the Bayer License Agreement would significantly and adversely affect our ability to develop, partner and/or commercialize our current product candidates and our VersAptx platform, raise capital, or continue our operations.

We have licensed our core patents and other intellectual property relating to our current product candidates and our VersAptx platform from Bayer on an exclusive, worldwide basis under the Bayer License Agreement. The Bayer License Agreement continues in effect on a country-by-country and licensed product-by-licensed product basis until there are no remaining royalty payment obligations in the relevant country and can be terminated earlier by Bayer in the event that we materially breach our material obligations, that bankruptcy or other insolvency proceedings are instituted against us or that we seek to revoke or challenge the validity of any licensed patents. If, for any reason, the Bayer License Agreement is terminated or we otherwise lose important rights, it would have a significant and adverse effect on our business and our ability to develop, partner and/or commercialize our current product candidates, raise capital, or continue our operations.

The Bayer License Agreement imposes on us obligations relating to development, commercialization, funding, payment, diligence, intellectual property protection and other matters. We paid Bayer an upfront license fee of $5.0 million following the closing of the LSAC Business Combination. In addition, we are obligated to make significant future payments to Bayer upon the achievement of certain development and commercial sales milestones involving licensed products. The size and timing of these milestone payments will vary greatly depending on factors such as the particular licensed product, whether it involves a P-TEFb licensed product or a bioconjugation licensed product (and which bioconjugation program), the number of distinct disease indications, the number of different countries with respect to which the milestone is achieved and the level of net commercial sales, and it is therefore difficult to estimate the total payments that could become payable to Bayer and when those payments would be due. If we were to achieve all of the milestones for each of the countries and disease indications, we would be obligated to pay development and commercial milestone payments that range from $110.0 million to up to $318.0 million per licensed product, and upon successful commercialization of at least five licensed products, we could be required to pay aggregate milestone payments in excess of $1.0 billion. In addition to milestone payments, we are also required to pay Bayer under the Bayer License Agreement ongoing royalties in the single digit to low double-digit percentage range on net commercial sales of licensed products.

To the extent we are able to achieve any of these milestones, many of them would be achieved, and the related milestone payments owed, before we are able to generate sufficient revenues (or any revenues in the case of development milestones). Accordingly, we would need to obtain substantial additional funding, or enter into strategic alliances in order to pay these milestones, and there can be no assurance that we would be able to obtain the necessary funding on acceptable terms or at all or that we would be able to enter into strategic alliances at levels sufficient to pay these milestones or at all. If we are unable to raise the necessary additional funding, enter into the necessary strategic alliances, or otherwise pay these milestones, we would be in breach of the Bayer License Agreement, which if not cured would give Bayer the right to terminate the agreement or seek other remedies, which would have a significant and adverse effect on our business and prospects and our ability to develop and commercialize our current product candidates, raise capital, or continue our operations.

We are currently substantially dependent on the success of VIP943, our lead product candidate, and our other product candidates. If we are unable to complete development of, obtain approval for, partner, and/or commercialize these product candidates in a timely manner, our business will be harmed.

Our business is substantially dependent on our ability to timely commence and complete clinical trials, obtain marketing approval for, partner, and/or successfully commercialize our product candidates. Development of these product candidates will require additional clinical development, evaluation of clinical, preclinical, and manufacturing activities, marketing approval from government regulators, substantial investment, and significant marketing efforts before we would be able to generate any revenues from product sales. We are not permitted to market or promote these or any other product candidates before we receive marketing approval from the FDA and comparable foreign regulatory authorities, and we may never receive such marketing approvals.

The success of our product candidates will depend on several factors, many of which we do not control, including certain aspects of clinical development and the regulatory submission process, potential threats to our intellectual property rights, and the manufacturing, marketing, distribution, and sales efforts of any future partner or collaborator. If we are not successful with respect to one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully develop, partner and/or commercialize these product candidates, which would materially harm our business.

We are at an early stage in development efforts for our product candidates, and we may not be able to successfully develop, manufacture, complete clinical trials, partner, and/or commercialize our product candidates on a timely basis or at all.

The potential therapeutic benefits of our bioconjugation product candidates are unproven, and we may never develop, successfully conduct or complete clinical trials, partner, and/or commercialize these product candidates.

While several bioconjugation and ADC candidates are under development by other companies, there is currently no approved bioconjugation therapy using our proprietary optimized CPT payload or an ADC using KSPi and CellTrapper. We may uncover a previously unknown risk associated with KSPi or our optimized CPT payload, our CellTrapper technology may not be as impermeable as initial testing suggests, our linker technology may not be as effective as initial testing suggests, or other issues that may be more problematic than we currently believe, which may prolong the period of observation required for obtaining, or result in the failure to obtain, regulatory approval or may necessitate additional preclinical and clinical testing. While results from preclinical trials of our bioconjugation product candidates have shown proof-of-concept for each, these product candidates may not demonstrate in patients any or all of the pharmacological benefits we believe they may possess. If the KSPi warhead or optimized CPT payload that we use is not safe in certain product candidates, we would be required to abandon or redesign all of our current bioconjugation product candidates. We have not yet succeeded and may never succeed in demonstrating efficacy and safety of our bioconjugation product candidates.

Enitociclib is a novel P-TEFb/CDK9 inhibitor, and its potential therapeutic benefit is unproven. While several CDK9 inhibitor candidates are under development by other companies, there is currently no approved therapy inhibiting CDK9 for the treatment of cancers, and as a result, the regulatory pathway for enitociclib may present novel issues that could cause delays in development or approval. In addition, enitociclib may not demonstrate in patients any or all of the pharmacological benefits we believe it may possess. Positive results from preclinical studies or early stage clinical trials are not necessarily predictive of the results of planned clinical trials of enitociclib. We have not yet succeeded and may never succeed in demonstrating efficacy and safety for enitociclib.

If we are unable to successfully develop, conduct, or complete clinical trials, obtain marketing approval, partner, and/or commercialize our product candidates, our business would be materially harmed.

Results from early-stage clinical trials may not be predictive of results from late-stage or other clinical trials.

Positive and promising results from preclinical studies and early-stage clinical trials may not be predictive of results from late-stage clinical trials or from clinical trials of the same product candidates for the treatment of other indications. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. Late-stage clinical trials could differ in significant ways from early-stage clinical trials, including changes to inclusion and exclusion criteria, efficacy endpoints, dosing regimen, and statistical design. Moreover, success in clinical trials in a particular indication does not guarantee that a product candidate will be successful for the treatment of other indications. Many companies in the biotechnology industry have suffered significant setbacks in late-stage clinical trials after achieving encouraging or positive results in early-stage development. There can be no assurance that we will not face similar setbacks in our clinical trials despite positive results observed in early-stage clinical trials.

Interim, "topline," and preliminary data from our clinical trials that we announce or publish 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 preliminary interim or "top-line" data from clinical trials. Positive preliminary data may not be predictive of such trial's subsequent or overall results. Preliminary data are subject to the risk that one or more of the outcomes may materially change as more data become available. Additionally, preliminary data 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. Therefore, positive preliminary results in any ongoing clinical trial may not be predictive of such results in the completed trial. We also make assumptions, estimations, calculations, and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully evaluate all data. As a result, preliminary data that we report may differ from future

results from the same clinical trials, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Preliminary data also remains subject to audit and verification procedures that may result in subsequent or final data being materially different from the preliminary data we previously published. As a result, preliminary data should be viewed with caution until the final data are available. Material adverse changes in the final data compared to preliminary data could materially harm our business and prospects.

Even if approved, our product candidates may not achieve adequate market acceptance among physicians, patients, healthcare payors, and others in the medical community necessary for commercial success.

Even if our product candidates were to receive regulatory approval, they may not gain adequate market acceptance among physicians, patients, healthcare payors, and others in the medical community. Such acceptance would depend on a number of factors, including:

- timing of market introduction, number, clinical profile, and potential advantages of competitive drugs;
- acceptable evidence of safety and efficacy;
- changing standards of medical care;
- relative convenience and ease of administration;
- restrictions on the use of our product candidates, such as boxed warnings or contraindications in labeling, or a Risk Evaluation and Mitigation Strategy, if any, which may not be required of alternative treatments and competitor products;
- pricing and cost-effectiveness, which may be subject to regulatory control;
- availability of coverage, reimbursement and adequate payment from health maintenance organizations and other third-party payors; and
- prevalence and severity of adverse side effects.

If any of our product candidates were to be approved but does not achieve an adequate level of acceptance by physicians, hospitals, healthcare payors, and patients, it would have a negative effect on our business.

If the market opportunity for any product candidate is smaller than we believe, our potential commercial opportunity may be adversely affected, and our business may suffer.

Our belief regarding addressable patient populations that may benefit from treatment with our product candidates are based on our estimates. These estimates, which have been derived from a variety of sources, may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these cancers. Additionally, the potentially addressable patient population for our product candidates may not ultimately be amenable to treatment with our product candidates. Our market opportunity may also be limited by future competitor treatments that enter the market. If any of our estimates prove to be inaccurate, the potential commercial opportunity for any of our product candidates could be significantly diminished and have an adverse material impact on our business.

We face significant competition, and if our competitors develop and market technologies or products more rapidly or that are more effective, safer, or less expensive than our product candidates, our commercial opportunities will be negatively impacted.

Our competitors are developing a large number of drug candidates and new therapies for the treatment of conditions similar to those targeted by our product candidates. Several pharmaceutical and biotechnology companies have CDK9 inhibitors, ADCs, immunotherapies, or other products on the market, in clinical trials, or

in development that are, or may be, competitive to our product candidates in oncology indications. Our competitors, either alone or together with collaborators, may have significantly greater financial, manufacturing, marketing, drug development, technical and human resources, and commercial expertise than we do and may have begun developing their drug candidates earlier than us. Our competitors may also have more experience:

- developing drug candidates;
- conducting preclinical and clinical trials;
- obtaining regulatory approvals; and
- commercializing product candidates.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe adverse effects, are more convenient, have a broader label, are marketed more effectively, are reimbursed, or are less expensive than our product candidates. Our competitors also may obtain marketing approval from the FDA or other comparable foreign regulatory authorities for their products more rapidly, which could result in our competitors establishing a strong market position. Technological advances or products developed by our competitors may render our technologies or product candidates obsolete, less competitive, or not economical. If we are unable to compete effectively, our business could be adversely affected.

Clinical trials are expensive, time consuming, subject to enrollment and other delays, and may be required to continue beyond our available funding, and we cannot be certain that we will be able to raise sufficient funds to successfully complete the development, clinical trials, and commercialization of any of our product candidates.

Clinical trials have uncertain outcomes and may be required to continue beyond our available funding. Failure can occur at any stage of the clinical trials, and we may experience numerous unforeseen events that could delay or prevent development and commercialization of our product candidates.

In addition, we had no involvement with or control over the preclinical or clinical development of our product candidates prior to their in-license from Bayer. We are therefore dependent on Bayer having conducted such development in accordance with the applicable protocols and legal, regulatory, and scientific standards, having accurately reported the results of all preclinical studies and clinical trials and other research they conducted prior to our acquisition of the rights to our product candidates, having correctly collected and interpreted the data from these studies, trials, and other research, and having supplied us with complete information, data sets, and reports required to adequately demonstrate the results reported through the date of our acquisition of these product candidates. Problems in any of these areas could result in increased costs and delays in the development of our product candidates, which could adversely affect our business.

If we suffer significant delays, setbacks, or negative results in, or termination of, our clinical trials, we may be unable to continue development of our product candidates, and our development costs could increase significantly. Adverse or inconclusive results from our clinical trials may substantially delay, or halt entirely, any further development of our product candidates.

Adverse or inconclusive results from our clinical trials may substantially delay, or halt entirely, any further development of our product candidates. Many companies have failed to demonstrate the safety or effectiveness of product candidates in later stage clinical trials notwithstanding favorable results in early-stage clinical trials. Previously unforeseen and unacceptable side effects could interrupt, delay, or halt clinical trials of our product candidates and could result in the FDA denying approval of our product candidates. To date, long-term safety and efficacy has not been demonstrated in clinical trials for any of our product candidates.

Certain toxicity and adverse events have been noted in some of the preclinical and clinical trials involving certain of our product candidates. Even if we believe that the data collected from clinical trials of our product candidates are promising with respect to safety and efficacy, such data may not be deemed sufficient by regulatory authorities to warrant product approval. Regulatory officials could interpret such data in different ways than we do, which could delay, limit, or prevent regulatory approval. The FDA or we may suspend or terminate clinical trials at any time. Any failure or significant delay in completing clinical trials for our product candidates, or in receiving regulatory approval for the commercialization of our product candidates, may materially harm our business.

Our business entails a significant risk of product liability, and if we are unable to obtain sufficient insurance coverage, such inability could have an adverse effect on our business.

Our business exposes us to significant product liability risks inherent in the development, testing, manufacturing, and marketing of therapeutic treatments. Product liability claims could delay or prevent completion of our development programs. Regardless of the merits or eventual outcome, liability claims may also result in injury to our reputation, costs to defend the related litigation, a diversion of management's time and our resources, and substantial monetary awards to clinical trial participants or patients. Any insurance we have or may obtain may not provide sufficient coverage against potential liabilities. Furthermore, clinical trial and product liability insurance is becoming increasingly expensive and difficult to obtain. As a result, we may be unable to obtain sufficient insurance at a reasonable cost to protect us against losses caused by product liability claims, which could negatively impact our ability to conduct clinical trials and have an adverse effect on our business and financial condition.

We make use of biomarkers in certain instances, which are not scientifically validated, and our reliance on biomarker data may cause us to direct our resources inefficiently.

We make use of biomarkers in certain instances to facilitate our drug development and to optimize our clinical trials. Biomarkers are proteins or other substances whose presence in the blood or tumor cells can serve as an indicator of specific cell processes. We believe that these biomarkers serve a useful purpose in helping us to evaluate whether our product candidates are having their intended effects through their assumed mechanisms and allow us to improve patient selection in connection with clinical trials and monitor patient compliance with trial protocols.

For most purposes, however, biomarkers have not been scientifically validated. If our understanding and use of biomarkers is inaccurate or flawed, or if our reliance on them is otherwise misplaced, we will not only fail to realize any benefits from using biomarkers but may also be led to invest time and financial resources inefficiently in attempting to develop less promising product candidates. Moreover, biomarker data are not currently accepted by the FDA or other regulatory agencies in the United States, the European Union, or elsewhere in applications for regulatory approval of product candidates, and there is no guarantee that such data will ever be accepted by the relevant authorities. Our biomarker data should not be interpreted as evidence of efficacy.

The failure to attract and retain skilled personnel could impair our drug development and business objectives.

Our business is highly dependent on our ability to attract and retain management, clinical development, scientific, research, technical, and other skilled personnel. There is currently intense competition for personnel with these skills and expertise, and this competition is likely to continue. In addition, our recent workforce reductions and other cost-control measures may negatively impact our ability to attract or retain such personnel. The inability to attract and retain skilled personnel as needed may delay or prevent the achievement of our drug development and other business objectives and could have a material adverse effect on our business.

We or the third parties upon whom we depend may be adversely affected by natural disasters, health epidemics, and other natural or man-made accidents or incidents, including the impact of climate change, and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Any unplanned event, such as a flood, fire, explosion, earthquake, extreme weather condition, health pandemic or epidemic (such as COVID-19), power shortage, telecommunication failure, wars (such as the wars in Ukraine and Israel), or other natural or man-made accidents or incidents, including the impact of climate change, may have a material adverse effect on our business. In addition, the disaster recovery and business continuity plans we have in place may prove inadequate in the event of a serious disaster or similar event. As part of our risk management policy, we maintain insurance coverage at levels that we believe are appropriate for our business. However, in the event of an accident or incident at these facilities, there can be no assurance that the amounts of insurance will be sufficient to satisfy any damages and losses. If we, or the third parties on whom we rely, are unable to operate because of an accident or incident or for any other reason, even for a short period of time, our business may be harmed.

Our business and operations would be adversely affected in the event that our computer systems or those of our partners, contract research organizations, contractors, consultants, or other third parties we work with were to suffer system failures, cyberattacks, loss of data, or other security incidents, or we fail to comply with applicable data security and privacy laws, regulations, and standards.

Despite the implementation of security measures, our computer systems, as well as those of our partners, contract research organizations, IT service providers, contractors, consultants, law and accounting firms, and other third parties we work with, may sustain damage from computer viruses, unauthorized access, data breaches, phishing attacks, ransomware attacks, denial-of-service attacks, cybercriminals, natural disasters, terrorism, war, and telecommunication and electrical failures. We rely on our partners and third-party providers to implement effective security measures and identify and correct for any such failures, deficiencies, or breaches. The risks of a security breach or disruption, particularly through cyberattacks or cyber intrusion, including by computer hackers, foreign governments, and cyber-terrorists, have increased significantly and are becoming increasingly difficult to detect. If a failure, accident, or security breach were to occur and cause interruptions in our operations, or the operations of our partners or third-party providers, it could result in a misappropriation of confidential information, including our intellectual property or financial information or clinical trial participant personal data, a material disruption or delay in our drug development programs, or significant monetary losses. For example, the loss of preclinical or clinical trial data from completed, ongoing, or planned trials, or chemistry, manufacturing, and controls data for our product candidates, could result in delays in regulatory approval efforts and significantly increase our costs to recover or reproduce the data.

In addition, we must comply with increasingly complex, rigorous, and sometimes conflicting laws, regulations, and standards enacted to protect business and personal data in the United States, Europe, and elsewhere. These laws impose additional obligations on companies regarding the handling of personal data and provide certain individual privacy rights to persons whose data is stored. Compliance with existing, proposed, and recently enacted laws, regulations, and standards can be costly and time consuming, and any failure to comply with these laws, regulations, and standards could subject us to legal and reputational risks. Misuse of or failure to secure personal information, including any breach, loss, or compromise of clinical trial participant personal data, could also result in violation of data privacy laws, regulations, and standards, proceedings against us by governmental entities or others, imposition of fines by governmental authorities, and damage to our reputation and credibility, and could have a negative impact on our business.

Risks Related to Our Financial Position and Need for Additional Capital

We previously announced that we are exploring strategic alternatives and also implemented certain workforce reductions and other cost-control measures to streamline our operations and focus our resources, and there can be no assurance that such measures will achieve the intended objectives, or that they will not adversely affect our business.

We previously announced that we are exploring strategic alternatives, including out-licensing, merger and acquisition opportunities (including reverse mergers), the sale of assets and technologies, and winding down operations. In the fourth quarter of 2024, we implemented a series of significant workforce reductions and other cost-control measures to streamline our operations and focus our resources as we pursue our business and a potential strategic transaction. There can be no assurance that these cost-control measures will not adversely affect our business or that a strategic transaction such as the Proposed Business Combination or other strategic alternative can be achieved on a timely basis or at all. Regardless of whether the Proposed Business Combination is consummated, we are currently continuing to pursue monetizing our assets. There can be no assurances that our efforts will be successful.

We have incurred net losses since inception and expect to continue to incur significant net losses for the foreseeable future, and there can be no assurance we will be able to raise capital.

We have incurred net losses in each reporting period since our inception, have not generated any revenue from product sales to date, and have financed our operations through the sale of our equity securities. It will be several years, if ever, before we would be in a position to generate revenue from product sales. We expect to continue to incur significant expenses and operating losses for the foreseeable future. Even if we were to succeed in receiving marketing approval for and partnering and/or commercializing one or more of our product candidates, we expect that we will continue to incur substantial development and other expenses. The size of our future net losses will depend, in part, on the rate of future expenses and our ability to generate revenue. Our prior losses and expected future losses have had and will continue to have an adverse effect on our working capital, need to raise additional capital, and ability to achieve and maintain profitability.

We require substantial capital to finance our operations. If we are unable to raise capital when needed, or on acceptable terms, we may be forced to significantly reduce our operations and expenses, may not be able to continue as a going concern, and may be forced to cease operations.

Developing pharmaceutical products, including conducting preclinical studies and clinical trials, is a very time-consuming, expensive, and uncertain process that takes years to complete. Even if one or more of our product candidates were to be approved for commercial sale, we anticipate incurring significant costs associated with partnering and/or commercializing any approved product candidate. These expenditures would include payments associated with the Bayer License Agreement and development and commercial milestones, in each case prior to generating any product sales. Additionally, following commencement of any commercial sales of our licensed products, we would be responsible for significant further payments upon the achievement of certain sales milestones and tiered royalty payments on net commercial sales.

Our expenses could increase beyond expectations if the FDA or other regulatory agencies were to require clinical trials or preclinical studies in addition to those that we currently anticipate. Other unanticipated costs could also arise. In addition, if we were to obtain marketing approval for any of our product candidates, we would expect to incur significant commercialization expenses related to drug sales, marketing, manufacturing, and distribution. We also expect to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in order to maintain our operations.

As of March 21, 2025, we had approximately $4.7 million in cash. We intend to use our existing capital resources to continue to fund our operations, including our public company costs and expenses associated with completing the Proposed Business Combination or other alternative, to seek to monetize our assets and for

working capital and other general corporate purposes. Based on our current business plans and assumptions, we believe that our existing cash will be sufficient to fund our expenses and capital expenditure requirements into the third quarter of 2025. Our estimate as to how long we expect our existing cash to be able to continue to fund our operating expenses and capital expenditure requirements is based on plans and assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Changing circumstances, some of which may be beyond our control, could result in less cash available to us or cause us to consume capital significantly faster than we currently anticipate, and we may need or choose to seek additional funds sooner than planned.

We will need to obtain further funding through public or private equity offerings, debt financings, collaborations and licensing arrangements, or other sources, which may dilute our stockholders or restrict our operating activities. Raising additional funds by issuing equity or convertible debt securities may cause our stockholders to experience substantial dilution. Raising additional funds through debt financing may involve covenants that restrict our business activities and options. To the extent that we raise additional funds through collaborations and licensing arrangements, we may have to relinquish valuable rights to our drug discovery and other technologies, development programs, or product candidates, or grant licenses on terms that may not be favorable to us. Additional funding may not be available to us on favorable terms, or at all, particularly in light of the current economic and market conditions. We do not have any committed external source of funds. Market volatility resulting from inflation and other economic and market conditions, the wars in Ukraine and Israel, the inability to maintain our listing on The Nasdaq Capital Market, or other factors could also adversely impact our ability to access capital as and when needed. Our failure to raise capital as and when needed or on acceptable terms would have a negative impact on our financial condition, and we may have to significantly reduce our operations and expenses, or curtail or cease our operations.

In accordance with Accounting Standards Update ("ASU") 2014-15, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern* (Subtopic 205-40), we have evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about our ability to continue as a going concern for a period of one year after the date that our audited consolidated financial statements are issued. In light of our existing cash resources and current and expected operating losses and negative cash flows, we expect to need additional capital prior to the one-year anniversary of the issuance of our audited consolidated financial statements, and such additional capital may not be available as and when needed on acceptable terms or at all. As a result, we have concluded that these circumstances and the uncertainties associated with our ability to obtain additional capital raise substantial doubt about our ability to continue as a going concern for a period of one year after the date that our audited consolidated financial statements are issued.

The Bayer License Agreement obligates us to make significant milestone and royalty payments, some of which would be triggered prior to any commercialization of our product candidates, and we may not be able to raise additional capital or enter into strategic alliances at levels sufficient to pay these amounts when due.

We will be responsible for significant future contingent payments and royalties under the Bayer License Agreement upon the achievement of certain development, regulatory, and sales milestone events, some of which could occur prior to any commercialization of our product candidates. In such event, we would be required to make certain of these payments prior to the time at which we are able to generate sufficient revenue, if any, from commercial sales of any of our product candidates. Accordingly, we would need to obtain substantial additional funding or enter into strategic alliances in order to make these payments, and there can be no assurance that we will have the funds necessary to make such payments, be able to obtain the necessary funding on acceptable terms or at all, or enter into strategic alliances at levels sufficient to pay these amounts or at all. If we are unable to pay these amounts, we would be in breach of the Bayer License Agreement, which if not cured would give Bayer the right to terminate the agreement or seek other remedies, which would have a significant and adverse effect on our business and our ability to develop and commercialize our current product candidates, raise capital, or continue our operations.

We may never achieve or sustain profitability.

We do not know when or whether we will become profitable. To date, we have not commercialized any products or generated any revenues from the sale of products. We do not expect to generate any product revenues in the near term. To become and remain profitable, we must succeed in developing, obtaining regulatory approval for, and partnering and/or commercializing one or more of our product candidates. This will require us to be successful in a range of challenging activities, including completing clinical trials of our product candidates, obtaining regulatory approval for any product candidates that successfully complete clinical trials, establishing commercial alliances and/or commercialization capabilities for any approved products, and achieving market acceptance for any approved products. We may never succeed in these activities. Even if we succeed in these activities, we may never generate revenue in an amount sufficient to achieve or sustain profitability.

Risks Related to Regulatory Approval and Other Legal Compliance Matters

We may be unable to obtain U.S. or foreign regulatory approvals and, as a result, may be unable to partner or commercialize our product candidates.

Our product candidates are subject to extensive governmental regulations relating to, among other things, research, testing, development, manufacturing, safety, dose selection and optimization, efficacy, approval, recordkeeping, reporting, labeling, storage, packaging, advertising, and promotion, pricing, marketing, and distribution. Rigorous preclinical testing and clinical trials and an extensive regulatory approval process must be successfully completed in the United States and in many foreign jurisdictions before a new drug can be marketed. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain, and subject to unanticipated delays. We cannot provide any assurance that any or our product candidates will progress through all required testing and obtain the necessary regulatory approvals.

We have not conducted, managed, or completed large-scale or pivotal clinical trials nor managed the regulatory approval process with the FDA or any other regulatory authority with respect to our product candidates. The time required to obtain approvals from the FDA and other regulatory authorities is unpredictable and requires successful completion of extensive clinical trials which typically takes many years, depending upon the type, complexity, and novelty of the product candidate. The standards that the FDA and its foreign counterparts use when evaluating clinical trial data can and often does change during drug development, which makes it difficult to predict with any certainty how they will be applied.

Any delay or failure in seeking or obtaining required approvals for a product candidate would have a material and adverse effect on our ability to generate revenue from such product candidate. Furthermore, any regulatory approval to market a product candidate may be subject to significant limitations on the approved uses or indications for which such product candidate may be marketed or the labeling or other restrictions of such product candidate. In addition, the FDA has the authority to require a Risk Evaluation and Mitigation Strategy as part of approving an NDA or BLA, or after approval, which may impose further requirements or restrictions on the distribution or use of an approved product candidate. These limitations and restrictions may significantly limit the size of the market for a product candidate and affect reimbursement by third-party payors.

We are also subject to numerous foreign regulatory requirements governing, among other things, the conduct of clinical trials, manufacturing and marketing authorization, pricing, and third-party reimbursement. The foreign regulatory approval process varies among countries, and generally includes most if not all of the risks associated with FDA approval as well as risks attributable to the satisfaction of local regulations in foreign jurisdictions. Moreover, the time required to obtain approval may differ from that required to obtain FDA approval. Any delay or failure in obtaining foreign regulatory approval for a product candidate would have a material and adverse effect on our ability to generate revenue from such product candidate in that foreign jurisdiction.

Our product candidates may cause adverse events, toxicities, or other undesirable side effects when used alone or in combination with other approved products or investigational new drugs that may result in a safety profile that could inhibit regulatory approval, prevent market acceptance, limit their commercial potential, or result in significant negative consequences.

If our product candidates are associated with a high and unacceptable severity and prevalence of side effects or unexpected characteristics in preclinical studies or clinical trials when used alone or in combination with other approved products or investigational new drugs, we may need to interrupt, delay, or abandon their development or limit development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe, or more acceptable from a risk-benefit perspective. Such results could result in a more restrictive label, implementation of a Risk Evaluation and Mitigation Strategy or the delay or denial of regulatory approval by the FDA or comparable foreign regulatory authorities. Treatment-related side effects could also affect patient recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. Any of these occurrences could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or comparable foreign regulatory authorities and may prevent us from achieving or maintaining market acceptance of the affected product candidate, which could harm our business.

If significant adverse events or other side effects are observed in any of our clinical trials, we may have difficulty recruiting patients to such clinical trials, patients may drop out of such clinical trials, or we may be required to abandon the clinical trials or our development efforts of that product candidate altogether. We, the FDA, or other comparable regulatory authorities or an Institutional Review Board may suspend clinical trials of a product candidate at any time for various reasons, including a belief that subjects in such trials are being exposed to unacceptable health risks or adverse side effects. Some potential therapeutics developed in the biotechnology industry that initially showed therapeutic promise in early-stage trials have later been found to cause side effects that prevented their further development. Even if the side effects do not preclude the product candidate from obtaining or maintaining marketing approval, undesirable side effects may inhibit market acceptance due to its tolerability versus other therapies. Any of these developments could materially harm our business.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of such product candidates in other jurisdictions.

Obtaining and maintaining regulatory approval of any of our product candidates in one jurisdiction does not guarantee that we would be able to obtain or maintain regulatory approval in any other jurisdiction. A failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the approval process in others. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from those in the United States, including additional preclinical studies or clinical trials, as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. Obtaining foreign regulatory approvals and establishing and maintaining compliance with foreign regulatory requirements could result in significant delays, difficulties, and costs. If we fail to comply with the regulatory requirements in international markets or fail to receive applicable marketing approvals, our target market will be reduced, and our business would be harmed.

Even if our product candidates were to receive regulatory approval, they would be subject to significant post-marketing regulatory requirements and oversight.

Any regulatory approvals we might receive for our product candidates would require the submission of reports to regulatory authorities and surveillance to monitor the safety and efficacy of those product candidates, may contain significant limitations related to use restrictions, warnings, precautions, or contraindications, and may include burdensome post-approval studies or risk management requirements. For example, the FDA may require a Risk Evaluation and Mitigation Strategy in order to approve our product candidates, which could entail

requirements for a medication guide, physician training and 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 foreign regulatory authorities approve any of our product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion, import, export, and recordkeeping for our product candidates would be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information, reports, and registration, as well as on-going compliance with cGMP requirements and good clinical practices for any post-approval clinical trials. In addition, manufacturers of drug products and their facilities are subject to continual review and periodic, unannounced inspections by the FDA and other regulatory authorities for compliance with cGMP regulations and standards. If we or a regulatory agency discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facilities where the product is manufactured, a regulatory agency may impose restrictions on that product, the manufacturing facility, or us, including requiring recall or withdrawal of the product from the market or suspension of manufacturing. In addition, failure to comply with FDA and other comparable foreign regulatory requirements could subject the Company to administrative or judicially imposed sanctions, which could harm our business.

There can be no assurance that we will be able to pursue accelerated or other expedited approval of any of our product candidates, and the failure to obtain such accelerated or other expedited approval would result in a longer time period to commercialization of such product candidates, which could increase the cost of development and harm our competitive position in the marketplace.

Under the accelerated approval program, the FDA may grant expedited approval to a product candidate designed to treat a serious or life-threatening condition that provides meaningful therapeutic benefit over available therapies upon a determination that such product candidate has an effect on a surrogate endpoint or intermediate clinical endpoint that is reasonably likely to predict clinical benefit. The FDA considers a clinical benefit to be a positive therapeutic effect that is clinically meaningful in the context of a given disease, such as irreversible morbidity or mortality. The accelerated approval pathway may be used in cases in which the advantage of a new drug over available therapy may not be a direct therapeutic advantage but is a clinically important improvement from a patient and public health perspective. If granted, accelerated approval is usually contingent on the sponsor's agreement to conduct, in a diligent manner, additional post-approval confirmatory studies to verify and describe the drug's clinical benefit. If such post-approval studies fail to confirm the drug's clinical benefit, the FDA may withdraw its approval of the drug.

There can be no assurance that we will have the opportunity, or decide, to pursue accelerated approval or any other form of expedited development, review, or approval. Furthermore, even if we were to submit an application for accelerated approval or receive an expedited regulatory designation (e.g., breakthrough therapy designation) for any of our product candidates, there can be no assurance that such submission or application would be accepted or that any expedited development, review, or approval would be granted on a timely basis or at all. The FDA or other comparable foreign regulatory authorities could also require us to conduct further studies prior to considering our application or granting approval of any type. A failure to obtain accelerated approval or any other form of expedited development, review, or approval for our product candidates would result in a longer time period to commercialization of such product candidates, could increase the cost of development of such product candidates, and could harm our competitive position in the marketplace.

We may be required to defend lawsuits or pay damages in connection with the alleged or actual violation of healthcare statutes such as fraud and abuse laws, and our corporate compliance programs cannot guarantee that we will always be in compliance with all relevant laws and regulations.

In addition to FDA restrictions on marketing of pharmaceutical products, several other types of state and federal healthcare laws, commonly referred to as "fraud and abuse" laws, have been applied in recent years to restrict certain marketing practices in the pharmaceutical industry. Other jurisdictions, such as Europe, have

similar laws. These laws include false claims and anti-kickback statutes. Anti-kickback laws make it illegal for a manufacturer to offer or pay any remuneration in exchange for, or to induce, the referral of business, including the purchase of a product. False claims laws prohibit anyone from knowingly and willingly presenting, or causing to be presented, for payment to third-party payors, including Medicare and Medicaid, claims for reimbursed products or services that are false or fraudulent, claims for items or services not provided as claimed, or claims for medically unnecessary items or services.

Our activities relating to our product candidates will be subject to scrutiny under these laws and regulations. It may be difficult to determine whether or not our activities comply with these complex legal requirements, and our corporate compliance programs cannot guarantee that we will always be in compliance with all relevant laws and regulations. Violations are punishable by significant criminal and civil fines and other penalties, as well as the possibility of exclusion of the affected product from coverage under governmental healthcare programs, including Medicare and Medicaid. If U.S. or foreign governments were to investigate or make allegations against us or any of our employees, or sanction or convict us or any of our employees, for violations of any of these legal requirements, this could have a material adverse effect on our business.

Our employees, agents, contractors, or collaborators may engage in misconduct or other improper activities.

We cannot ensure that our corporate compliance controls, policies, and procedures will in every instance protect us from acts committed by our employees, agents, contractors, or collaborators, including contract research organizations, electronic data capture companies, data management companies, contract clinical research associates, medical institutions, clinical investigators, contract laboratories, and other third parties, that would violate the laws or regulations of the jurisdictions in which we operate, including healthcare, employment, foreign corrupt practices, environmental, competition, and privacy laws and regulations. Such improper actions could subject us to civil or criminal investigations, and civil penalties, and could adversely impact our business.

For example, we are subject to the Foreign Corrupt Practices Act and similar anti-bribery or anti-corruption laws, regulations, and rules of other countries in which we operate. The Foreign Corrupt Practices Act generally prohibits offering, promising, giving, or authorizing others to give, anything of value, either directly or indirectly, to a non-U.S. government official in order to influence official action or otherwise obtain or retain business. The Foreign Corrupt Practices Act also requires public companies to make and keep books and records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls. Our business is heavily regulated and therefore involves significant interaction with public officials, including officials of non-U.S. governments. Additionally, in many other countries, the healthcare providers who prescribe pharmaceuticals are employed by their government, and the purchasers of pharmaceuticals are government entities, and our dealings with these prescribers and purchasers are therefore subject to regulation under the Foreign Corrupt Practices Act.

There is no certainty that our employees, agents, contractors, or collaborators, or those of our affiliates, will comply with all applicable laws and regulations, particularly given the high level of complexity of these laws. While we have implemented codes of conduct and other policies and controls to mitigate the risk of non-compliance with anti-corruption and anti-bribery laws, it is not always possible to identify and deter employee misconduct, 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 government investigations or other actions stemming from a failure to comply with these laws or regulations. Violations of such laws and regulations could result in, among other things, administrative, civil and criminal fines and sanctions against us, our directors, officers, or employees, the closing of our facilities, requirements to obtain export licenses, exclusion from participation in federal healthcare programs including Medicare and Medicaid, implementation of compliance programs, integrity oversight and reporting obligations, and prohibitions on the conduct of our business. Any such violations could include prohibitions on our ability to offer our products in one or more countries and could materially damage our business.

Risks Related to Our Dependence on Third Parties

Our manufacturing processes are complex, and we do not have our own manufacturing capabilities and rely on third-party manufacturers for the development, clinical trials, and commercialization of any product candidate we may develop or sell.

The processes for manufacturing our product candidates, particularly our bioconjugation candidates, are very complex and take significant time and resources to develop and implement. In addition, our supply chain of raw materials, consumables, intermediates, drug substances, and drug products for use in our clinical trials and, if approved by regulatory authorities, commercialization rely on a worldwide supply chain. We do not operate our own manufacturing facilities or have our own manufacturing capabilities for clinical or commercial production of our product candidates under development and rely on third-party manufacturers. Third-party manufacturers that have the capabilities, processes, and expertise that we need for our product candidates and that can meet our quality standards may be difficult to identify or retain, and even if retained, such third-party manufacturers may not be able to perform the manufacturing services we require within our planned timeframes. We anticipate relying on a limited number of third-party manufacturers until such time, if ever, as we decide to expand our operations to include manufacturing capabilities. Certain of our key third-party manufacturers are located in China, and the United States and China are currently experiencing geopolitical tensions that could result in legislation or government intervention that adversely impacts our ability to manufacture in China, which could necessitate transitioning such manufacturing to other third-party manufacturers and increase costs, delay manufacturing, and lengthen timelines. In addition, the European Union, which is experiencing, and could continue to experience, the impact of the wars in Ukraine and Israel on supply chains, and other economic matters, including inflation. Such third-party manufacturers may implement, and certain of such manufacturers have implemented, price increases that could negatively impact our ability to afford their services.

If the FDA or comparable foreign regulatory authorities approve any of our product candidates for commercial sale, we would need to manufacture them in larger quantities, and we may not be able to successfully increase the manufacturing capacity for any of our product candidates in a timely or economic manner or at all. Until such time, if any, that we directly control the manufacturing of our product candidates, we will have limited control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance, and qualified personnel, and we will be dependent on our third-party manufacturing partners for compliance with current cGMP requirements for the manufacture of our product candidates. If our third-party manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or comparable foreign regulatory authorities, we may not be able to secure or maintain regulatory approval for our product candidates. In addition, if any third-party manufacturer makes improvements in the manufacturing process for our product candidates, we may not own, or may have to share, the intellectual property rights to such improvements.

Any inability to identify and retain third-party manufacturers on a cost-effective basis, any performance failure on the part of such manufacturers, or any disruption in our supply chain as a result of economic uncertainty, political unrest, the wars in Ukraine and Israel, trade disputes, natural disasters, pandemics or epidemics, climate change, or otherwise, would harm our business.

If we fail to enter into and maintain successful collaborative arrangements or strategic alliances for our product candidates, our ability to develop and commercialize such product candidates will be adversely affected.

An important element of our strategy for developing, manufacturing, and commercializing our product candidates is entering into collaborative arrangements or strategic alliances with pharmaceutical companies, research institutions, or other industry participants to advance our programs. We face significant competition in seeking such collaborations and alliances. We may not be able to negotiate such collaborations or alliances on acceptable terms if at all. In addition, such collaborations or alliances may be unsuccessful. If we fail to create and maintain suitable collaborations or alliances, our ability to develop and commercialize such product

candidates will be adversely affected. In addition, these kinds of collaborative arrangements and strategic alliances may place certain aspects of the development of our product candidates outside of our control, require us to relinquish important rights, limit our commercial opportunities, or otherwise be on terms unfavorable to us.

Dependence on collaborative arrangements or strategic alliances will subject us to several risks, including the risks that:

- we may not be able to control the amount and timing of resources that our collaborators may devote to our product candidates;
- our collaborators may experience financial difficulties;
- we may be required to relinquish important rights such as marketing and distribution rights;
- business combinations or significant changes in a collaborator's business strategy may adversely affect its willingness or ability to complete its obligations under any arrangement;
- a collaborator could independently move forward with a competing product candidate developed either independently or in collaboration with others, including our competitors; and
- collaborative arrangements are often terminated or allowed to expire, which would delay development and may increase the cost of developing our product candidates.

Changes in methods of product candidate manufacturing or formulation may result in additional costs or delay.

As product candidates proceed through preclinical and clinical trials towards potential approval, and commercialization, various aspects of the development program, such as manufacturing methods and formulation, may be altered along the way to optimize processes and results or due to other factors. Such changes carry the risk that they will not achieve these intended objectives. Any of these changes could cause our product candidates to perform differently and affect the costs, results, or timing of preclinical or clinical trials conducted with the altered materials. Such changes may also require additional testing, FDA notification, or FDA approval, which could increase our expenses and harm our business.

Our applications for regulatory approval could be delayed or denied due to problems with studies conducted before we in-licensed the rights to some of our product candidates.

We currently license all of our product candidates from Bayer pursuant to the Bayer License Agreement and rely to a certain extent upon previous development conducted by Bayer or other third parties over whom we had no control and before we in-licensed such product candidates. To receive regulatory approval of a product candidate, we must present all relevant data and information obtained during its development, including research conducted prior to our licensure of such product candidate. Although we are not currently aware of any such problems, any problems that emerge with preclinical or clinical development conducted prior to our in-licensing may affect our ability to document prior development and conduct clinical trials, which could delay, limit, or prevent regulatory approval for our product candidates.

Due to our reliance in part on contract research organizations and other third parties to conduct clinical trials, we may be unable to directly control the timing, conduct, and expense of all aspects of our clinical trials.

We rely in part on contract research organizations, electronic data capture companies, data management companies, contract clinical research associates, medical institutions, clinical investigators, contract laboratories, and other third parties in conducting clinical trials and obtaining regulatory approvals for our product candidates. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, need to be replaced, or the quality or accuracy of the data they obtain is compromised due to

their failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our clinical trials could be extended, delayed, suspended, or terminated, and we may not be able to obtain regulatory approval for or successfully partner and/or commercialize our product candidates.

Risks Related to Our Intellectual Property

If we fail to comply with our obligations under any license, collaboration, or other agreement, including the Bayer License Agreement, we may be required to pay damages and could lose intellectual property rights that are necessary for developing and protecting our product candidates.

Pursuant to the Bayer License Agreement, we have been granted a license from Bayer to certain intellectual property rights covering our current product candidates. If, for any reason, our licenses under the Bayer License Agreement are terminated or we otherwise lose those rights, our business will be significantly and adversely affected. The Bayer License Agreement imposes, and any future collaboration agreements or license agreements we may choose to enter are likely to impose, various development, commercialization, funding, milestone payment, royalty, diligence, sublicensing, patent prosecution and enforcement, or other obligations on us. If we breach any material obligations, or use the intellectual property licensed to us in an unauthorized manner, we may be required to pay damages, and Bayer and any other licensor, may have the right to terminate the license, which could result in us being unable to develop, manufacture, and sell products that are covered by the licensed technology or having to negotiate new or reinstated licenses on less favorable terms, or enable a competitor to gain access to the licensed technology.

Moreover, disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our product candidates, technology, and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under our third-party relationships;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by us, our licensors, and our partners; and
- the priority of invention of patented technology.

In addition, the Bayer License Agreement under which we license our core intellectual property and technology is complex, and certain provisions in the agreement may be susceptible to multiple interpretations. The resolution of any disagreement that may arise as a matter of contract interpretation could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under that agreement, either of which could have a material adverse effect on our business and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidate, which could have a material adverse effect on our business and prospects.

Our business depends on our ability to protect our intellectual property and our proprietary technologies.

Our business depends in part on our ability to obtain and maintain intellectual property for our product candidates, proprietary technologies, and their uses as well as our ability to operate without infringing upon the proprietary rights of others. We generally seek to protect our proprietary position by filing patent applications in the U.S. and abroad related to our product candidates, technologies, and their uses that are important to our business. We also seek to protect our proprietary position by acquiring or in-licensing relevant issued patents or pending applications from third parties.

Pending patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless, and until, patents issue from such applications, and then only to the extent the issued claims cover the technology. There can be no assurance that our patent applications or the patent applications of our licensors will result in additional patents being issued or that issued patents will afford sufficient protection against competitors with similar technology, nor can there be any assurance that the patents issued will not be infringed, designed around, or invalidated by third parties.

Even issued patents may later be found invalid or unenforceable or may be modified or revoked in proceedings instituted by third parties before various patent offices or in courts. The degree of future protection for our and our licensors' proprietary rights is uncertain. Only limited protection may be available and may not adequately protect our rights or permit us to gain or keep any competitive advantage. These uncertainties and/or limitations in our ability to properly protect the intellectual property rights relating to our product candidates could have a material adverse effect on our business and prospects.

Although we have licensed issued patents that cover certain of our product candidates and technologies, we do not have issued patents covering all our product candidates and technologies, and we may need additional issued patents covering such product candidates and technologies. We cannot be certain that the claims in any of our U.S. pending patent applications, corresponding international patent applications, or those of our licensors, will be considered patentable by the USPTO, courts in the U.S., or the patent offices and courts in foreign countries, nor can we be certain that the claims in our issued patents or our licensor's issued patents will not be found invalid or unenforceable if challenged.

The patent application process is subject to numerous risks and uncertainties, and there can be no assurance that we or any of our potential future collaborators will be successful in protecting our product candidates by obtaining and defending patents. These risks and uncertainties include the following:

- the USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment, and other provisions during the patent process, the noncompliance with which can result in abandonment or lapse of a patent or patent application, and partial or complete loss of patent rights in the relevant jurisdiction;
- patent applications may not result in any patents being issued;
- patents may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable, or otherwise may not provide any competitive advantage;
- our competitors, many of whom have substantially greater resources than we do and many of whom have made significant investments in competing technologies, may seek, or may have already obtained, patents that will limit, interfere with, or eliminate our ability to make, use, and sell our potential product candidates;
- there may be significant pressure on the U.S. government and international governmental bodies to limit the scope of patent protection both inside and outside the U.S. for disease treatments that prove successful as a matter of public policy regarding worldwide health concerns; and
- countries other than the U.S. may have patent laws less favorable to patentees than those upheld by U.S. courts, allowing foreign competitors a better opportunity to create, develop, and market competing product candidates.

The patent prosecution process is also expensive and time-consuming, and we and our licensors may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner or in all jurisdictions where protection may be commercially advantageous. It is also possible that we or our licensors will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection.

In addition, although we enter non-disclosure and confidentiality agreements with parties who have access to patentable aspects of our research and development output, such as our employees, outside scientific collaborators, contract research organizations, third-party manufacturers, consultants, advisors, and other third parties, any of these parties may breach such agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to obtain patent protection.

Given the amount of time required for the development, testing, and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our intellectual property may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

If the scope of any patent protection we obtain is not sufficiently broad, or if we lose any of our patent protection, our ability to prevent our competitors from commercializing similar or identical product candidates would be adversely affected.

The patent position of biopharmaceutical companies generally is highly uncertain, involves complex legal and factual questions, and has been the subject of much litigation in recent years. As a result, the issuance, scope, validity, enforceability, and commercial value of our patent rights are highly uncertain. Our pending and future patent applications and those of our licensors may not result in patents being issued which protect our product candidates or which effectively prevent others from commercializing competitive product candidates.

In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. Even if patent applications we own or in-license currently or in the future issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors or other third parties from competing with us, or otherwise provide us with any competitive advantage. Any patents that we own or in-license may be challenged or circumvented by third parties or may be narrowed or invalidated as a result of challenges by third parties. Consequently, we do not know whether our product candidates will be protectable or remain protected by valid and enforceable patents. Our competitors or other third parties may be able to circumvent our patents or the patents of our licensors by developing similar or alternative technologies or products in a non-infringing manner which could materially adversely affect our business and prospects.

Furthermore, our ability to obtain and maintain valid and enforceable patents also depends on whether the differences between our technology and the prior art allow our technology to be patentable over the prior art. Since patent applications in the United States and most other countries are confidential for a period after filing, we may not be certain that we or our licensors are the first to file any patent application related to our drug product candidates or technologies, potentially having a material adverse effect on our business and prospects. This will require us to be to be aware of the possibility of adverse determinations in any such submissions or proceedings, potentially reducing the scope or enforceability of, or invalidate, our patent rights, which would adversely affect our competitive position.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents or the patents of our licensors may be challenged in the courts or patent offices in the U.S. 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 review and inter partes review, or other similar proceedings challenging our owned patent rights. An adverse determination in any such submission, proceeding, or litigation could reduce the scope of, or invalidate or render unenforceable, our patent rights, allow third parties to commercialize our product candidates, 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, our patents or the patents of our licensors may become subject to post-grant challenge proceedings, such as oppositions in a foreign patent office, that challenge our priority of invention or other features of patentability with respect to our patents and patent applications and those of our licensors. 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 product candidates. Such proceedings also may result in substantial cost and require significant time from our scientists and management, even if the eventual outcome is favorable to us. In addition, if the breadth or strength of protection provided by our patents and patent applications or the patents and patent applications of our licensors is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop, or commercialize current or future product candidates.

The validity, scope, and enforceability of any patents that cover a biologic subject to approval by the FDA via a BLA, such as VIP943 and VIP924, can be challenged by third parties.

For biologics subject to approval by the FDA via a BLA, such as VIP943 and VIP924, the BPCIA provides a mechanism for one or more third parties to seek FDA approval to manufacture or sell biosimilar or interchangeable versions of brand name biological products. If a biosimilar applicant successfully challenges our asserted patent claims, it could result in the invalidation of, or render unenforceable, some or all our relevant patent claims or result in a finding of non-infringement. Such litigation or other proceedings to enforce or defend our intellectual property rights are complex in nature, may be very expensive and time-consuming, and may result in unfavorable results that could limit our ability to prevent third parties from competing with our biological product candidates.

We may be involved in lawsuits to protect or enforce our patents or our licensors' patents, which could be expensive, time consuming, and unsuccessful. Further, our issued patents or our licensors' patents could be found invalid or unenforceable if challenged in court.

Competitors may infringe our intellectual property rights. To prevent infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in a patent infringement proceeding, a court may decide that a patent we own or in-license is not valid, is unenforceable, or is not infringed. If we or any of our potential future collaborators were to initiate legal proceedings against a third party to enforce a patent directed at one of our product candidates, the defendant could counterclaim that our patents or the patents of our licensors are invalid or unenforceable in whole or in part.

Third parties may also raise similar invalidity claims before the USPTO or patent offices abroad, even outside the context of litigation, and prior art could render our patents or our licensors' patents invalid. Such mechanisms include re-examination, post-grant review, inter partes review, derivation proceedings, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in the revocation of, cancellation of or amendment to our patents or our licensors' patents in such a way that they no longer cover our current or future product candidates, technologies, or VersAptx platform. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, 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 also no assurance that there is not prior art of which we are aware, but which we do not believe affects the validity or enforceability of a claim in our patents and patent applications or the patents and patent applications of our licensors, which may, nonetheless, ultimately be found to affect the validity or enforceability of a claim.

If a third party 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 current or future product candidates, technologies, or VersAptx platform. In addition, if the breadth or strength of protection provided by our patents and patent applications or the patent and patent applications of our licensors is threatened, it could dissuade companies from collaborating with us to license, develop, or commercialize current or future product candidates. Such a loss of patent protection would have a material adverse impact on our business and prospects. Moreover, the issuance of a patent does not necessarily give us the right to practice the patented invention. Third parties may have blocking

patents that could prevent us from marketing our own patented products and practicing our own patented technologies.

Even if resolved in our favor, litigation or other legal proceedings relating to our intellectual property rights may cause us to incur significant expenses and could distract our technical and management personnel from their normal responsibilities. In addition, such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could compromise our ability to compete in the marketplace. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or other legal proceedings relating to our intellectual property rights, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation or other proceedings.

Intellectual property litigation may lead to unfavorable publicity that harms our reputation and causes the market price of our common stock to decline.

During any intellectual property litigation, there could be public announcements of the initiation of the litigation as well as results of hearings, rulings on motions, and other interim proceedings in the litigation. If securities analysts or investors regard these announcements as negative, the perceived value of our existing products, programs, or intellectual property could be diminished. Accordingly, the market price of shares of our common stock may decline. Such announcements could also harm our reputation or the market for our future products, which could have a material adverse effect on our business and prospects.

Derivation proceedings may be necessary to determine priority of inventions, and an unfavorable outcome may require us to cease using the related technology or to attempt to license rights from the prevailing party.

Derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our licensors. An unfavorable outcome could require us to cease using relevant inventions or to attempt to license rights from the prevailing party. Our business could be harmed if the prevailing party would not offer us a license on commercially reasonable terms. Our defense of derivation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with such proceedings could have a material adverse effect on our ability to raise the funds necessary to continue clinical trials or research programs, license necessary technology from third parties, or enter into development or manufacturing partnerships that would help us bring our product candidates to market.

Changes in U.S. patent law, or laws in other countries, could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.

Obtaining and enforcing patents in the pharmaceutical industry involve a high degree of technological and legal complexity. Changes in either the patent laws or in the interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property, increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents and weaken our ability to obtain new patents or to enforce our existing patents and the patents we might obtain or license in the future.

We may be subject to claims challenging the inventorship or ownership of our licensor's patents, our patents and other intellectual property.

We may also be subject to claims that former employees or other third parties have an ownership interest in our licensor's patents, our patents, or other intellectual property. Litigation or other proceedings may be necessary to defend against these and other claims challenging inventorship or ownership. For example, because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States 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. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. Such an outcome could have a material adverse effect on our business and prospects. Even if we are successful in defending against such claims, litigation could result in substantial costs and distraction to management and other employees.

Patent terms may not protect our competitive position on our product candidates for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent life has expired, we may be open to competition from products of third parties. Given the amount of time required for the development, testing, and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

If we do not obtain patent term extension for our product candidates, our business may be materially harmed.

Depending upon the timing, duration and specifics of FDA marketing approval of our product candidates, one or more of our patents or in-licensed patents may be eligible for limited patent term restoration under the Drug Price Competition and Patent Term Restoration Act of 1984. This Act permits a patent restoration term of up to five years as compensation for patent term lost during product development and FDA regulatory review. A maximum of one patent may be extended per FDA approved product as compensation for the patent term lost during FDA regulatory review. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, and only those claims covering such approved drug product, a method for using it, or a method for manufacturing it may be extended. Patent term extension may also be available in certain foreign countries upon regulatory approval of our product candidates. However, we may not be granted an extension because of, for example, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents, or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or restoration or the term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our revenue could be reduced, possibly materially. Further, if this occurs, our competitors may take advantage of our investment in development and trials by referencing our clinical and preclinical data to launch their product earlier than might otherwise be the case.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting, and defending patents in all countries throughout the world can be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property

rights to the same extent as the laws of the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as in the United States. These products may compete with our product candidates, and our patents, the patents of our licensors, or other intellectual property rights may not be effective or sufficient to prevent them from competing.

The requirements for patentability differ regionally. Some countries limit the enforceability of patents against government agencies or government contractors, while others have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. If we are forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position may be impaired, and our business and prospects may be adversely affected.

The standards applied by the USPTO and foreign patent offices in granting patents are not always applied uniformly or predictably. As such, we do not know the degree of future protection that we will have on our technologies and product candidates. While we will endeavor to protect our technologies and product candidates with intellectual property rights such as patents, the process of obtaining patents is time consuming, expensive, and unpredictable. Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of some countries do not favor patent enforcement and other intellectual property protection, which could make it difficult for us to stop infringement of our patents or our licensors' patents or marketing of competing products in violation of our proprietary rights.

Beginning in March 2023, European patent applicants have the option of participating in the Unitary Patent System ("UPS"), subject to the jurisdiction of the Unitary Patent Court ("UPC"), on an issued patent-by-issued patent, or patent application-by-patent application basis. This new system is a significant change in European patent practice, and the UPC is a new court system, with no established legal precedent, resulting in uncertainty for patent holders and applicants. We will consider, case-by-case, with each individual patent or application, the risks and benefits of participating in the UPS. We will continue to monitor the evolution of the UPS and UPC, especially over the course of its seven-years' transitional period as the new system and the new court gains footing.

Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents or the patents of our licensors at risk of not issuing or being invalidated or interpreted narrowly and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, 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.

Geopolitical actions in the United States and in foreign countries could increase the uncertainties and costs surrounding the prosecution, maintenance, or enforcement of our patent applications or issued patents or those of any current or future licensors. For example, United States and foreign government actions related to Russia's invasion of Ukraine have limited and prevented the filing, prosecution, and maintenance of patent applications and issued patents in Russia, and actions by the Russian government allow Russian companies and individuals to exploit inventions owned by patentees from the United States without consent or compensation. These actions could adversely affect our business.

Obtaining and maintaining our patent protection depends on compliance with various procedural, documentary, fee payment, and other requirements imposed by regulations and governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees, and various other governmental fees on patents and applications will be due to the USPTO and various foreign patent offices at many points over the lifetime of our licensor's patents and applications and those that we own. We rely on our outside patent annuity service to pay these fees when due. Additionally, the USPTO and various foreign patent offices require compliance with many procedural, documentary, fee payment, and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with rules applicable to the relevant jurisdiction. However, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. If such an event were to occur, it could have a material adverse effect on our business.

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 business may be adversely affected.

We use registered and unregistered trademarks or trade names to brand and market ourselves and our products and technologies. Our trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential business partners or customers in our markets of interest. At times, competitors may adopt trade names or trademarks like ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Our efforts to enforce or protect our proprietary rights related to trademarks and trade names may be ineffective and could result in substantial costs and diversion of resources. If we are unable to enforce and protect our trademarks and tradenames and establish name recognition based on our trademarks and trade names, we may not be able to compete effectively, and our business could be adversely affected.

If we are unable to protect the confidentiality of our proprietary information, our business and competitive position would be harmed.

We rely on the protection of our proprietary information, including our technologies and know-how, to maintain our competitive position. Although we have taken steps to protect such information, including entering confidentiality agreements with third parties and confidential information and inventions agreements with employees, consultants, and advisors, we cannot provide any assurances that these parties would not breach such agreements and disclose our proprietary information, and we may not be able to obtain adequate remedies in the event of such breaches. Enforcing claims that a party illegally used or disclosed such information is difficult, expensive, and time-consuming, and the outcome is unpredictable. Moreover, third parties may obtain or come upon this or similar information independently, and we would have no right to prevent them from using that information to compete with us. If any of these events occurs or if we otherwise lose such protection, the value of our proprietary information may be greatly reduced, and our competitive position would be harmed.

We may be subject to claims that we or our employees, agents, or consultants have wrongfully used or disclosed alleged confidential information or trade secrets of third parties.

We have entered and may enter in the future into non-disclosure and confidentiality agreements to protect the proprietary positions of third parties, such as outside scientific collaborators, contract research organizations, third-party manufacturers, consultants, advisors, potential partners, and other third parties. In addition, we may engage employees, agents, and consultants to assist us in the development of our product candidates who were

previously employed at, or have previously provided or are currently providing services to, other pharmaceutical companies, including our competitors or potential competitors. We may become subject to claims or litigation where a third party asserts that we or our employees, agents, or consultants used or disclosed trade secrets or other information proprietary to such third parties. Defense of such matters, regardless of their merit, could involve substantial litigation expense and be a diversion from our business, and we cannot predict whether we would prevail in any such actions. In addition, third parties making claims against us may be able to sustain the costs of complex intellectual property litigation more effectively than we can because they have substantially greater resources. Moreover, intellectual property litigation, regardless of its outcome, may cause negative publicity, result in the disclosure of our confidential information in discovery, and adversely impact our ability to market or otherwise commercialize our product candidates and technologies. Failure to defend against any such claim could subject us to significant liability for monetary damages or prevent or delay our developmental and commercialization efforts, which could adversely affect our business and prospects. Even if we are successful in defending against such claims, such litigation could result in substantial costs and be a distraction to our management team and other employees.

We may need to license intellectual property from third parties, and such licenses may not be available on commercially reasonable terms or at all.

Third parties may hold intellectual property, including patent rights, that are important or necessary to the development or commercialization of our product candidates. in which case we would be required to obtain a license from such third parties on commercially reasonable terms. Such a license may not be available, or it may not be available on commercially reasonable terms. Our business would be harmed if we are not able to obtain such a license on commercially reasonable terms or at all or if a non-exclusive license is offered and our competitors gain access to the same intellectual property rights. In addition, even if we are able to obtain such a license, we may not have control over, nor the ability to provide input with respect to, the prosecution, maintenance, or enforcement of the patents that we license, and our licensors may fail to take the steps that we believe are necessary or desirable in order to obtain, maintain, defend and enforce the licensed patents.

Our business depends significantly on our ability to operate without infringing the patents and other proprietary rights of third parties. Claims by third parties that we infringe their proprietary rights may result in liability for damages or prevent or delay our developmental and commercialization efforts.

Our commercial success depends in part on avoiding infringement of the patents and proprietary rights of third parties. However, our research, development, and commercialization activities may be subject to claims that we infringe or otherwise violate patents or other intellectual property rights owned or controlled by third parties. Other entities may have or obtain patents or proprietary rights that could limit our ability to make, use, sell, offer for sale, or import our current or future product candidates, which could impair our competitive position. There is a substantial amount of litigation and administrative proceedings, both within and outside the United States, involving patent and other intellectual property rights in the biopharmaceutical industry, including patent infringement lawsuits, oppositions, reexaminations, inter partes review proceedings, and post-grant review proceedings. Numerous third-party U.S. and foreign issued patents and pending patent applications exist in the fields in which we are developing product candidates. There may be third party patents or patent applications with claims to materials, formulations, methods of manufacture, or methods for treatment related to the use or manufacture of our product candidates.

As the pharmaceutical industry expands and more patents are issued, the risk increases that our product candidates may be subject to claims of infringement of the patent rights of third parties. Because patent applications are maintained as confidential, until the relevant application is published, we may be unaware of third-party patents that may be infringed by commercialization of any of our product candidates, and we cannot be certain that we were the first to file a patent application related to a product candidate or technology. Moreover, because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that our product candidates may infringe. In addition,

identification of third-party patent rights that may be relevant to our technology is difficult because patent searching is imperfect due to differences in terminology among patents, incomplete databases, and the difficulty in assessing the meaning of patent claims. There is also no assurance that prior art that we do not believe is relevant to our business may, ultimately, be found to limit our ability to make, use, sell, offer for sale, or import our current or future products and impair our competitive position. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. Any claims of patent infringement asserted by third parties would be time consuming and could:

- result in costly litigation that may cause negative publicity or, if we were found to be infringing willfully, result in treble damages;
- require us to enter into royalty or licensing agreements, which may not be available on commercially reasonable terms, or at all, or which might be non-exclusive, which could result in our competitors gaining access to the same technology;
- require us to develop non-infringing technology, which may not be possible on a cost-effective basis or at all;
- cause development delays;
- prevent us from commercializing any of our product candidates until the asserted patent expires or is held finally invalid or not infringed in a court of law;
- subject us to significant liability to third parties; or
- divert the time and attention of our technical personnel and management.

Although no third party has asserted a claim of patent infringement against us as of the date of this report, others may hold proprietary rights that could prevent our product candidates from being marketed. For example, we are aware of issued patents that claim a method of treatment based upon a general mode of action. These claims could be alleged to cover enitociclib in certain treatment indications. While we believe that these patents are difficult to enforce and that we would have valid defenses to these claims of patent infringement, we cannot be certain that we would prevail in any dispute and we cannot be certain how an adverse determination would affect our business.

Parties making claims against us may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Furthermore, because of the large amount of discovery required in connection with intellectual property litigation or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have material adverse effect on our ability to raise capital or otherwise have a material adverse effect on our business.

If we were to pursue invalidity proceedings with respect to third-party patents, the outcome following legal assertions of invalidity would be unpredictable. Even if resolved in our favor, these legal proceedings could distract our technical and management personnel from their normal responsibilities and may cause us to incur significant expenses, which could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing, or distribution activities. In addition, we may not have sufficient financial or other resources to conduct such proceedings adequately. Some of these third parties may be able to sustain the costs of such proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent proceedings could compromise our ability to compete in the marketplace. If we fail to prevail in any such patent proceedings, such third parties may assert a claim of patent infringement directed at our technologies or product candidates, which could have a material adverse effect on our business.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business. For example:

- others may be able to develop products that are similar to our product candidates but that are not covered by the claims of the patents that we own or license;
- we or our licensors or collaborators might not have been the first to file patent applications covering certain of our inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that the pending patent applications we own or license will not lead to issued patents;
- issued patents that we own or license may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- 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 products for sale in our major commercial markets;
- the patents of others may have an adverse effect on our business; and
- we may choose not to file a patent to maintain certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property.

Should any of these events occur, it could significantly harm our business.

Risks Related to Operating as a Public Company

If we are not able to maintain compliance with the continued listing requirements of The Nasdaq Capital Market, our common stock may be delisted, which could negatively impact the liquidity and price of our common stock, our ability to complete a business combination or access the capital markets, and the confidence of investors and others.

On September 14, 2023, we received written notice from The Nasdaq Stock Market LLC ("Nasdaq") that the closing bid price of our common stock for the prior 30 consecutive business days was lower than the minimum bid price requirement of $1.00 per share. On January 12, 2024, we received written notice from Nasdaq that we had regained compliance with the minimum bid price requirement.

On May 22, 2024, we received a subsequent notice from Nasdaq that based upon the closing bid price of our shares of common stock for the prior 30 consecutive business days was again lower than the minimum bid price requirement In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we were provided with a period of 180 calendar days, to November 18, 2024, to regain compliance with the minimum bid price requirement. On November 14, 2024, we submitted a request to Nasdaq for an additional 180-day extension to May 19, 2025 to regain compliance with the minimum bid price requirement, which request was granted on November 19, 2024. On January 27, 2025, we effected a 1-for-20 reverse stock split. On February 11, 2025, we received written notice from Nasdaq that we had regained compliance with the minimum bid price requirement.

Although we have regained compliance with the Nasdaq minimum bid price requirement, as of the date of this report, our common stock is trading below $1.00 per share. Because we have effected a reverse stock split within the past year, if our common stock fails to meet the minimum bid price requirement, our common stock will be delisted unless we submit a timely request for a delisting hearing, and are granted a stay of delisting until the conclusion of the hearing process. There can be no assurance that we will be able to continue to maintain

compliance with the Nasdaq continued listing requirements or achieve a stay of delisting, and if we fail to do so and Nasdaq delists our common stock, we could face material adverse consequences, including:

- limited availability of market quotations and decreased liquidity for our common stock, resulting in a decline in the trading price of our common stock;
- adverse impact on the ability of stockholders to sell our common stock;
- limited news and analyst coverage and negative publicity; and
- decreased ability to raise capital and potential loss of confidence by investors, suppliers, customers, collaborators, and employees.

As a public company, we face significant expenses and administrative burdens, which could have an adverse effect on our business, financial condition, and results of operations.

As a public company, we face significant legal, accounting, administrative, and other costs and expenses. The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the Public Company Accounting Oversight Board, the securities exchanges, and the rules and regulations thereunder impose additional reporting and other obligations on public companies. Compliance with public company requirements results in significant costs and makes certain activities more time-consuming, including expenses associated with SEC reporting requirements. In addition, if any issues in complying with those requirements are identified (for example, if the auditors identify a material weakness or significant deficiency in our internal control over financial reporting), we could incur additional costs in rectifying those issues, and the existence of those issues could adversely affect our reputation or investor perceptions of us and also increase our costs of obtaining director and officer liability insurance. Risks associated with our status as a public company may make it more difficult to attract and retain qualified persons to serve on our board of directors or as executive officers. The reporting and other obligations imposed by these rules and regulations increase our legal and financial compliance costs and the costs of related legal, accounting, and administrative activities. These costs require us to divert a significant amount of money that could otherwise be used to expand our business and achieve our strategic objectives. Advocacy efforts by stockholders and third parties may also prompt additional changes in governance and reporting requirements, which could further increase costs.

We are an "emerging growth company" within the meaning of the Securities Act, and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our stock less attractive to investors.

We are an emerging growth company, as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies," including exemption from compliance with the auditor attestation requirements of Section 404, reduced disclosure obligations regarding executive compensation, 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 will cease to be an emerging growth company on the date that is the earliest of (a) the last day of the fiscal year in which we have total annual gross revenue of $1.235 billion or more, (b) December 31, 2025, the last day of our fiscal year following the fifth anniversary of the date of the completion of our initial public offering, (c) the date on which we have issued more than $1.0 billion in nonconvertible debt during the previous three years, or (d) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

In addition, under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. Even after we no longer qualify as an emerging growth company, we may still qualify as a "smaller reporting

company," which would allow us to take advantage of many of the same exemptions from disclosure requirements, including exemption from compliance with the auditor attestation requirements of Section 404 and reduced disclosure obligations regarding executive compensation in this report and our periodic reports and proxy statements.

We cannot predict if investors will find our common stock less attractive because we may 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 our common stock, and the market price of our common stock may be more volatile.

Our failure to timely and effectively implement controls and procedures required by Section 404(a) of the Sarbanes-Oxley Act could have a material adverse effect on our business.

As a public company, we will be required to provide management's attestation on internal controls in the future under Section 404(a) of the Sarbanes-Oxley Act. Management may not be able to effectively and timely implement controls and procedures that adequately respond to these increased regulatory compliance and reporting requirements. If we are not able to implement the additional requirements of Section 404(a) in a timely manner or with adequate compliance, we may not be able to assess whether our internal controls over financial reporting are effective, which may subject us to adverse regulatory consequences and could harm investor confidence and the market price of our common stock.

Any material weaknesses in or other inability to maintain effective internal control over financial reporting could adversely affect our ability to report our results of operations and financial condition accurately and in a timely manner.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with GAAP. Our management is likewise required, on a quarterly basis, to evaluate the effectiveness of our internal controls and to disclose any changes and material weaknesses identified through such evaluation in those internal controls. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. We have in the past and may in the future determine that there are material weaknesses in our internal control over financial reporting. Any material weaknesses or other inability to maintain effective internal control over financial reporting could adversely impact our ability to report our financial position and results of operations on a timely and accurate basis. If our consolidated financial statements are not accurate, investors may not have a complete understanding of our operations and may lose confidence in our financial reporting and our business, reputation, results of operations, liquidity, financial condition, stock price, and ability to access the capital markets could be adversely affected. In addition, we may be unable to maintain or regain compliance with applicable securities laws, stock market listing requirements, and covenants regarding the timely filing of periodic reports, we may be subject to regulatory investigations and penalties, and we may face claims invoking the federal and state securities laws. Any such litigation or dispute, whether successful or not, could have a material adverse effect on our business and prospects.

General Risk Factors

Our stock price has been volatile and our stock has been thinly traded, and you may not be able to sell shares of our common stock at or above the price you paid.

The trading price of our common stock has been volatile and is subject to wide fluctuations. Since the completion of the LSAC Business Combination, our common stock has been thinly traded. As a result of the low trading volume of our common stock, the trading of relatively small quantities of shares by our stockholders

could disproportionately influence the market price of our common stock in either direction. The price for our shares could, for example, decline significantly in the event that a large number of shares of our common stock are sold on the market without commensurate demand, as compared to an issuer with a higher trading volume that could better absorb those sales without an adverse impact on its stock price.

There are numerous factors that can influence our stock price volatility and trading volume, some of which are beyond our control. These factors could include:

- our ability to develop or commercialize products;
- results of our clinical trials and nonclinical studies;
- our capital levels, capital requirements and capital raising activities, including issuances of securities or the incurrence of debt;
- our ability to enter into and maintain collaboration arrangements;
- actual or anticipated fluctuations in our financial results or the financial results of companies perceived to be similar;
- changes in the market's expectations about our operating results;
- success of competitors;
- our operating results failing to meet the expectation of securities analysts or investors in a particular period;
- changes in financial estimates and recommendations by securities analysts concerning us or the oncology industry in general;
- operating and share price performance of other companies that investors deem comparable to us;
- changes in laws and regulations affecting our business;
- our ability to meet compliance requirements and obtain regulatory approvals;
- our ability to obtain and maintain proprietary protection for our current and future product candidates;
- commencement of, or involvement in, litigation involving us;
- the volume of shares of our common stock available for public sale;
- any major change in our board of directors or management;
- sales of shares of common stock by our directors, executive officers, or significant stockholders, or the perception that such sales could occur; and
- general economic and political conditions such as recessions, interest rates, inflation, fuel prices, international currency fluctuations and acts of war or terrorism.

In addition, 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, particularly those in the biotechnology industry. These fluctuations have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry factors, as well as general economic, political, regulatory, and market conditions, may negatively affect the market price of our common stock, regardless of our actual operating performance.

Volatility in our stock price could subject us to securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biotechnology companies have

experienced significant stock price declines and volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business and prospects.

If securities or industry analysts do not publish research or reports about us, or publish negative reports, our stock price and trading volume could decline.

The trading market for our common stock will depend, in part, on the research and reports that securities or industry analysts publish about us. We do not have any control over these analysts. If our operating results fail to meet analyst estimates or one or more of the analysts who cover us downgrade our common stock or change their opinion, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our stock price or trading volume to decline.

Future sales of shares of our common stock may depress the market price of our common stock.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. As of December 31, 2024, we had outstanding warrants to purchase an aggregate of approximately 1,810,000 shares of common stock (adjusted to give effect to the 1-for-20 reverse stock split). Additionally, up to 200,000 Earnout Shares (adjusted to give effect to the 1-for-20 reverse stock split) may be issued in connection with the LSAC Business Combination, provided that certain conditions are met. To the extent that any of the warrants are exercised or otherwise converted into shares of our common stock or conditions to receive Earnout Shares are met, additional shares of our common stock will be issued, which will result in dilution to the holders of our common stock and increase the number of shares eligible for sale in the public market. Sales, or potential sales, of substantial numbers of shares in the public market could increase the volatility of, or adversely affect, the market price of our common stock.

Our Certificate of Incorporation provides, subject to limited exceptions, that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for certain stockholder litigation matters, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees, or stockholders.

Our Certificate of Incorporation requires, to the fullest extent permitted by law, that derivative actions brought in our name, actions against directors, officers, and employees for breach of fiduciary duty, and other similar actions may be brought solely and exclusively in the Court of Chancery in the State of Delaware or, if that court lacks subject matter jurisdiction, another federal or state court situated in 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 consented to the forum provisions in our Certificate of Incorporation. In addition, our Certificate of Incorporation and our Bylaws provide that the federal district courts of the United States shall be the exclusive forum for the resolution of any complaint asserting a cause of action under the Securities Act and the Exchange Act. In March 2020, the Delaware Supreme Court found that an exclusive forum provision providing for claims under the Securities Act to be brought in federal court is facially valid under Delaware law. We intend to enforce this provision, but we do not know whether courts in other jurisdictions will agree with this decision or enforce it.

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 any of our directors, officers, other employees, or stockholders, which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the choice of forum provision contained in our Certificate of Incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business and prospects.

We have never paid dividends on our capital stock and we do not anticipate paying dividends in the foreseeable future.

We have never paid dividends on any of our capital stock and currently intend to retain any future earnings to fund the growth of our business. In addition, we may enter into credit agreements or other borrowing arrangements in the future that will restrict our ability to declare or pay cash dividends on our common stock. Any determination to pay dividends in the future will be at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, general business conditions, and other factors that our board of directors may deem relevant. As a result, capital appreciation, if any, of our common stock will be the sole source of gain for the foreseeable future.

ITEM 1B. Unresolved Staff Comments.

None.

ITEM 1C. Cybersecurity.

Risk Management and Strategy

We have developed and implemented a cybersecurity policy for assessing, identifying, and managing material risks from cybersecurity threats and have integrated this policy into our overall risk management framework and policies. This policy applies to all of our employees, contractors, and consultants, and any other users who have permanent or temporary access to our data and systems, regardless of their location, device, or network, and all of our employees, contractors, consultants and other users are expected to read, understand, and adhere to this policy and its associated processes and procedures.

Our cybersecurity policy also encompasses the risks associated with our use of third-party service providers. We conduct assessments of our third-party service providers before engagement and maintain ongoing monitoring intended to ensure compliance with our cybersecurity standards.

We are subject to various cybersecurity risks that could adversely affect our business, financial condition, and results of operations, including intellectual property theft; fraud; extortion; harm to employees, customers, or patients; violation of privacy laws; and litigation, legal, and reputational risk. We have implemented an approach to identify and assess the threats and vulnerabilities that could affect our data and systems. Our policy is aligned with industry standards and best practices, such as the National Institute of Standards and Technology's ("NIST") Cybersecurity Framework Standard (800-53 -Security and Privacy Controls for information Systems and Organizations).

Supporting technologies, processes, and procedures under our cybersecurity policy include the following:

- identification, credential/authentication, and access management for all users prior to accessing any data and systems;
- encryption of all data at rest and in transit for all devices and cloud services;
- firewalls, antivirus software, security traffic inspections, and other endpoint protection and monitoring tools and techniques;
- automatic updates and patches of all software and systems regularly and fix of all known or reported bugs or vulnerabilities promptly;
- data loss prevention through regular backup of all data and systems and storage of backups in secure and separate locations;
- cybersecurity awareness training for users to educate them on our policy and procedures as well as best practices, potential vulnerabilities, and common threats and promote a culture of cybersecurity risk management;
- cybersecurity incident response plans that include procedures for analyzing, reporting, and responding to cybersecurity incidents; and
- third-party risk management procedures for service providers, suppliers, and vendors.

We have security personnel to monitor our data and technology infrastructure, report and respond to cybersecurity incidents, work with users, and report to management and the audit committee. We also maintain a cybersecurity risk insurance policy.

We have not encountered any cybersecurity incidents that have materially affected our business, results of operations, or financial condition.

Governance

Our board of directors considers cybersecurity risk as part of its overall risk oversight function and has delegated that oversight role to the audit committee. The audit committee oversees the implementation of our cybersecurity risk management under the cybersecurity policy.

The audit committee receives reports from management on our cybersecurity risks, controls, tools, and incidents. The audit committee reports to the full board of directors regarding its activities, including those related to cybersecurity.

Our Director, IT, SaaS Applications Management, Enterprise Collaboration, has primary responsibility for developing and implementing our cybersecurity policy and procedures and assessing, monitoring, and managing the prevention, detection, mitigation, and remediation of our cybersecurity risks and incidents. He has served in various roles in information technology and information security for over 20 years.

ITEM 2. Properties.

Our corporate office is located in San Mateo, California, which we lease on a month-to-month basis. Vincerx Pharma GmbH, our wholly owned German subsidiary, leases space in Monheim am Rhein, Germany. We do not own any real property. We believe that our office space is adequate to meet our current needs and that additional facilities will be available on commercially reasonable terms should future requirements arise.

ITEM 3. Legal Proceedings.

We are not currently a party to any legal proceedings, and are not aware of any pending or threatened legal proceedings against us that we believe could have a material adverse effect on our business, operating results or financial condition. We may from time to time become involved in legal proceedings arising in the ordinary course of business.

ITEM 4. Mine Safety Disclosures.

Not applicable.

PART II

ITEM 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Our common stock is listed on the Nasdaq Capital Market under the symbol "VINC."

As of March 21, 2025, there were 8 holders of record of our common stock and 2 holders of record of our warrants. These numbers exclude holders whose stock or warrants are held in "street name" by brokers.

We have not paid any cash dividends on our common stock to date. We may retain future earnings, if any, for future operations, expansion and debt repayment and have 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 future outstanding indebtedness we or our subsidiaries may incur. We do not anticipate declaring any cash dividends to holders of the common stock in the foreseeable future.

ITEM 6. [Reserved].

ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis should be read in conjunction with our audited consolidated financial statements and related notes appearing elsewhere in this report. This discussion may contain forward-looking statements based on current expectations that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth in the section titled "Risk Factors" as set forth in this report. Historical results are not necessarily indicative of future results. Unless the context otherwise requires, references in this "Management's Discussion and Analysis of Financial Condition and Results of Operations" to "Vincerx", the "Company", "we", "us" and "our" refer to the business and operations of Vincerx and its subsidiaries.

Overview

We are a clinical-stage biopharmaceutical company. Our current pipeline is entirely derived from the Bayer License Agreement, pursuant to which we have been granted an exclusive, royalty-bearing, worldwide license under certain Bayer patents and know-how to develop, use, manufacture, commercialize, sublicense, and distribute (i) a versatile and adaptable bioconjugation platform, now referred to as the VersAptx platform, including next-generation ADCs VIP943, in Phase 1 trials, and VIP924, in preclinical studies, and VIP236, an SMDC, on Phase 1 trials, and (ii) a small molecule drug program, including enitociclib, a P-TEFb/CDK9 inhibitor in an NIH-sponsored Phase 1 trial.

We previously announced that we are exploring strategic alternatives, including out-licensing, merger and acquisition opportunities (including reverse mergers), the sale of assets and technologies, and winding down operations. In the fourth quarter of 2024, we executed a series of workforce reductions to streamline operations and control ongoing costs as we pursue strategic alternatives. In March 2025, we announced that we had entered into a non-binding Letter of Intent for a Proposed Business Combination with QumulusAI. Regardless of whether the Proposed Business Combination is consummated, the Company is continuing to pursue monetizing its assets. There can be no assurances that its efforts will be successful. If its efforts are not successful and the Proposed Business Combination is not consummated for any reason, the Company will need to reassess strategic alternatives available at that time, which again could include, depending on the circumstances, out-licensing, merger and acquisition opportunities (including reverse mergers), the sale of assets and technologies, and winding down operations.

Unless specifically noted or the context clearly requires otherwise, all information in this section relates to the Company without regard to the Proposed Business Combination.

Reverse Stock Split

In January 2025, stockholders approved, and the Company effected, a 1-for-20 reverse stock split. All share and per-share data have been retroactively adjusted throughout this report to account for this reverse stock split. Proportionate adjustments have been made to the number of shares of common stock underlying our outstanding equity awards and warrants, the number of shares issuable under our equity incentive plans, and other existing agreements, as well as the exercise price. The reverse stock split does not affect the par value of the common stock.

License Agreement with Bayer

Following the closing of the LSAC Business Combination, we paid Bayer a $5.0 million upfront license fee under the Bayer License Agreement. In addition, we are responsible for significant development and commercial milestone payments to Bayer as well as royalties on commercial sales. As of December 31, 2022, we recorded a $1.0 million development milestone payable to Bayer, which was subsequently paid, in connection with our IND filing for VIP236. As of December 31, 2023, we paid another $1.0 million development milestone to Bayer in connection with our IND filing for VIP943. The size and timing of future milestone payments will vary greatly depending on factors such as the particular licensed product, whether it involves a P-TEFb licensed product or a bioconjugation licensed product (and which bioconjugation program), the number of distinct disease indications, the number of different countries with respect to which the milestone is achieved and the level of net commercial sales, and it is therefore difficult to estimate the total payments that could become payable to Bayer and when those payments would be due. If we were to achieve all of the milestones for each of the countries and disease indications, we would be obligated to pay development and commercial milestone payments that range from $110.0 million to up to $318.0 million per licensed product, and upon successful commercialization of at least five licensed products, we could be required to pay aggregate milestone payments in excess of $1.0 billion. We will be required to pay certain of these milestone payments prior to the time at which we are able to generate sufficient revenue, if any, from commercial sales of any of our product candidates. In addition to milestone payments, we are also required to pay Bayer under the Bayer License Agreement ongoing royalties in the single digit to low double-digit percentage range on net commercial sales of licensed products. See “Business—Bayer License Agreement”.

Basis of Presentation

We currently conduct our business through one operating segment. As a pre-revenue company with no commercial operations, our activities to date have been limited and were conducted primarily in the United States. Our historical results are reported under U.S. GAAP and in U.S. dollars.

Components of Results of Operations

We are a research and development stage company, and our historical results may not be indicative of our future results, if any, for reasons that may be difficult to anticipate. Accordingly, the drivers of our future financial results, as well as the components of such results, may not be comparable to our historical results of operations.

Revenue

To date, we have not recognized any revenue from any sources, including from product sales, and we do not expect to generate any revenue from the sale of products in the foreseeable future or at all. If our development efforts for our product candidates are successful and result in regulatory approval or license agreements with third parties, we may generate revenue in the future from product sales. However, there can be no assurance as to when we will generate such revenue, if at all.

Research and Development Expense

Research and development expenses consist of preclinical development of our product candidates and discovery efforts (including preclinical studies), manufacturing, preparing for and conducting clinical trials, and activities related to regulatory filings for our product candidates. Research and development expenses are recognized as incurred and payments made prior to the receipt of goods or services to be used in research and development are capitalized until the goods or services are received. Costs incurred in obtaining technology licenses through asset acquisitions are charged to research and development expense if the licensed technology has not reached technological feasibility and has no alternative future use. Research and development expenses include or could include:

- personnel-related expenses, including salaries, bonuses, consulting fees, benefits, stock-based compensation, and other related costs for those employees and other personnel involved in research and development efforts;
- external research and development expenses incurred under agreements with clinical research organizations, investigative sites, and consultants to conduct preclinical studies and clinical trials;
- costs related to manufacturing material for preclinical studies and clinical trials, including fees paid to contract manufacturing organizations;
- laboratory supplies and research materials;
- costs related to compliance with regulatory requirements; and
- facilities, depreciation, and other allocated expenses, which include direct and allocated expenses for rent, maintenance of facilities, insurance, and equipment.

We do not currently track our research and development expenses on a program-by-program basis as such costs are deployed across multiple programs under development. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. To the extent we continue our clinical trials, our future research and development expenses with respect to such clinical trials may vary significantly each period based on factors such as:

- expenses incurred to conduct such clinical trials;
- per patient clinical trial costs, including based on the number of doses that patients receive and the cost of drug products for combination therapies;
- the number of patients who enroll in each clinical trial;
- the number of clinical trials required for approval;
- the number of sites included in the clinical trials;
- the countries in which the clinical trials are conducted;
- the length of time required to enroll eligible patients;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring requested by regulatory agencies;
- the duration of patient participation in the clinical trials and follow-up;
- the phase of development of the product candidate;
- third party contractors failing to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- the cost of insurance, including product liability insurance, in connection with clinical trials;

- the availability of capital;
- regulators or institutional review boards requiring that we or our investigators suspend or terminate clinical development for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks; and
- the efficacy and safety profile of our product candidates.

General and Administrative Expenses

General and administrative expenses consist principally of salaries, consulting fees, and related costs for personnel in executive and administrative functions, including stock-based compensation, travel expenses, and recruiting expenses. Other general and administrative expenses include professional fees for legal, accounting, and tax-related services and insurance costs.

Change in Fair Value of Warrant Liabilities

Certain of our legacy warrants are classified as liabilities pursuant to ASC 815-40, Derivatives and Hedging—Contracts in Entity's Own Equity. The change in fair value of warrant liabilities consists of the change in fair value of these legacy warrants.

Results of Operations

Comparison of the Years Ended December 31, 2024 and 2023

The following table sets forth our historical operating results for the periods indicated (amounts in thousands):

	For the years ended December 31,		
	2024	2023	Amount Change
Operating expenses:			
General and administrative	$ 15,977	$ 13,636	$ 2,341
Research and development	15,486	28,973	(13,487)
Total operating expenses	31,463	42,609	(11,146)
Loss from operations	(31,463)	(42,609)	11,146
Other income (expense)			
Change in fair value of warrant liabilities	183	(47)	230
Interest income	472	1,251	(779)
Other income (expense)	734	1,248	(514)
Total other income (expense)	1,389	2,452	(1,063)
Net loss	**$(30,074)**	**$(40,157)**	**$ 10,083**

Research and Development

Research and development expenses decreased by $13.5 million for the year ended December 31, 2024 compared to the year ended December 31, 2023. This decrease is primarily the result of decreases in research services of approximately $7.9 million, manufacturing services associated with our ADC program of approximately $4.7 million, and personnel related expenses of approximately $1.2 million, partially offset by an increase in clinical related expenses of approximately $1.4 million.

General and Administrative

General and administrative expenses increased by approximately $2.3 million for the year ended December 31, 2024 compared to the year ended December 31, 2023 primarily as a result of approximately $2.4 million in severance expenses associated with our workforce reduction in December 2024.

Change in Fair Value of Warrant Liabilities

The change in fair value of warrant liabilities for the year ended December 31, 2024 compared to the prior year was primarily due to the decrease in the closing price of our common stock from $23.60 per share as of December 31, 2023 to $5.26 per share as of December 31, 2024, resulting in a $0.2 million gain in 2024.

Interest Income

Interest income is primarily comprised of interest income and gains or losses realized on cash, cash equivalents and marketable securities. The decrease in interest income from $1.3 million for the year ended December 31, 2023 to $0.5 million for the year ended December 31, 2024 is a result of our declining portfolio of cash equivalents and marketable securities.

Other Income (Expense)

Other income (expense) is primarily comprised of estimated grant income of approximately $0.7 million earned in connection with our research activities conducted at our German subsidiary, partially offset by foreign currency transaction gains and losses related to certain transactions with European third-party vendors.

Liquidity and Capital Resources

Net working capital decreased from the year ended December 31, 2023 to the year ended December 31, 2024 by $8.0 million (to $1.1 million from $9.1 million) primarily as a result of cash used in operations of $26.1 million in fiscal 2024, partially offset by cash generated from financing activities of $18.0 million.

To date, we have not generated any revenue from any source, including the commercial sale of approved drug products. We do not know when, or if, we will generate any revenue from our product candidates.

As of December 31, 2024, and March 21, 2025, we had approximately $5.0 million and $4.7 million, respectively, in cash. Based on our current business plans and assumptions, we believe that our existing capital resources will be sufficient to fund our expenses and capital requirements into the third quarter of 2025, which current estimate includes net proceeds of approximately $3.9 million received from “at-the-market” offerings during the first quarter of 2025. We intend to use our existing capital resources to continue to fund our operations, including our public company costs and expenses associated with completing the Proposed Business Combination or other alternatives, to seek to monetize our existing assets, and for working capital and other general corporate purposes. Our estimate as to how long we expect our existing capital to be able to fund our operating expenses and capital requirements is based on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Changing circumstances, some of which may be beyond our control, could result in less cash available to us or cause us to consume capital significantly faster than we currently anticipate, and we may need or choose to seek additional funds sooner than planned.

The failure to raise additional capital as and when needed or on acceptable terms would have a negative impact on our financial condition and the ability to pursue our business strategy, and we may have to further reduce our workforce or delay, reduce the scope of, suspend, or eliminate one or more preclinical programs, clinical trials, or partnering and/or commercialization efforts, or curtail or cease our operations. We have concluded that uncertainties associated with our ability to obtain additional capital raise substantial doubt about our ability to continue as a going concern for a period of one year after the date that our consolidated financial statements are issued.

Our future funding requirements will depend on many factors, including, but not limited to:

- the costs and timing of expenses related to our assessment and pursuit of strategic alternatives;
- the costs and timing of development expenses associated with our product candidates;
- the timing and amount of any milestone and royalty payments to Bayer under the Bayer License Agreement;
- the extent to which we are able to enter into collaboration or other agreements that provide us with additional capital resources;
- our headcount and associated costs;
- the costs and timing of preparing, filing, and prosecuting patent applications, maintaining and enforcing our intellectual property rights, and defending any intellectual property-related claims; and
- the costs of operating as a public company.

Capital may not be available to us on acceptable terms, or at all. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our stockholders, and the terms of these equity securities or this debt may restrict our ability to operate. Any future debt financing and equity financing, if available, may involve covenants limiting and restricting our ability to take specific actions. If we raise additional funds through collaborations, strategic alliances, or marketing, distribution, or licensing arrangements with third parties, we may be required to relinquish valuable rights to our technologies, future revenue streams, research programs, or product candidates or to grant licenses on terms that may not be favorable to us.

Contractual Obligations and Commitments

Leases

On December 23, 2020, we entered into a five-year term lease agreement which commenced on January 1, 2021. In April and May 2021, the lease was amended to include additional space. The annual rent payments are approximately $1.2 million.

Effective July 2022, we subleased substantially all of our unused office space for a term of 18 months at a base rent of $50,000 per month. In January 2024, the sublease was extended to include additional space for an additional 24 months at a base rent of approximately $50,000 per month. Such payments received in the years ended December 31, 2024 and December 31, 2023 were approximately $0.6 million each year. During the fourth quarter of 2024 , the Company further streamlined its operations and significantly reduced its workforce. In connection with this workforce reduction, the Company terminated its lease effective December 31, 2024. In consideration for this early termination, the Company relinquished the original deposit of approximately $82,000 as well as the $50,000 deposit received from the sublessor to the landlord. The Company recorded a gain of approximately $95,000 from early termination of the lease, recorded in other income (expense), net in the consolidated statements of operations included elsewhere in this report.

Cash Flows

The following table provides a summary of our cash flow data for the periods indicated (amounts in thousands):

	For the years ended December 31,	
	2024	2023
Net cash used in operating activities	$(26,127)	$(40,453)
Net cash provided by investing activities	$ 212	$ 41,500
Net cash provided by financing activities	$ 17,992	$ 114

Cash Flows from Operating Activities

Our cash flows used in operating activities to date have been primarily comprised of payroll and professional service fees related to manufacturing, preclinical development and studies, clinical trials, and general and administrative activities. To the extent that we continue our clinical trials of, and seek marketing approval for, our product candidates, we expect our cash used in operating activities to continue before we generate any material cash flows from our business.

Net cash used in operating activities was approximately $26.1 million for the year ended December 31, 2024 compared to $40.5 million for the year ended December 31, 2023. Significant components of our cash used in operating activities consist primarily of payments to clinical and manufacturing service providers, payroll costs, and third-party professional services in connection with our clinical trials. Our net loss during the year ended December 31, 2024 was approximately $30.1 million, which included approximately $3.5 million related to stock-based compensation.

Cash Flows from Investing Activities

Cash provided by investing activities was $0.2 million for the year ended December 31, 2024, consisting of sales and maturities of marketable securities of approximately $11.7 million used to fund our operating activities, offset by purchases of approximately $11.5 million. Cash provided by investing activities was $41.5 million for the year ended December 31, 2023, consisting of sales and maturities of marketable securities of approximately $53.3 million used to fund our operating activities, offset by purchases of approximately $11.8 million.

Cash Flows from Financing Activities

Net cash provided by financing activities was $18.0 million and $0.1 million for the years ended December 31, 2024 and December 31, 2023, respectively.

In March 2024, we entered into a Sales Agreement, which provided for the issuance and sale by us of shares of common stock in “at-the-market” offerings having an aggregate offering price of up to $50.0 million. As of December 31, 2024, we sold an aggregate of 106,042 shares of our common stock at an average price of $23.34 per share, resulting in net proceeds of approximately $2.2 million, after paying commissions and offering expenses of approximately $0.2 million. This agreement was terminated effective January 10, 2025.

On April 30, 2024, we closed an underwritten public offering of (i) 0.3 million shares of our common stock and accompanying warrants to purchase up to 0.3 million shares of common stock, and (ii) to certain investors, pre-funded warrants to purchase up to an aggregate of 0.8 million shares of common stock and accompanying common stock warrants to purchase up to 0.8 million shares of common stock. Each share of common stock was sold together with an accompanying common stock warrant at a combined offering price of $15.00, and each pre-funded warrant was sold together with an accompanying common stock warrant at a combined offering price of $14.998, which is equal to the combined offering price per share of common stock and accompanying common stock warrant less the $0.002 exercise price of each pre-funded warrant. We received net proceeds of approximately $14.8 million from this offering, after deducting underwriting discounts and commissions and offering expenses of approximately $0.7 million.

We entered into a definitive securities purchase agreement dated December 26, 2024 for the purchase, in a registered direct offering, of an aggregate of (i) 140,812 shares of common stock and accompanying common stock warrants to purchase 281,625 shares of common stock at a combined offering price of $3.68, and (ii) for certain purchasers, in lieu of common stock, pre-funded warrants to purchase 131,791 shares of common stock and accompanying common stock warrants to purchase 263,582 shares of common stock at a combined offering price of $3.66, which is equal to the combined offering price per share of common stock and accompanying common warrant less the $0.02 exercise price of each pre-funded warrant. The offering closed on December 27, 2024. We received net proceeds of approximately $0.9 million from this offering, after deducting offering expenses of approximately $0.1 million.

Off-Balance Sheet Arrangements

We are not a party to any off-balance sheet arrangements, as defined under SEC rules.

Critical Accounting Estimates

Our consolidated financial statements have been prepared in accordance with GAAP. In the preparation of these consolidated financial statements, the management is required to use judgment in making estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the date of the consolidated financial statements, as well as the reported expenses incurred during the reporting periods.

We consider an accounting judgment, estimate, or assumption to be critical when (1) the estimate or assumption is complex in nature or requires a high degree of judgment, and (2) the use of different judgments, estimates, and assumptions could have a material impact on the consolidated financial statements. Our significant accounting policies are described in Note 2 to our consolidated financial statements included elsewhere in this report. The critical accounting estimates are described below.

Research and Development

Research and development expenses may consist primarily of salaries, consulting fees, benefits, and other related costs and expenses, including stock-based compensation, in connection with preclinical development of our product candidates and discovery efforts (including conducting preclinical studies), manufacturing development efforts, preparing for and conducting clinical trials, and activities related to regulatory filings for our product candidates. In addition, research and development expenses may include payments to Bayer and other third parties for the development of our product candidates and the estimated fair value for the issuance of equity for the license rights to products in development (prior to marketing approval). Expenses related to clinical trials may be primarily related to activities at contract research organizations that design, gain approval for, and conduct clinical trials on our behalf. Such amounts are then recognized as an expense as the related goods are delivered or the services are performed.

Contingent Milestone Payments

As described above, we will be responsible for significant payments to Bayer under the Bayer License Agreement. We will be responsible to Bayer for significant future contingent payments under the Bayer License Agreement upon the achievement of certain development, regulatory, and commercial sales milestones. The size and timing of these milestone payments will vary greatly depending on numerous factors outlined above.

The transactions provided for under the Bayer License Agreement will be accounted for as an asset acquisition. Contingent consideration in an asset acquisition is generally recognized when it is probable that a liability has been incurred, and the amount can be reasonably estimated. In connection with the successful filing of our IND for VIP943 in August 2023, we made a $1.0 million development milestone payment to Bayer under the Bayer License Agreement. No further milestone payments are probable, and no further liabilities had been incurred as of the date of this filing.

Income Taxes

Income taxes are recorded in accordance with ASC 740, Income Taxes, or ASC 740, which provides for deferred taxes using an asset and liability approach. We recognize deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the consolidated financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse, and net operating loss carryforwards and research and development tax credit

carryforwards. Valuation allowances are provided if based upon the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. We have recorded a full valuation allowance to reduce our net deferred income tax assets to zero. In the event we were to determine that we would be able to realize some or all of our deferred income tax assets in the future, an adjustment to the deferred income tax asset valuation allowance would increase income in the period such determination was made.

Stock-Based Compensation

We recognize the cost of share-based awards granted to employees, non-employees, and directors based on the estimated grant-date fair value of the awards. Cost is recognized on a straight-line basis over the service period, which is generally the vesting period of the award. We reverse previously recognized costs for unvested options in the period that forfeitures occur. We determine the fair value of stock options using the Black-Scholes option pricing model, which is impacted by the following assumptions:

- *Expected Term*—We use the simplified method when calculating the expected term due to insufficient historical exercise data.
- *Expected Volatility*—Given the limited market trading history of our common stock, volatility is based on a benchmark of comparable companies within the biopharmaceutical industry.
- *Expected Dividend Yield*—We have never paid any cash dividends on common stock and do not anticipate doing so in the foreseeable future.
- *Risk-Free Interest Rate*—The interest rates used are based on the implied yield available on U.S. Treasury zero-coupon issues with an equivalent remaining term equal to the expected life of the award.

Legacy Common Stock Warrant Liabilities

As of December 31, 2024, there were 3,295,000 legacy warrants to purchase common stock outstanding. Any discussion in this Annual Report with respect to the legacy warrants does not give effect to the Company's 1-for-20 reverse stock split effected in January 2025.

The legacy warrants are exercisable on the basis of 20 warrants for one share of common stock at an aggregate exercise price of $230 per share and will be exercisable for cash (even if a registration statement covering the shares of common stock issuable upon exercise of such warrants is not effective) or on a cashless basis, at the holder's option (except with respect to 500,000 of the legacy warrants held by Rosedale Park, LLC and 500,000 of the legacy warrants held by LifeSci Holdings LLC, which were amended to remove the cashless exercise provision), and will not be redeemable by the Company (except with respect to 500,000 of the legacy warrants held by Rosedale Park, LLC and 500,000 of the legacy warrants held by LifeSci Holdings LLC, which were amended to include a redemption provision. The legacy warrants held by Rosedale Park, LLC, expire on March 5, 2025, provided that once the legacy warrants are not beneficially owned by Chardan Capital Markets, LLC or any of its related persons, the legacy warrants will expire on December 23, 2025 (five years from the closing of the LSAC Business Combination).

The legacy warrants issued to LifeSci Holdings LLC that were amended as described above were determined to be equity classified in accordance with ASC 815, Derivatives and Hedging. The remaining legacy warrants were determined to be liability classified in accordance with ASC 815, Derivatives and Hedging.

Since these legacy warrants meet the definition of a derivative under ASC 815, we recorded these warrants as liabilities on the balance sheet at fair value, with subsequent changes in their respective fair values recognized in the consolidated statement of operations and comprehensive loss at each reporting date. The estimated fair value of the legacy warrants is determined with Level 3 inputs using Black-Scholes and Monte Carlo simulations. The legacy warrants were valued as of December 31, 2024 and December 31, 2023. See Note 6 to the audited consolidated financial statements in this report.

Emerging Growth Company Status

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 are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can choose not to take advantage of the extended transition period and comply with the requirements that apply to non-emerging growth companies, and any such election to not take advantage of the extended transition period is irrevocable.

We are an "emerging growth company" as defined in Section 2(a) of the Securities Act and have elected to take advantage of the benefits of the extended transition period for new or revised financial accounting standards. We expect to remain an emerging growth company through the end of the 2025 fiscal year and expect to continue to take advantage of the benefits of the extended transition period, although we may decide to early adopt such new or revised accounting standards to the extent permitted by such standards. This may make it difficult or impossible to compare our financial results with the financial results of another public company that is either not an emerging growth company or is an emerging growth company that has chosen not to take advantage of the extended transition period exemptions because of the potential differences in accounting standards used.

Recent Accounting Pronouncements

See Note 2 to the audited consolidated financial statements in this report for more information about recent accounting pronouncements, the timing of their adoption, and our, to the extent it has made one, review of their potential impact on our financial condition and results of operations and cash flows.

ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk.

Not applicable.

ITEM 8. Financial Statements and Supplementary Data.

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of
Vincerx Pharma, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Vincerx Pharma, Inc. (the "Company") as of December 31, 2024 and 2023, the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2024, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2024, in conformity with accounting principles generally accepted in the United States of America.

Going Concern

The accompanying consolidated financial statements have been prepared assuming that the entity will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the entity has incurred recurring losses from operations and expects to continue to incur operating losses that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's 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. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the 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, audits 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 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 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ WithumSmith+Brown, PC

We have served as the Company's auditor since 2020.

East Brunswick, New Jersey

March 27, 2025

PCAOB ID Number 100

Vincerx Pharma, Inc.
Consolidated Balance Sheets

(In thousands, except share and per share amounts)

	December 31, 2024	December 31, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	$ 4,987	$ 12,782
Restricted cash	79	72
Prepaid expenses	89	51
Grant receivable	1,041	1,044
Other current assets	214	784
Total current assets	6,410	14,733
Right-of-use assets, net	—	2,201
Property, plant and equipment, net	—	125
Other assets	1,595	1,158
Total assets	**$ 8,005**	**$ 18,217**
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 2,029	$ 2,497
Accrued expenses	3,244	1,755
Lease liability	—	1,162
Common stock warrant liabilities	8	191
Total current liabilities	5,281	5,605
Lease liability, net of current portion	—	1,340
Other noncurrent liabilities	—	50
Total liabilities	5,281	6,995
Commitments and contingencies (Note 8)		
Stockholders' equity		
Preferred stock, $0.0001 par value; 30,000,000 shares authorized, none issued and outstanding as of December 30, 2024 and 2023	—	—
Common stock, $0.0001 par value; 120,000,000 shares authorized; 2,239,580 shares and 1,070,375 shares issued and outstanding as of December 31, 2024 and 2023, respectively[(1)]	—	—
Additional paid-in capital	191,791	170,326
Accumulated other comprehensive income	119	8
Accumulated deficit	(189,186)	(159,112)
Total stockholders' equity	2,724	11,222
Total liabilities and stockholders' equity	**$ 8,005**	**$ 18,217**

(1) In January 2025, the stockholders approved, and the Company effected a 1-for-20 reverse stock split. All share and per-share data have been retroactively adjusted throughout this report to account for this stock split.

The accompanying notes are an integral part of these consolidated financial statements

Vincerx Pharma, Inc.
Consolidated Statements of Operations and Comprehensive Loss

(In thousands, except per share amounts)

	For the years ended December 31,	
	2024	**2023**
Operating expenses:		
General and administrative	$ 15,977	$ 13,636
Research and development	15,486	28,973
Total operating expenses	31,463	42,609
Loss from operations	(31,463)	(42,609)
Other income (expense)		
Change in fair value of warrant liabilities	183	(47)
Interest income	472	1,251
Other income (expense), net	734	1,248
Total other income (expense)	1,389	2,452
Net loss	**$(30,074)**	**$(40,157)**
Other comprehensive income (loss):		
Net foreign currency translation gain (loss)	110	(40)
Net unrealized gain on marketable securities	1	74
Comprehensive loss	**$(29,963)**	**$(40,123)**
Net loss per common share, basic and diluted	$ (15.85)	$ (37.72)
Weighted average common shares outstanding, basic and diluted[(1)]	1,898	1,065

(1) In January 2025, the stockholders approved, and the Company effected a 1-for-20 reverse stock split. All share and per-share data have been retroactively adjusted throughout this report to account for this stock split.

The accompanying notes are an integral part of these consolidated financial statements.

Vincerx Pharma, Inc.
Consolidated Statements of Changes in Stockholders' Equity
For the years ended December 31, 2024 and 2023

(In thousands)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares[1]	Amount				
Balance as of January 1, 2023	**1,062**	**$ 2**	**$166,647**	**$ (26)**	**$ (118,955)**	**$ 47,668**
Retroactive reclassification of par value in connection with January 2025 reverse split		(2)	2	—	—	—
Issuance of common stock from employee stock plans	8	—	114	—	—	114
Stock-based compensation	—	—	3,563	—	—	3,563
Cumulative translation adjustment	—	—	—	(40)	—	(40)
Unrealized loss on marketable securities	—	—	—	74	—	74
Net loss	—	—	—	—	(40,157)	(40,157)
Balance as of December 31, 2023	**1,070**	**—**	**170,326**	**8**	**(159,112)**	**11,222**
Issuance of pre-funded warrants and common stock from public offerings, net of commissions and expenses of $697	441	—	15,712	—	—	15,712
Issuance of common stock in connection with at-the-market offering, net of issuance costs of $239	106	—	2,161	—	—	2,161
Issuance of common stock in connection with exercise of pre-funded warrants	561	—	1	—	—	1
Issuance of common stock from employee stock plans	62	—	118	—	—	118
Stock-based compensation	—	—	3,473	—	—	3,473
Cumulative translation adjustment	—	—	—	110	—	110
Unrealized gain on marketable securities	—	—	—	1	—	1
Net loss	—	—	—	—	(30,074)	(30,074)
Balance as of December 31, 2024	**2,240**	**$ —**	**$191,791**	**$ 119**	**$ (189,186)**	**$ 2,724**

(1) In January 2025, the stockholders approved, and the Company effected a 1-for-20 reverse stock split. All share and per-share data have been retroactively adjusted throughout this report to account for this stock split.

The accompanying notes are an integral part of these consolidated financial statements.

Vincerx Pharma, Inc.
Consolidated Statements of Cash Flows

(In thousands)

	For the years ended December 31,	
	2024	**2023**
Cash Flows from Operating Activities		
Net loss	$(30,074)	$(40,157)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	52	52
Stock-based compensation	3,473	3,563
Amortization of right-of-use assets	1,038	863
Gain on early termination of lease, net of asset disposals	(44)	—
Change in fair value of warrant liabilities	(183)	47
Net amortization of discounts on marketable securities	(211)	(630)
Changes in operating assets and liabilities:		
Prepaid and other current assets	532	1,228
Grant receivable	—	328
Other assets	(519)	(1,077)
Accounts payable	(468)	(1,568)
Accrued expenses	1,489	(2,168)
Lease liabilities	(1,162)	(934)
Other noncurrent liabilities	(50)	—
Net cash used in operating activities	(26,127)	(40,453)
Cash Flows from Investing Activities:		
Purchases of marketable securities	(11,463)	(11,821)
Sales and maturities of marketable securities	11,675	53,321
Net cash provided by investing activities	212	41,500
Cash Flows from Financing Activities:		
Proceeds from public offerings, net of transaction costs	15,713	—
Proceeds from at-the-market offering, net of transaction costs	2,161	—
Proceeds from issuance of common stock from employee stock plans	118	114
Net cash provided by financing activities	17,992	114
Effect of exchange rate changes on cash, cash equivalents and restricted cash	135	(40)
Net increase (decrease) in cash, cash equivalents and restricted cash	(7,788)	1,121
Cash, cash equivalents and restricted cash at beginning of year	12,854	11,733
Cash, cash equivalents and restricted cash at end of year	**$ 5,066**	**$ 12,854**
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ —	$ —
Cash paid for taxes	$ —	$ —

The accompanying notes are an integral part of these consolidated financial statements.

Vincerx Pharma, Inc.
Notes to Consolidated Financial Statements

December 31, 2024 and 2023

1. Nature of Business

LSAC was initially formed on December 19, 2018 as a Delaware corporation for the purpose of effecting a merger, share exchange, asset acquisition, share purchase, reorganization, or similar business combination with one or more businesses. In December 2020, the LSAC Merger Sub merged with and into Legacy Vincera Pharma, with Legacy Vincera Pharma surviving the LSAC Merger as a wholly- owned subsidiary of LSAC. In connection with the LSAC Business Combination, LSAC changed its name to Vincera Pharma, Inc., and subsequently in January 2021, changed its name to Vincerx Pharma, Inc. (together with its consolidated subsidiaries, the "Company").

The Company is a clinical-stage biopharmaceutical company. The Company's current pipeline is entirely derived from the Bayer License Agreement (see Note 4), pursuant to which the Company has been granted an exclusive, royalty-bearing, worldwide license under certain Bayer patents and know-how to develop, use, manufacture, commercialize, sublicense, and distribute a clinical-stage and follow-on small molecule drug program and a preclinical stage bioconjugation platform, which includes next-generation antibody-drug conjugates and small molecule drug conjugates.

Reverse Stock Split

In January 2025, the stockholders approved, and the Company effected a 1-for-20 reverse stock split. All share and per-share data have been retroactively adjusted to account for the reverse stock split. Proportionate adjustments have been made to the number of shares of common stock underlying our outstanding equity awards and warrants, the number of shares issuable under our equity incentive plans, and other existing agreements, as well as the exercise price. The reverse stock split does not affect the par value of the common stock.

2. Summary of Significant Accounting Policies

Basis of Presentation

The Company's consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") as determined by the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") and pursuant to the regulations of the U.S. Securities and Exchange Commission ("SEC"). They include the accounts of Vincerx and its wholly-owned subsidiaries, VNRX Corp., Vincerx Pharma GmbH and Vincerx Pharma Australia Pty Limited. All intercompany accounts and transactions have been eliminated.

Liquidity and Going Concern

As of December 31, 2024, the Company had approximately $5.0 million in cash. The Company has incurred recurring operating losses and negative cash flows from operating activities since its inception and expects to continue to incur operating losses and negative cash flows in the future. Based on current business plans and assumptions, the Company believes that its existing cash and cash equivalents will be sufficient to fund its operating expenses and capital expenditure requirements into the third quarter of 2025, although this estimate is based on plans and assumptions that may prove to be wrong, and the Company could use its available capital resources sooner than it currently expects. Accordingly, the Company will need to raise additional capital through public or private equity offerings, debt financings, collaborations and licensing arrangements, or other sources, and such additional capital may not be available on favorable terms or at all, particularly in light of the current economic and market conditions. Market volatility resulting from pandemics or other epidemics, inflation

and other economic and market conditions, the wars in Ukraine and Israel, the inability to maintain the listing on The Nasdaq Capital Market of the Company's common stock, and other factors could also adversely impact the Company's ability to raise additional capital. The failure to raise additional capital as and when needed or on acceptable terms would have a negative impact on the Company's financial condition and the ability to pursue its business strategy, and the Company may have to reduce its workforce or delay, reduce the scope of, suspend, or eliminate one or more preclinical programs, clinical trials, or future commercialization efforts, or curtail its business operations.

In accordance with Accounting Standards Update ("ASU") 2014-15, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern (Subtopic 205-40), the Company has evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about its ability to continue as a going concern for a period of one year after the date that its audited consolidated financial statements are issued. In light of the Company's existing cash resources and current and expected operating losses and negative cash flows, the Company will need additional capital prior to the one-year anniversary of the issuance of its consolidated financial statements, and such additional capital may not be available as and when needed on acceptable terms or at all. As a result, the Company has concluded that these circumstances and the uncertainties associated with its ability to obtain additional capital raise substantial doubt about the Company's ability to continue as a going concern for a period of one year after the date that its audited consolidated financial statements are issued.

The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business, and do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of the uncertainties described above.

Emerging Growth Company

The Company is an "emerging growth company," as defined in Section 2(a) of 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 independent registered public accounting firm 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 consolidated 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.

Use of Estimates

The preparation of consolidated financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of commitments and contingencies at the date of the consolidated financial statements as well as reported amounts of expenses during the reporting periods. Estimates made by the Company include, but are not limited to, common stock warrant liabilities and stock-based compensation. The Company bases these estimates on historical experience and on various other assumptions that it believes are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying amounts of assets and liabilities that are not readily apparent from other sources. Actual results could differ materially from those estimates.

Concentrations of Credit Risk

The Company has cash balances at financial institutions which exceed the federally insured limit of $250,000. Any loss incurred or a lack of access to such funds could have a significant adverse impact on the Company's financial condition, results of operations, and cash flows.

The Company is subject to risks common to companies in the biotechnology industry, including, but not limited to, development by the Company or its competitors of technological innovations, risks of failure of clinical studies, dependence on key personnel, protection of proprietary technology, compliance with government regulations, and ability to transition from preclinical manufacturing to commercial production of products.

The Company's product candidates will require approvals from the U.S. Food and Drug Administration and comparable foreign regulatory agencies prior to commercial sales in their respective jurisdictions. There can be no assurance that any product candidates will receive the necessary approvals. If the Company was denied approval, approval was delayed or the Company was unable to maintain approval for any product candidate, it could have a material adverse impact on the Company.

Cash and Cash Equivalents

Management considers all highly liquid investments with an insignificant interest rate risk and original maturities of three months or less to be cash equivalents.

Restricted Cash

Restricted cash represents cash deposits with a financial institution in support of the Company's corporate credit card program.

Marketable Securities

The Company generally invests its excess cash in money market funds and investment grade short-term to intermediate-term fixed income securities. Such investments are included in cash and cash equivalents, short-term marketable securities or long-term marketable securities on the consolidated balance sheets. Marketable securities with a maturity date greater than 90 days and less than one year at each consolidated balance sheet date are classified as short-term. Marketable securities with a maturity date greater than one year, if any, are classified as long-term. All of the Company's marketable securities are considered available-for-sale and are reported at fair value with unrealized gains and losses included as a component of stockholders' equity. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, which is included in interest income on the consolidated statements of operations and comprehensive loss. Realized gains and losses and declines in value judged to be other-than-temporary, if any, on marketable securities are included in interest income on the consolidated statements of operations and comprehensive loss. The cost of securities sold is determined using specific identification.

The Company periodically evaluates whether declines in the fair values of its marketable securities below their amortized cost are other-than-temporary. This evaluation consists of several qualitative and quantitative factors regarding the severity and duration of the unrealized loss, as well as the Company's ability and intent to hold the marketable security until a forecasted recovery occurs. Additionally, the Company assesses whether it has plans to sell the marketable security or it is more likely than not it will be required to sell any marketable securities before recovery of its amortized cost basis. Factors considered include quoted market prices, recent financial results and operating trends, implied values from any recent transactions or offers of investee securities, credit quality of debt instrument issuers, other publicly available information that may affect the value of the marketable security, duration and severity of the decline in value, and the Company's strategy and intentions for holding the marketable security.

Property, Plant and Equipment

Property, plant and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation and amortization are provided for using straight-line methods, in amounts sufficient to charge the cost of depreciable assets to operations over their estimated service lives. Repairs and maintenance costs are charged to operations as incurred.

The Company assesses its long-lived assets for impairment whenever facts and circumstances indicate that the carrying amounts may not be fully recoverable. To analyze recoverability, the Company projects undiscounted net future cash flows over the remaining lives of such assets. If these projected undiscounted net future cash flows are less than the carrying amounts, an impairment loss would be recognized, resulting in a write-down of the assets with a corresponding charge to earnings. The impairment loss is measured based upon the difference between the carrying amounts and the fair values of the assets. In connection with the early termination of the lease during the fourth quarter of 2024, the Company incurred an impairment loss of approximately $50,000, included within other income (expense), net.

Fair Value Measurement

The Company applies fair value accounting for all financial assets and liabilities measured on a recurring and nonrecurring basis. Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. The accounting guidance established a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, used to determine the fair value of its financial instruments. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Level 1—Quoted prices in active markets for identical assets or liabilities that the entity has the ability to access.

Level 2—Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets and liabilities.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities.

Legacy Warrant Liability

As of December 31, 2024 and 2023, there were 3,295,000 legacy warrants to purchase common stock outstanding. The legacy warrants will expire at 5:00 p.m., New York City time, on December 23, 2025 (five years from the closing of the LSAC Business Combination).

The legacy warrants are exercisable on the basis of 20 warrants for one share of common stock at an aggregate exercise price of $230 per share and are exercisable for cash (even if a registration statement covering the shares of common stock issuable upon exercise of such warrants is not effective) or on a cashless basis, at the holder's option (except with respect to 500,000 of the legacy warrants held by Rosedale Park, LLC and 500,000 of the legacy warrants held by LifeSci Holdings LLC, which were amended to remove the cashless exercise provision), and will not be redeemable by the Company (except with respect to 500,000 of the legacy warrants held by Rosedale Park, LLC and 500,000 of the legacy warrants held by LifeSci Holdings LLC, which were amended to include a redemption provision. The legacy warrants held by Rosedale Park, LLC, expire on March 5, 2025, provided that once the legacy warrants are not beneficially owned by Chardan Capital Markets, LLC or any of its related persons, the legacy warrants will expire on December 23, 2025 (five years from the closing of the LSAC Business Combination).

The legacy warrants issued to LifeSci Holdings LLC that were amended as described above were determined to be equity classified in accordance with ASC 815, Derivatives and Hedging. The remaining legacy warrants were determined to be liability classified in accordance with ASC 815, Derivatives and Hedging (see Note 6).

Since the legacy warrants meet the definition of a derivative under ASC 815, the Company recorded these warrants as liabilities on the consolidated balance sheets at fair value, with subsequent changes in their respective fair values recognized in the consolidated statements of operations and comprehensive loss at each reporting date. The estimated fair value of the legacy warrants is determined with Level 3 inputs using Black-Scholes and Monte Carlo simulations.

Leases

The Company adopted FASB ASC Topic 842, "Leases" ("ASC 842"), using the required modified retrospective approach and utilizing the effective date as its date of initial application, for which prior periods are presented in accordance with the previous guidance in ASC 840, "Leases".

At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on the unique facts and circumstances present in the arrangement. Most leases with a term greater than one year are recognized on the balance sheet as right-of-use assets and short-term and long-term lease liabilities, as applicable. The Company has elected not to recognize on the balance sheet leases with terms of 12 months or less. The Company typically only includes an initial lease term in its assessment of a lease arrangement. Options to renew a lease are not included in the Company's assessment unless there is reasonable certainty that the Company will renew.

Operating lease liabilities and their corresponding right-of-use assets are recorded based on the present value of lease payments over the expected remaining lease term. Certain adjustments to the right-of-use assets may be required for items such as incentives received. The interest rate implicit in the Company's leases is typically not readily determinable. As a result, the Company utilizes its incremental borrowing rate, which reflects the fixed rate at which the Company could borrow on a collateralized basis the amount of the lease payments in the same currency, for a similar term and in a similar economic environment (see Note 9).

In accordance with ASC 842, components of a lease should be allocated between lease components (e.g., land, building) and non-lease components (e.g., common area maintenance, consumables). The fixed and in-substance fixed contract consideration (including any consideration related to non-components) must be allocated based on the respective relative fair values to the lease components and non-lease components.

Segments

Operating segments are identified as components of an enterprise about which separate discrete financial information is regularly reviewed for evaluation by the chief operating decision-maker ("CODM") in making

decisions regarding resource allocation and assessing performance. The Company views its operations and manages its business as a single operating segment. The Company's CODM, its chief executive officer, reviews operating results on an aggregate basis and manages the operations as a single operating segment.

The accounting policies of the Company's single operating and reportable segment are the same as those described in the summary of significant accounting policies. The measure of segment assets is reported on the consolidated balance sheets as total assets. The CODM evaluates performance and allocates resources based on consolidated net loss that also is reported on the consolidated statements of operations as net loss, and consolidated cash used in operations. The significant expenses regularly reviewed by the CODM are consistent with those reported on the Company's consolidated statement of operations, and expenses are not regularly provided to or reviewed on a more disaggregated basis for purposes of assessing segment performance and deciding how to allocate resources.

Research and Development Costs

The Company expenses research and development costs as operating expenses as incurred. These expenses include acquired in-process research and development expenses for which there is no alternative future use, salaries for research and development personnel, consulting fees, product development, pre-clinical studies, clinical trial costs, and other fees and costs related to the development of the technology.

Stock-Based Compensation

The Company measures and recognizes compensation expense for all stock-based awards made to employees, directors, and non-employees, including stock options and restricted shares, based on estimated fair values recognized over the requisite service period.

The fair value of options granted is estimated on the grant date using the Black-Scholes option valuation model. This valuation model for stock-based compensation expense requires the Company to make assumptions and judgments about the variables used in the calculation, including the expected term (weighted-average period of time that the options granted are expected to be outstanding), the volatility of the Company's common stock, and an assumed risk-free interest rate. The Company accounts for forfeitures when they occur. The Company uses the simplified calculation of the expected life, which takes into consideration the grant's contractual life and vesting period and assumes that all options will be exercised between the vesting date and the contractual term of the option. No awards have been issued with a market condition or other non-standard terms.

The estimate for volatility is based on an average of the historical volatilities of the common stock of several entities with characteristics similar to those of the Company. Since these comparable companies operate in the same industry segment, the Company expects that it would share similar characteristics, such as risk profiles, volatility, capital intensity and market growth patterns and drivers.

The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant for periods corresponding with the expected life of the option.

Income Taxes

Income taxes are recorded in accordance with ASC 740, "Income Taxes" ("ASC 740"), which provides for deferred taxes using an asset and liability approach. The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse, and net operating loss carryforwards and research and development tax credit ("R&D Credit") carryforwards. Valuation allowances are provided, if based upon the weight of available evidence, it is

more likely than not that some or all of the deferred tax assets will not be realized. The Company has recorded a full valuation allowance to reduce its net deferred income tax assets to zero. In the event the Company were to determine that it would be able to realize some or all its deferred income tax assets in the future, an adjustment to the deferred income tax asset valuation allowance would increase income in the period such determination was made.

The Company accounts for uncertain tax positions in accordance with the provisions of ASC 740. When uncertain tax positions exist, the Company recognizes the tax benefit of tax positions to the extent that the benefit would more likely than not be realized assuming examination by the taxing authority. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances. At December 31, 2024 and 2023, the Company had no liability for income tax associated with uncertain tax positions. The Company would recognize any corresponding interest and penalties associated with its income tax positions in income tax expense. There was no income tax interest or penalties incurred in 2024 or 2023.

German Grant Income

In accordance with ASC 958, the Company recognizes grant income in the period when the underlying eligible expenses are incurred. The German government grant program provides for tax refunds or direct reimbursements of eligible research expenses of up to 1.0 million euros per year over a period of six years. The grant was approved in 2022 and is retroactive to 2021. Grant income for the years ended December 31, 2024 and 2023 has been recorded in other income (expense), net on the consolidated statements of operations and comprehensive loss. The corresponding receivable is included within current assets and other assets, $1.0 million and $1.6 million, respectively, at December 31, 2024 on the consolidated balance sheet depending upon expectations for collection within twelve months of the balance sheet date.

Foreign Currency Translation and Transactions

The consolidated financial statements are presented in U.S. dollars. The functional currency for the Company's foreign subsidiaries is the local currency. Expenses, gains and losses for this entity are translated into U.S. dollars using average currency exchange rates for the period. Assets and liabilities are translated using exchange rates in effect at the balance sheet date. Foreign currency translation adjustments are recorded as a component of accumulated other comprehensive loss on the Company's consolidated balance sheets. Foreign currency transaction gains and losses on transactions not denominated in the functional currency are recorded in other income (expense), net, on the consolidated statements of operations and comprehensive loss.

Comprehensive Income or Loss

Comprehensive loss is equal to net loss, net foreign currency translation gain (loss), and net unrealized gain on marketable securities as presented in the accompanying consolidated statements of operations and comprehensive loss.

Net Loss per Share of Common Stock

Basic net loss per share is computed by dividing the net loss by the weighted-average number of shares of common stock outstanding during the period.

Diluted earnings per share adjusts basic earnings per share for the potentially dilutive impact of stock options and warrants. As the Company has reported losses for all periods presented, all potentially dilutive securities including stock options and warrants, are antidilutive and accordingly, basic net loss per share equals diluted net loss per share.

Recent Accounting Pronouncements

In November 2023, Financial Accounting Standards Board ("FASB") issued ASU No. 2023-07 "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures." ASU 2023-07 requires incremental annual and quarterly disclosures about segment measures of profit or loss as well as significant segment expenditures. It also requires public entities with a single reportable segment to provide all segment disclosures required by the amendments in the update and all existing segment disclosures in Topic 280. The Company adopted this guidance on January 1, 2025 on a retrospective basis and the adoption did not have a significant impact to the consolidated financial statements.

In December 2023, FASB issued ASU No. 2023-09 "Income Taxes (Topic 740): Improvements to Income Tax Disclosures." ASU 2023-09 requires incremental annual disclosures around income tax rate reconciliations, income taxes paid and other related disclosures. This guidance requires prospective application and permits retrospective application to prior periods presented. The Company has adopted this guidance on January 1, 2025. The Company expects the adoption of this standard to result in increased disclosures in its notes to consolidated financial statements.

3. LSAC Business Combination

As discussed in Note 1, on December 23, 2020, the Company consummated the LSAC Business Combination, with Legacy Vincera Pharma surviving the LSAC Merger as a wholly-owned subsidiary of the Company.

Immediately prior to the effective time of the LSAC Business Combination, each share of Legacy Vincera Pharma Common Stock was canceled, and the Legacy Holders received (i) 0.028545 shares of common stock, for each share of Legacy Vincera Pharma Common Stock held by them immediately prior to the effective time of the LSAC Business Combination and (ii) certain rights to Earnout Shares after the closing of the LSAC Business Combination.

The Legacy Holders are entitled to receive Earnout Shares if the daily volume-weighted average price of the Company's common stock equals or exceeds the following prices for any 20 trading days within any 30 trading-day period following the closing of the LSAC Business Combination: (1) during any such trading period prior to the six year anniversary of the closing, upon achievement of a daily volume-weighted average price of at least $700.00 per share, such number of shares of the Company's common stock as equals the quotient of $20.0 million divided by the Closing Price Per Share; and (2) during any such trading period prior to the eight year anniversary of the closing, upon achievement of a daily volume-weighted average price of at least $900.00 per share, such number of shares of the Company's common stock as equals the quotient of $20.0 million divided by the Closing Price Per Share. A total of 90.6% of (rounded to the nearest whole share) of the Earnout Shares then earned and issuable shall be issued to the Legacy Holders on a pro-rata basis based on the percentage of the number of shares of Vincera Pharma Common Stock owned by them immediately prior to the closing of the LSAC Business Combination, and the remaining Earnout Shares that would otherwise have been issuable shall not be issuable to the Legacy Holders but in lieu thereof the number of authorized shares available for issuance under the Company's 2020 Stock Incentive Plan (the "2020 Plan") shall be automatically increased by an equivalent number of shares of the Company's common stock.

4. Bayer License Agreement

On October 7, 2020, Legacy Vincerx Pharma entered into the Bayer License Agreement, which became effective on December 23, 2020 upon the closing of the LSAC Business Combination. Pursuant to the Bayer License Agreement, Legacy Vincerx Pharma has an exclusive, worldwide, royalty-bearing license under certain Bayer patents and know-how to develop, use, manufacture, commercialize, sublicense and distribute (i) a clinical-stage and follow-on small molecule drug platform, including a P-TEFb inhibitor compound, and (ii) a

preclinical stage bioconjugation platform, which includes next-generation antibody-drug conjugates and innovative small molecule drug conjugates.

During 2023, the Company recorded a $1.0 million development milestone payable to Bayer in connection with the Company's IND filing for VIP943. This milestone obligation was expensed as incurred.

If the Company achieves all of the development and commercial sales milestones for license products under the Bayer License Agreement for each of the countries and disease indications, the Company would be obligated to pay milestone payments that range from $110.0 million to up to $318.0 million per licensed product, and upon successful commercialization of at least five licensed products, the Company could be required to pay aggregate milestone payments in excess of $1 billion. In addition to milestone payments, the Company is also required to pay Bayer under the Bayer License Agreement ongoing royalties in the single digit to low double-digit percentage range on net commercial sales of licensed products.

5. Workforce Reduction

In December 2024, the Board of Directors of the Company approved a plan to implement cost-controls and explore strategic alternatives. To streamline operations and focus resources, the Company initially implemented a significant reduction in force of the Company's full-time employees by approximately 55% and then further reduced the workforce in connection with the signing of a binding term sheet and proposed business combination, which binding term sheet was subsequently terminated by the parties. Affected employees were offered separation benefits, including severance payments and payments to cover premiums for continuation of healthcare coverage for a limited period.

The Company incurred approximately $2.6 million of severance and related expenses during 2024, of which approximately $2.4 million is included within accrued expenses at December 31, 2024.

6. Fair Value Measurement

The Company's financial assets and liabilities are subject to fair value measurements on a recurring basis and the level of inputs used for such measurements were as follows (amounts in thousands):

	Fair Value Measured as of December 31, 2023			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash Equivalents:				
Money market funds	$ 4,682	$ —	$ —	$ 4,682
U.S. government treasuries	6,233	—	—	6,233
U.S. government agency securities	—	999	—	999
Total cash equivalents	$ 10,915	$ 999	$ —	$ 11,914

There were no cash equivalents or marketable securities at December 31, 2024. There were no marketable securities at December 31, 2023. The Company's Level 2 securities are valued using third-party pricing sources. The pricing services utilize industry standard valuation models, including both income and market-based approaches, for which all significant inputs are observable, either directly or indirectly. There were no transfers of assets between Level 1, Level 2, or Level 3 during the years ended December 31, 2024 and 2023.

	Fair Value Measured as of December 31, 2024			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Common stock warrant liabilities	$ —	$ —	$ 8	$ 8
Total fair value	$ —	$ —	$ 8	$ 8

	Fair Value Measured as of December 31, 2023			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Common stock warrant liabilities	$ —	$ —	$ 191	$ 191
Total fair value	$ —	$ —	$ 191	$ 191

The estimated fair value of the warrant liability for the legacy warrants at December 31, 2024 and 2023 was determined using Level 3 inputs. Inherent in a Monte Carlo options pricing model are assumptions related to expected stock-price volatility, expected life, risk-free interest rate and dividend yield. The Company estimates the volatility of its ordinary shares based on its historical volatility for a time period that approximates the expected remaining life of the warrants. The risk-free interest rate is based on the U.S. Treasury zero-coupon yield curve on the grant date for a maturity similar to the expected remaining life of the warrants. The dividend rate is based on the historical rate, which the Company anticipates to remain at zero. There were no changes to the number of legacy warrants underlying the Level 3 financial instruments during the year ended December 31, 2024. There were no transfers between Level 1, 2, or 3 during the years ended December 31, 2024 and 2023.

The following table presents changes in Level 3 liabilities measured at fair value for the years ended December 31, 2024 and 2023. Both observable and unobservable inputs were used to determine the fair value of positions that the Company has classified within the Level 3 category. Unrealized gains and losses associated with liabilities within the Level 3 category include changes in fair value that were attributable to both observable (e.g., changes in market interest rates) and unobservable (e.g., changes in unobservable long-dated volatilities) inputs (in thousands).

	Warrant Liability
Balance – January 1, 2023	**$ 144**
Change in fair value	47
Balance – December 31, 2023	**191**
Change in fair value	(183)
Balance – December 31, 2024	**$ 8**

A summary of the weighted average (in aggregate) significant unobservable inputs (Level 3 inputs) used in measuring the Company's warrant liabilities that are categorized within Level 3 of the fair value hierarchy as of December 31, 2024 and 2023 is as follows:

	As of December 31, 2024	As of December 31, 2023
Stock price	$ 5.26	$ 23.60
Exercise price	$ 230.00	$ 230.00
Option term (years)	1.0	2.0
Volatility (annual)	144.2%	90.9%
Risk-free rate	4.1%	4.2%
Dividend yield (per share)	0%	0%

7. Balance Sheet Details

Other current assets consist of the following at December 31, 2024 and 2023 (in thousands):

	December 31, 2024	December 31, 2023
Clinical related vendor prepayments	$ 165	$ 407
Other	49	377
	$ 214	$ 784

Property, plant and equipment, net consist of the following at December 31, 2024 and 2023 (in thousands):

	December 31, 2024	December 31, 2023	Estimated Useful Life
Furniture and fixtures	$ —	$ 236	5 years
Computers	—	20	3-5 years
Total	—	256	
Less: accumulated depreciation	—	(131)	
Total property, plant and equipment, net	$ —	$ 125	

Depreciation expense was approximately $52,000 for each of the years ended December 31, 2024 and 2023.

The following table sets forth the components of accrued expenses at December 31, 2024 and 2023, respectively (in thousands):

	December 31, 2024	December 31, 2023
Accrued severance	$ 2,356	$ —
Accrued payroll	144	332
Accrued benefits	278	918
Accrued manufacturing, clinical trial and related	466	505
	$ 3,244	$ 1,755

8. Commitments and Contingencies

Litigation

The Company is not currently a party to any material legal proceedings and is not aware of any pending or threatened claims. From time to time, the Company may be subject to various legal proceedings and claims that arise in the ordinary course of its business activities.

Leases

On December 23, 2020, the Company entered into a five-year term lease agreement which commenced on January 1, 2021. In April and May, 2021, the lease was amended to include additional space. The annual rent expense is approximately $1.2 million.

At December 31, 2023, the Company had operating lease liabilities of approximately $2.5 million and right of use assets of approximately $2.2 million, which were included in the consolidated balance sheets.

Effective July 2022, the Company subleased substantially all of its unused office space for a term of 18 months at a base rent of $50,000 per month. The Company had not been legally released from its primary obligations under the original lease and subsequent amendments and, therefore, continued to account for the original lease according to Accounting Standard Codification ("ASC") Topic 842, "Leases." The Company records both fixed and variable payments received from the sublessee in its consolidated statements of operations and comprehensive loss on a straight-line basis as an offset to rent expense. Such payments received in the years ended December 31, 2024 and 2023 were $0.6 million each. The Company also received a $50,000 deposit, recorded as a noncurrent liability in the consolidated balance sheet at December 31, 2023. During the fourth quarter of 2024, the Company further streamlined its operations and significantly reduced its workforce (see Note 5). In connection with this workforce reduction, the Company terminated its lease effective December 31, 2024. In consideration for this early termination, the Company relinquished the original deposit of approximately $82,000, as well as the $50,000 deposit received from the sublessor, to the landlord. The Company recorded a gain of approximately $95,000 from early termination of the lease, recorded in other income (expense), net in the consolidated statements of operations.

The following summarizes quantitative information about the Company's operating leases (dollars in thousands):

	For the years ended	
	December 31, 2024	December 31, 2023
Lease cost		
Operating lease cost	$ 1,196	$ 1,196
Variable lease cost	—	—
Total operating lease expense	$ 1,196	$ 1,196
Other information		
Operating cash flows from operating leases	$ 1,320	$ 1,270
Right-of-use assets obtained in exchange for operating lease liabilities	$ —	$ —
Weighted-average remaining lease term—operating leases	—	2.0
Weighted-average discount rate—operating leases	8%	8%

As of December 31, 2024, future minimum lease payments are de minimus and consist solely of the remaining lease obligation in Germany into 2026.

9. Stockholders' Equity

The Company's Certificate of Incorporation authorizes the issuance of 120,000,000 shares of common stock, $0.0001 par value per share and 30,000,000 shares of undesignated preferred stock, $0.0001 par value per share. As of December 31, 2024 and 2023, there were 2,239,580 shares and 1,070,375 shares of common stock outstanding, respectively, and no shares of preferred stock outstanding.

During the years ended December 31, 2024 and 2023, 11,625 shares and 8,083 shares, respectively, were issued pursuant to the Company's Employee Stock Purchase Program ("ESPP") (see Note 10) for approximately $114,000 and $112,000 in proceeds, respectively.

Public and At-the-Market Offerings

The Company entered into a Sales Agreement dated as of March 29, 2024 between the Company and Leerink Partners LLC, as sales agent, which provided for the issuance and sale by the Company of shares of common stock in "at-the-market" offerings having an aggregate offering price of up to $50.0 million. As of December 31, 2024, the Company sold an aggregate of 106,042 shares of its common stock at an average price of $23.34 per share, resulting in net proceeds of approximately $2.2 million, after paying commissions and offering expenses of approximately $0.2 million. As of December 31, 2024, approximately $47.5 million remained available under the ATM Agreement.

On April 30, 2024, the Company closed an underwritten public offering of (i) 0.3 million shares of its common stock and accompanying warrants to purchase up to 0.3 million shares of common stock, and (ii) to certain investors, pre-funded warrants to purchase up to an aggregate of 0.8 million shares of common stock and accompanying warrants to purchase up to 0.8 million shares of common stock. Each share of common stock was sold together with an accompanying common stock warrant at a combined offering price of $15.00, and each pre-funded warrant was sold together with an accompanying common stock warrant at a combined offering price of $14.998, which is equal to the combined offering price per share of common stock and accompanying common stock warrant less the $0.002 exercise price of each pre-funded warrant. The Company received net proceeds of approximately $14.8 million from this offering, after deducting underwriting discounts and commissions and offering expenses of approximately $0.7 million.

Registered Direct Offering

The Company entered into a definitive securities purchase agreement dated December 26, 2024 for the purchase, in a registered direct offering, of an aggregate of (i) 140,812 shares of its common stock and accompanying common stock warrants to purchase 281,625 shares of common stock at a combined offering price of $3.68, and (ii) for certain purchasers, in lieu of common stock, pre-funded warrants to purchase 131,791 shares of common stock and accompanying common stock warrants to purchase 263,582 shares of common stock at a combined offering price of $3.66, which is equal to the combined offering price per share of common stock and accompanying common warrant less the $0.02 exercise price of each pre-funded warrant. The offering closed on December 27, 2024. The Company received net proceeds of approximately $0.9 million from this offering, after deducting offering expenses of approximately $0.1 million.

Legacy Warrants

As of December 31, 2023, there were 3,295,000 legacy warrants to purchase common stock outstanding.

The legacy warrants are exercisable on the basis of 20 warrants for one share of common stock at an aggregate exercise price of $230 per share and will be exercisable for cash (even if a registration statement covering the shares of common stock issuable upon exercise of such warrants is not effective) or on a cashless basis, at the holder's option (except with respect to 500,000 of the legacy warrants held by Rosedale Park, LLC and 500,000 of the legacy warrants held by LifeSci Holdings LLC, which were amended to remove the cashless exercise provision), and will not be redeemable by the Company (except with respect to 500,000 of the legacy

warrants held by Rosedale Park, LLC and 500,000 of the legacy warrants held by LifeSci Holdings LLC, which were amended to include a redemption provision. The legacy warrants held by Rosedale Park, LLC expire on March 5, 2025, provided that once the legacy warrants are not beneficially owned by Chardan Capital Markets, LLC or any of its related persons, the legacy warrants will expire on December 23, 2025 (five years from the closing of the LSAC Business Combination).

The legacy warrants issued to LifeSci Holdings LLC that were amended as described above were determined to be equity classified in accordance with ASC 815, Derivatives and Hedging. The remaining legacy warrants were determined to be liability classified in accordance with ASC 815, Derivatives and Hedging (see Note 6).

Restricted Shares

In May 2020, Legacy Vincera Pharma issued 8,677 shares of restricted stock at a fair value of $1.40 per share in exchange for services. Pursuant to these restricted share agreements, the term vesting represents the expiration of the Company's repurchase right for the underlying shares.

A summary of restricted stock activity for the years ended December 31, 2024 and 2023 is presented below:

	Number of Shares	Weighted Average Grant Date Fair Value per Share
Nonvested at January 1, 2023	**3,350**	**$ 1.30**
Vested	(2,447)	—
Nonvested at December 31, 2023	**903**	**$ 2.06**
Vested	(903)	—
Nonvested at December 31, 2024	—	**$ —**

10. Equity Incentive Plans

In connection with the LSAC Business Combination, the stockholders approved the 2020 Plan, which became effective upon the closing of the LSAC Business Combination on December 23, 2020. As of December 31, 2024, the Company had 254,565 shares of common stock reserved for issuance and 104,038 shares available for future awards under the 2020 Plan.

The 2020 Plan allows for the grant of stock options and rights to acquire restricted stock to employees, directors and consultants of the Company. The terms and conditions of specific awards are set at the discretion of the Company's board of directors. Options granted under the 2020 Plan expire no later than 10 years from the date of grant. Unvested common shares obtained upon early exercise of options are subject to repurchase by the Company at the original issue price.

Stock Option Repricing and Exchange Program

The board of directors and stockholders of the Company approved a one-time stock option repricing and exchange program. As a result, effective on August 12, 2024 (the "Effective Date"), the exercise price of all outstanding stock options held by employees (including the Company's executive officers) and consultants of the Company that were granted under the 2020 Plan and that had an exercise price per share greater than $10.97, the closing price of the Company's common stock on the Effective Date, was reduced to $11.00 per share, except that a premium exercise price will apply for certain exercises made prior to the end of a one year retention period. The exercise price of outstanding eligible options with a weighted average exercise price of $163.81 for 369,890 shares of common stock was reduced to the $11.00 per share exercise price with an estimated common stock fair value of $8.20 per share at the date of the repricing. The vesting terms and expiration dates remain unchanged from the original grant dates. Our non-employee directors were not eligible to participate in the stock option repricing program.

The stock option repricing was treated as an option modification for accounting purposes and resulted in total incremental expense of approximately $0.9 million, of which approximately $0.6 million incremental expense associated with the vested options was recognized on the modification date of August 12, 2024. The remaining $0.3 million incremental expense associated with the unvested options as of the modification date will be recognized over the remainder of the original requisite service period.

Subsequent to completion of the repricing, the Company commenced a tender offer to exchange outstanding eligible options to purchase shares of the Company's common stock for new restricted stock units (each, a "New RSU"). At the completion of the tender offer on September 27, 2024, a total of 95,560 eligible options were tendered for New RSUs. The surrendered options were cancelled, and a total of 73,507 New RSUs were granted, each effective as of September 30, 2024. There was no incremental expense associated with this exchange. Our non-employee directors were not eligible to participate in the tender offer to exchange outstanding options for new restricted stock units.

Stock option activity under the Plan is as follows (amounts in thousands, except per share amount):

	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value
Outstanding at January 1, 2023	218	$217.44	8.6	$ 125
Options granted	57	24.30	—	—
Options exercised	(1)	16.40	—	—
Options cancelled	(13)	235.11	—	—
Outstanding at December 31, 2023	261	174.81	8.1	—
Options granted	133	143.83	—	—
Options exercised	(1)	17.93	—	—
Options cancelled	(141)	22.54	—	—
Outstanding at December 31, 2024	252	$ 19.89	6.9	$ —
Options vested and exercisable at December 31, 2024	176	$ 23.65	5.9	$ —

Stock-based compensation expense is based on the grant-date fair value. The Company recognizes compensation expense for all stock-based awards on a straight-line basis over the requisite service period of the awards, which is generally the option vesting term of either two or three years.

As of December 31, 2024, the Company had stock-based compensation of approximately $3.7 million related to unvested stock options not yet recognized that are expected to be recognized over an estimated weighted average period of 2.0 years.

The following weighted average assumptions were used as inputs to the Black-Scholes option valuation model in determining the estimated grant-date fair value of the Company's stock options granted during the years ended December 31, 2024 and 2023:

	For the years ended December 31,	
	2024	2023
Exercise price	$61.99	$18.00
Expected term (years)	6.0	5.6
Volatility (annual)	91.9%	89.5%
Risk-free rate	4.3%	4.0%
Dividend yield (per share)	0%	0%

Restricted stock unit activity under the 2020 Plan is as follows (in thousands):

	Restricted Stock Units	Weighted Average Purchase Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value
Outstanding at January 1, 2024	—	$ —	—	$ —
Awarded	73	—	—	—
Released	(50)	—	—	—
Cancelled	(21)	—	—	—
Outstanding at December 31, 2024	2	$ —	1.1	$ 12

Stock-based compensation expense associated with the New RSUs is based on the grant-date fair value, or $14.32 for all restricted stock units granted during the year ended December 31, 2024, as well as the remaining unrecognized compensation expense associated with the options that were tendered in exchange for these New RSUs. The Company recognizes compensation expense for all stock-based awards on a straight-line basis over the requisite service period of the awards, which is the vesting term of approximately three years.

As of December 31, 2024, the Company had stock-based compensation of approximately $52,000 related to unvested restricted stock units not yet recognized that are expected to be recognized over an estimated weighted average period of 2.7 years.

Total stock-based compensation expense recognized in the accompanying consolidated statements of operations and comprehensive loss for all equity awards is as follows (amounts in thousands):

	For the years ended December 31,	
	2024	2023
Research and development	$1,655	$1,712
General and administrative	1,818	1,851
Total stock-based compensation expense	**$3,473**	**$3,563**

Employee Stock Purchase Plan

The Company's 2021 Employee Stock Purchase Plan (the "ESPP") became effective in May 2021 upon stockholder approval and is intended to qualify as an "employee stock purchase plan" under Section 423 of the Internal Revenue Code. 10,000 of the Company's authorized but unissued or reacquired shares of common stock have been reserved for issuance under the ESPP, plus an additional number of shares to be reserved annually on the first day of each fiscal year from January 1, 2022 through January 1, 2031, equal to the least of (i) one percent (1%) of the outstanding shares of the Company's common stock on such date, (ii) 25,000 shares, or (iii) a lesser amount determined by the compensation committee or the Company's board.

The ESPP allows eligible employees to purchase shares of the Company's common stock at a discount of up to 15% of their eligible compensation through payroll deductions, subject to any plan limitations. The ESPP consists of a series of offerings of purchase rights to eligible employees, each with a duration of not more than 12 months and purchase dates every six months. The purchase price cannot, under the terms of the ESPP, be less than 85% of the fair market value per share of the Company's common stock on either the offering date or on the purchase date, whichever is less. If the fair market value of a share of the Company's common stock on any purchase date within a particular offering period is less than or equal to the fair market value on the start date of that offering period, then the offering period will automatically terminate and the employees in that offering period will automatically be transferred and enrolled in a new offering period which will begin on the next day following such purchase date.

As of December 31, 2024, 11,149 shares of common stock were reserved for future issuance under the ESPP. Shares issued under the ESPP were 11,625 and 8,083 shares for the years ended December 31, 2024 and 2023, respectively. The Company recorded approximately $179,000 and $133,000 of stock-based compensation expense for the years ended December 31, 2024 and 2023, respectively, related to the ESPP.

11. Net Loss per Share Applicable to Common Stockholders

Basic loss per common share is computed by dividing net loss by the weighted average number of common shares outstanding during the reporting period. Diluted loss per common share is computed similarly to basic loss per common share except that it reflects the potential dilution that could occur if dilutive securities or other obligations to issue common stock were exercised or converted into common stock.

The following table sets forth the computation of loss per share for the years ended December 31, 2024 and 2023, respectively (amounts in thousands, except per share number):

	For the year ended December 31,	
	2024	2023
Numerator:		
Net loss	$(30,074)	$(40,157)
Denominator:		
Weighted average common shares outstanding, basic and diluted	1,898	1,065
Net loss per common share, basic and diluted	$ (15.85)	$ (37.72)

The following table presents the potential common stock outstanding that was excluded from the computation of diluted net loss per share of common stock as of the periods presented because including them would have been antidilutive:

	For the year ended December 31,	
	2024	2023
Options outstanding	252	261
Restricted stock units	2	—
Warrants	1,810	165
Restricted stock	—	1
Total	2,064	427

In accordance with ASC 260-10-45-13, a pre-funded, or penny, warrant is an instrument that requires the holder to pay little or no consideration to receive the shares upon exercise of the warrant (see Note 9). Since the shares underlying the warrants are issuable for little or no consideration, the Company considered them outstanding in the context of basic earnings per share.

12. Income Taxes

The Company has no provision for income taxes for the years ended December 31, 2024 and 2023. The Company has no current tax expense from losses and no deferred expense from the valuation allowance.

Income (loss) before provision for income taxes consisted of the following (amounts in thousands):

	For the year ended December 31,	
	2024	2023
United States	$ (30,412)	$ (35,281)
International	338	(4,876)
	$(30,074)	**$(40,157)**

The effective tax rate of the Company's provision (benefit) for income taxes differs from the federal statutory rate as follows:

	For the year ended December 31,	
	2024	2023
Statutory federal income tax rate	21.0%	21.0%
State taxes, net of federal tax benefit	0.6%	0.1%
Research and development	1.0%	2.0%
Other	(3.3%)	0.5%
Change in valuation allowance	(19.3%)	(23.6%)
Income taxes provision (benefit)	0.0%	0.0%

Significant components of the Company's net deferred tax assets as of December 31, 2024 and 2023, are as follows (amounts in thousands):

	As of December 31,	
	2024	2023
Deferred tax assets:		
Net operating loss	$ 19,357	$ 15,475
Stock-based compensation	3,322	5,235
Capitalized research and development	15,814	14,734
Research and development credit	2,404	2,231
Accruals and reserves	57	137
Lease liability	—	462
Total deferred income tax assets	40,954	38,274
Less: Valuation allowances	(40,954)	(37,748)
Deferred tax assets, net of valuation allowances	$ —	$ 526
Deferred tax liabilities:		
Right of use asset	—	(526)
Total deferred income tax liabilities	$ —	$ (526)
Net deferred taxes	$ —	$ —

ASC 740 requires that the tax benefit of net operating losses, temporary differences and credit carryforwards be recorded as an asset to the extent that management assesses that realization is "more likely than not." Realization of the future tax benefits is dependent on the Company's ability to generate sufficient taxable income within the carryforward period. Because of the Company's recent history of operating losses, management believes that recognition of the deferred tax assets arising from the above-mentioned future tax benefits is currently not likely to be realized and, accordingly, has provided a valuation allowance. The Company's valuation allowance increased by $4.1 million and $9.4 million for the years ended December 31, 2024 and 2023, respectively.

Effective for tax years beginning after December 31, 2021, taxpayers are required to capitalize any expenses incurred that are considered incidental to research and experimentation (R&E) activities under IRC Section 174. While taxpayers historically had the option of deducting these expenses under IRC Section 174, the December 2017 Tax Cuts and Jobs Act mandates capitalization and amortization of R&E expenses for tax years beginning after December 31, 2021. Expenses incurred in connection with R&E activities in the U.S. must be amortized over a five-year period and over a fifteen-year period if incurred outside the U.S. R&E activities are broader in scope than qualified research activities considered under IRC Section 41 (relating to the research tax credit). For the year ended December 31, 2024, the Company performed an analysis based on available guidance and determined that it will continue to be in a loss position even after the required capitalization and amortization of its R&E expenses. The Company will continue to monitor this issue for future developments, but it does not expect R&E capitalization and amortization to require it to pay cash taxes now or in the near future.

At December 31, 2024, the Company had federal and state net operating loss carryforwards of approximately $85.9 million and $0.7 million, respectively. The federal net operating loss carryforwards can be carried forward indefinitely, with certain limitations. A portion of the state net operating loss carryforwards will expire beginning in 2039, if not utilized.

As of December 31, 2024, the Company also has Federal and California research and development credits of $2.8 million and $1.3 million, respectively. The federal tax credit carryforwards will expire beginning in 2039, if not utilized. The state tax credit carryforwards do not expire.

The following table summarizes activity related to the Company's gross unrecognized tax benefits (amounts in thousands):

	Total
Balance as of December 31, 2022	$ 979
Increase/decrease due to prior year positions	—
Increase/decrease due to current year positions	259
Balance as of December 31, 2023	1,238
Increase/decrease due to prior year positions	136
Increase/decrease due to current year positions	166
Balance as of December 31, 2024	$1,540

The unrecognized tax benefits, if recognized, would not have an impact on the Company's effective tax rate due to the valuation allowance. The Company does not expect a significant change to its unrecognized tax benefits over the next twelve months. The Company files income tax returns in the United States, California and Germany jurisdictions and is not currently under examination by federal, state or local taxing authorities for any open tax years. The tax years 2019 through 2024 remain open to examination by the major taxing authorities. In addition, net operating losses arising from prior years are also subject to examination at the time they are utilized in future years. The Company records interest related to uncertain tax positions as interest, and any penalties are recorded as income tax expense in its consolidated statements of operations and comprehensive loss.

Utilization of net operating losses and tax credit carryforwards may be limited by the "ownership change" rules, as defined in Section 382 of the Internal Revenue Code (any such limitation, a "Section 382 limitation"). Similar rules may apply under state tax laws. The Company has not performed an analysis to determine whether an "ownership change" occurred from inception to December 31, 2024. If a change in ownership were to have occurred, additional net operating loss and tax credit carryforwards could be eliminated or restricted. If eliminated, the related asset would be removed from the deferred tax asset schedule with a corresponding reduction in the valuation allowance.

ASC 740-10, “Income Taxes”, prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of uncertain tax positions taken or expected to be taken in the Company’s income tax return and also provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition.

13. Subsequent Events

On January 21, 2025, the Company entered into a Sales Agreement (the “Agreement”) with H.C. Wainwright & Co., LLC (the “Agent”). The Agreement provides for the issuance and sale by the Company of shares of common stock in “at-the-market” offerings having an aggregate offering price of up to $30.0 million (the “Shares”). Pursuant to the Agreement, the Company may offer and sell the Shares in transactions deemed to be an “at-the-market” offering as defined in Rule 415(a)(4) of the Securities Act of 1933, which Shares can be sold by the Company from time to time, depending upon market demand, with the Agent acting as an agent for sales. As of March 21, 2025, the Company sold an aggregate of 2,624,276 shares of its common stock at an average price of $1.63 per share, resulting in net proceeds of approximately $3.9 million, after paying commissions and offering expenses of approximately $0.4 million. On January 10, 2025, the Company terminated its Sales Agreement with Leerink Partners LLC.

On March 14, 2025, the Company entered into a non-binding letter of intent (the “Letter of Intent”) with Global Digital Holdings Inc., a Georgia corporation that conducts business under the name QumulusAI (“QumulusAI”), relating to a proposed business combination between the Company and QumulusAI. The parties currently contemplate a reverse triangular merger structure, pursuant to which (i) a subsidiary of Vincerx would merge into QumulusAI, (ii) QumulusAI stockholders would receive shares of the Company’s common stock in exchange for their shares of QumulusAI capital stock (“QumulusAI Capital Stock”) based on the Exchange Ratio (defined below), and (iii) outstanding options, warrants, and other rights to acquire QumulusAI Capital Stock (“QumulusAI Stock Rights”) would be assumed by the Company and converted into options, warrants, and rights to acquire the Company’s common stock based on the Exchange Ratio.

The conversion of the QumulusAI Capital Stock and QumulusAI Stock Rights would be pursuant to an exchange ratio (the “Exchange Ratio”) intended to result in the following aggregate post-closing percentage ownership: (i) the equity holders of QumulusAI immediately prior to the closing (including all QumulusAI Stock Rights) would own 95% of the equity of the combined company, and (ii) the equity holders of the Company immediately prior to the closing (including all outstanding options and warrants) would own 5% of the equity of the combined company. These ownership percentages assume a valuation of $285.0 million for QumulusAI and $15.0 million for the Company and “net cash” (defined as cash minus liabilities) of zero at closing. To the extent requested by the Company, QumulusAI or its designees will invest up to $1.5 million in the equity of the Company prior to the closing.

ITEM 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.

Not applicable.

ITEM 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, or the Exchange Act, that are designed to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in Securities and Exchange Commission rules and forms and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognized that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Our disclosure controls and procedures have been designed to meet reasonable assurance standards. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any disclosure controls and procedures also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Based on their evaluation as of the end of the period covered by this Annual Report on Form 10-K, our Acting Chief Executive Officer (our principal executive officer) and Acting Chief Financial Officer (our principal financial officer) have concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining a system of internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. All internal control systems, no matter how well designed, have inherent limitations.

Under the supervision and with the participation of our management, including our Acting Chief Executive Officer and Acting Chief Financial Officer, under the oversight of our board of directors, we evaluated the effectiveness of our internal control over financial reporting as of December 31, 2024, the last day of our fiscal year. This evaluation was based on the criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our assessment, management has concluded that our internal control over financial reporting was effective as of the end of the fiscal year to provide reasonable assurances regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with GAAP.

Changes in Internal Control over Financial Reporting

Based on the foregoing assessment, our management, including our Acting Chief Executive Officer and Acting Chief Financial Officer, has concluded that there has been no change in our internal control over financial reporting that occurred during the quarter ended December 31, 2024 and that there was no change during such period that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. Other Information.

(b) Trading Plans.

During the three months ended December 31, 2024, no director or officer adopted or terminated any contract, instruction, or written plan for the purchase or sale of securities of the Company pursuant to Rule 10b5-1(c) or any non-Rule 10b5-1 trading arrangement (as defined in Item 408(c) of Regulation S-K).

ITEM 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

Not applicable.

PART III

ITEM 10. Directors, Executive Officers and Corporate Governance.

Directors

The following provides the names, ages (as of February 28, 2025) and certain biographical information of our directors:

Name	Age	Position with Company	Director Since
Ahmed M. Hamdy, M.D.	60	Chairman of the Board	2020
Raquel E. Izumi, Ph.D.	55	Acting Chief Executive Officer and Director	2020
Laura I. Bushnell	57	Director	2020
Brian J. Druker, M.D.	69	Director	2020
John H. Lee, M.D.	57	Director	2020
Francisco D. Salva	55	Director	2020
Ruth E. Stevens, Ph.D.	66	Director	2021

Ahmed M. Hamdy, M.D. has served as Chairman of our board of directors since December 2020 and served as our Chief Executive Officer from December 2020 to December 2024, and as our President from December 2020 to January 2021. Dr. Hamdy co-founded Vincera Pharma, Inc. ("Legacy Vincera Pharma") and served as its Chief Executive Officer and as a member of its board of directors from March 2019 to December 2020. Prior to that, Dr. Hamdy co-founded Acerta Pharma B.V., a pharmaceutical development company and member of the AstraZeneca plc, and served as its head of early clinical development from January 2015 to June 2019, as chief executive officer from February 2013 to January 2015, as chief medical officer from February 2013 to January 2015 and as a member of the board from February 2013 to February 2016. Prior to that, Dr. Hamdy served as chief medical officer of Pharmacyclics LLC (Nasdaq: PCYC), a biopharmaceutical company, from March 2008 to June 2011. Dr. Hamdy has served as a clinical advisor and member of the board of directors of Andes Biotechnologies, a nucleic acid-based drug discovery and development company, since September 2016, as a member of the Dean's Council of the Jack Baskin School of Engineering at the University of California, Santa Cruz, since April 2019, and as a member of the Palo Alto Medical Foundation President's Council since March 2016. Dr. Hamdy received a MBBCH from the KasrAlainy School of Medicine at the University of Cairo, Egypt. We believe Dr. Hamdy is qualified to serve on our board of directors due to his more than twenty years of clinical research experience in pharmaceutical drug development and extensive executive leadership experience in the pharmaceutical drug development industry.

Raquel E. Izumi, Ph.D. has served as our Acting Chief Executive Officer in a consulting capacity since December 2024 and served as our Chief Operations Officer from December 2020 to December 2024 and as our President from January 2021 to December 2024. Dr. Izumi co-founded Legacy Vincera Pharma and served as its Chief Operations Officer and as a member of its board of directors from March 2019 to December 2020. Prior to that, Dr. Izumi co-founded Acerta Pharma B.V. and served as its executive vice president of clinical development from February 2013 to May 2020. Dr. Izumi also co-founded Aspire Therapeutics LLC and served as its chief scientific officer from June 2011 to February 2013. Prior to founding Aspire Therapeutics LLC, Dr. Izumi served as *senior director of clinical development at Pharmacyclics LLC (Nasdaq: PCYC) from February 2010 to May 2011, where she worked* on designing and implementing seven clinical studies across various hematologic malignancies (including three studies that garnered breakthrough therapy designation) for the first BTK inhibitor to enter clinical trials. Dr. Izumi began her research career at Amgen Inc. (Nasdaq: AMGN), where she held positions of increasing responsibility and participated in a successful BLA filing and approval for Aranesp®. Dr. Izumi was a Howard Hughes Predoctoral Fellow at the University of California, Los Angeles where she obtained a Ph.D. in microbiology and immunology. She received honors and distinction for her B.A. in biological sciences from the University of California, Santa Barbara. We believe Dr. Izumi is qualified to serve on our board of directors due to her over 20 years of drug development and clinical research experience and her

authorship of several INDs as well as design and execution of several clinical trials in oncology, cardiology, pulmonology, immunology, and endocrinology.

Laura I. Bushnell has served as a member of our board since December 2020. Ms. Bushnell has served as a partner of King & Spalding LLP, a global law firm, since September 2009. Ms. Bushnell has served as a member of the board of trustees of the University of California, Santa Cruz Foundation since February 2015, and as chair of the Dean's Council of the Baskin School of Engineering at the University of California, Santa Cruz, since July 2019. Ms. Bushnell received an A.B. in psychology from Stanford University and a J.D. from the Georgetown University Law Center. We believe Ms. Bushnell is qualified to serve on our board of directors due to her extensive experience counseling management and boards of directors of private and public companies, particularly in the life sciences and technology sectors, on capital raising matters, strategic transactions and corporate governance.

Brian J. Druker, M.D. has served as a member of our board since December 2020. Dr. Druker has served in various capacities at the Oregon Health and Science University, as a physician since July 1993, professor since July 2000, and associate dean of Oncology since July 2010. Since July 2007, Dr. Druker served as director of the Oregon Health and Science University Knight Cancer Institute. Dr. Druker has served as a member of the scientific advisory board of Aptose Biosciences Inc. (Nasdaq: APTO), a biotechnology company, since 2013. Since May 2018, Dr. Druker has served as a member of the board of directors of Amgen Inc. (Nasdaq: AMGN), a multinational biopharmaceutical company. Dr. Druker served as a member of the scientific advisory board of Grail, Inc., a biotechnology company, from May 2016 to September 2019. Dr. Druker has been recognized with numerous awards, including the Warren Alpert Prize from Harvard Medical School, the Lasker-DeBakey Award for Clinical Medical Research, the Japan Prize in Healthcare and Medical Technology, and most recently, the 2018 Tang Prize in Biopharmaceutical Science. Dr. Druker has been elected to the National Academy of Medicine, the National Academy of Sciences and the American Academy of Arts and Sciences. Dr. Druker received a B.A. in chemistry from the University of California, San Diego, and an M.D. from the University of San Diego Medicine, San Diego. We believe Dr. Druker is qualified to serve on our board of directors due to his extensive experience in cancer research industry and leadership experience on public company boards of directors.

John H. Lee, M.D. has served as a member of our board since December 2020. Dr. Lee has served as chief medical officer of cancer research of Avera Health, a regional healthcare system, since May 2020 and as chief medical officer of ImmunityBio, Inc. (Nasdaq: IBRX), an immuno-oncology and infectious disease company, from March 2019 to May 2020. Prior to that, Dr. Lee served as senior vice president of clinical development of Nantkwest, Inc., a clinical-stage immunotherapy company, from May 2016 to March 2019. Dr. Lee served as executive director of the Chan Soon Shiong Institute of Molecular Medicine, a biomedical and translational research institute and as a full professor at the University of South Dakota, from May 2016 to September 2018 and September 2010 to May 2016, respectively. Dr. Lee served as director of the cancer center of Stanford Health, a leading academic health system from July 2012 to May 2016. Dr. Lee served as a member of the board of directors of Windber Hospital from June 2018 to May 2020. Dr. Lee received a B.S. in biology from Stanford University, an M.D. from the University of Minnesota, Twin Cities, and special training in otolaryngology-head and neck surgery from the University of Iowa. We believe Dr. Lee is qualified to serve on our board of directors due to his extensive experience within the cancer research industry.

Francisco D. Salva has served as a member of our board since December 2020. Mr. Salva currently serves as president and chief executive officer of Azitra, Inc., a synthetic biology company. He has served as an operating partner of Accelerator Life Science Partners, a venture capital firm, since January 2018, and served as president and chief executive officer of Complexa Inc., a clinical-stage biopharmaceutical company, from May 2018 to August 2020. Mr. Salva co-founded Acerta Pharma and served as its vice president of operations from February 2013 to November 2016. Prior to that, Mr. Salva served as senior director of corporate finance at Pharmacyclics LLC (Nasdaq: PCYC). Earlier in his career, Mr. Salva spent almost a decade in life sciences venture capital, starting his investment career at Patricof & Co, Ventures (now Apax Partners) before moving to

lead investments at Invesco (NYSE: IVZ) and CIBC Capital Partners. Mr. Salva received an A.B. in business economics and an A.B. in philosophy from Brown University and a MSc. in economics and philosophy from the London School of Economics. We believe Mr. Salva is qualified to serve on our board of directors due to his extensive experience with corporate development, operations, healthcare venture capital and investment banking.

Ruth E. Stevens, Ph.D. has served as a member of our board since May 2021. Dr. Stevens also serves as a Senior Advisor to Premier Research, a clinical research and development company, and as an independent regulatory consultant to the pharmaceutical industry. Dr. Stevens was a co-founder and served as chief scientific officer and executive vice president of Camargo Pharmaceutical Services, LLC, a drug development consulting company, from 2003 to September 2021, and a member of its board of directors from March 2017 to September 2021. Dr. Stevens was a recipient of 2019 Oregon State University, Icon of Pharmacy award, and induction into the Pharmacy Hall of Fame. Dr. Stevens has served as an adjunct professor at the University of Cincinnati, College of Pharmacy, since March 1997. Prior to founding Camargo Pharmaceutical Services, Dr. Stevens was senior director of clinical operations at Barr Research, Inc. (formerly Duramed Pharmaceuticals, Inc.) (NYSE: BRL), a pharmaceutical product company, from 1999 to 2002, and served as director of pharmacokinetics & scientific affairs at Phoenix International Life Sciences Inc., a research organization, which provided research, clinical studies and studies to pharmaceutical and biotechnology companies, from 1996 to 1999. Prior to that, from 1990 to 1996, Dr. Stevens served as an FDA pharmacokinetic team leader and pharmacokinetic reviewer at the Office of Clinical Pharmacology and Biopharmaceutics of the U.S. Food and Drug Administration. Dr Stevens has a B.A. in Health Education from the University of Washington, Seattle, a Ph.D. in Biopharmaceutics/ Pharmacokinetics from Oregon State University and an MBA from Xavier University. We believe Dr. Stevens is qualified to serve on our board of directors due to her extensive leadership experience in drug development.

There are no family relationships among any of our directors or executive officers.

Director Nominations

Our board of directors nominates directors whose term is scheduled to expire at the next annual meeting of stockholders and elects new directors to fill vacancies when they arise. The nominating and corporate governance committee has the responsibility to identify, evaluate, recruit, and recommend qualified candidates to our board of directors for nomination or election. There have been no material changes to the procedures by which our stockholders may recommend nominees to our board of directors.

Director Independence

Our board of directors determined that each of our directors, other than Dr. Ahmed M. Hamdy and Dr. Raquel E. Izumi, qualify as independent directors, as defined under the Nasdaq listing rules, and our board consists of a majority of "independent directors," as defined under the rules of the SEC and Nasdaq listing rules relating to director independence requirements. In addition, we are subject to the rules of the SEC and Nasdaq relating to the membership, qualifications, and operations of the audit committee, as discussed below.

Board Meetings

Our board of directors held 14 meetings during 2024. Each director attended at least 75% of the aggregate meetings held by the board of directors and the committees on which such director served. We do not have a policy that requires the attendance of directors at our annual meeting of stockholders. All of our directors attended the 2024 annual meeting.

Meeting of Non-Management and Independent Directors and Communications with Directors

During meetings of our board of directors, our independent directors regularly meet in an executive session without management or management directors present. The purpose of these executive sessions is to promote

open and candid discussion among the non-management directors. Our board of directors welcomes questions or comments about the Company and our operations. If a stockholder wishes to communicate with our board of directors, including our independent directors, they may send their communication in writing to: Secretary, Vincerx Pharma, Inc., 1825 S. Grant Street, San Mateo, CA 94402. You must include your name and address in the written communication and indicate whether you are a stockholder. The Secretary will review any communication received from a stockholder, and all material communications will be forwarded to the appropriate director or directors or committee of our board of directors based on the subject matter.

Board Committees

We have established an audit committee, compensation committee, and nominating and corporate governance committee, each of which operates under a charter that has been approved by our board of directors. We believe that the composition of these committees meets the criteria for independence under, and the functioning of these committees complies with the applicable requirements of, the Sarbanes-Oxley Act, and the current rules and regulations of the SEC and Nasdaq. We intend to comply with future requirements as they become applicable to us. Each committee has the composition and responsibilities described below.

Audit Committee

Current Members:	Francisco D. Salva (Chair) Dr. Ruth E. Stevens Dr. John H. Lee
Number of Meetings in 2024:	4
Functions:	Our audit committee assists our board of directors in the oversight of:

- independent auditor's qualifications, independence and performance;
- our financial reporting processes and disclosure controls;
- engagement of our independent auditors to perform audit services and any permissible non-audit services;
- the organization and performance of our internal audit function;
- the annual audit plan and all critical accounting policies;
- the integrity of our financial statements and internal quality control;
- our compliance with legal and regulatory requirements;
- our treasury and finance matters; and
- our risk management and assessment pertaining to the financial, accounting and tax matters.

In addition, our audit committee provides our board of directors such information and materials as it may deem necessary to make the board aware of significant financial matters that require the attention of the board.

Our board of directors has determined that Mr. Salva is an audit committee financial expert, as defined by the rules promulgated by the SEC, and meets both the independence and financial sophistication requirements of the Nasdaq listing rules. Each of the members of our audit committee has the requisite financial sophistication as defined under the applicable rules and regulations of Nasdaq.

Compensation Committee

Current Members:	Laura I. Bushnell (Chair) Dr. John H. Lee
Number of Meetings in 2024:	4
Functions:	Our compensation committee assists our board of directors in meeting its responsibilities with regard to oversight and determination of: • compensation plans, including executive compensation and equity and cash incentive plans; • independence of compensation consultants, legal counsel, and other advisors; • material arrangements for our executive officers, including employment agreements, severance agreements, change in control protections, and indemnification agreements; and • disclosure in periodic reports filed with the SEC. Our board of directors has determined that each of the members of the compensation committee satisfies the independence requirements as defined under the applicable rules and regulations of Nasdaq.

Nominating and Corporate Governance Committee

Current Members:	Francisco D. Salva (Chair) Dr. Brian J. Druker
Number of Meetings in 2024:	0
Functions:	Our nominating and corporate governance committee is responsible for making recommendations to our board of directors regarding candidates for directorships and oversees the evaluation of our board of directors. In addition, our nominating and corporate governance committee is responsible for developing, maintaining, and recommending to our board of directors corporate governance policies.

Executive Officers

Our executive officers are elected by our board of directors and serve at the discretion of the board. The following provides the names, ages (as of February 28, 2025), and certain biographical information of our executive officers:

Name	Age	Position
Raquel E. Izumi, Ph.D.	55	Acting Chief Executive Officer
Kevin Haas	59	Acting Chief Financial Officer
Alexander A. Seelenberger	46	Consultant
Tom C. Thomas	65	Consultant

Biographical information for our executive officers other than Dr. Izumi is set forth below:

Kevin Haas has served as our Acting Chief Financial Officer since December 2024. Prior to that, Mr. Haas served as our Vice President of Finance and Corporate Controller from December 2020 to December 2024.

Mr. Haas was the Vice President, Finance and Administration and Principal Accounting Officer at Aravive, Inc. (f/k/a Versartis, Inc.) from November 2017 to May 2019 and served in a consulting capacity through July 2019. Mr. Haas began his career in public accounting in 1989 with Grant Thornton, LLP and holds a B.S. in Business Administration from Western Colorado University.

Alexander A. Seelenberger has served as a consultant to the Company since December 2024 and served as our Chief Financial Officer from December 2020 to December 2024. Prior to that, Mr. Seelenberger was a managing partner at Aurus Capital, a leading Latin American venture capital firm, heading its healthcare venture capital practice, from March 2009 to December 2020. In that role, Mr. Seelenberger co-founded and has been an executive director in several healthcare companies. From August 2007 to January 2009, Mr. Seelenberger served as an associate at Athelera LLC, a New York-based boutique investment bank offering financial advisory services to clients in the United States, Latin America and Europe. Mr. Seelenberger has served as a member of the board of directors of Andes Biotechnologies since September 2009, Trigemina Holdings, Inc., a pharmaceutical company, since March 2012, Levita Magnetics, a magnetic surgical platform development company, since January 2012, Echopixel, Inc., a medical imaging device development company, since September 2012, and Algenis, a bioactive molecule development company, since December 2012. Mr. Seelenberger received a B.B.A in business from the University of Chile and an M.B.A with high distinction from Harvard Business School, where he graduated as a Baker Scholar.

Tom C. Thomas has served as a consultant to the Company since December 2024 and served as our General Counsel and Chief Legal Officer from March 2021 to December 2024. Mr. Thomas was a partner at Pillsbury Winthrop Shaw Pittman LLP, an international law firm, from March 2003 to March 2021. Mr. Thomas has over 30 years of experience representing life science and technology companies at all stages of development, from start-up and emerging companies, to pre-IPO companies, to large public and private companies. Mr. Thomas received his B.B.A. in Accounting from the University of Iowa, where he graduated summa cum laude, and his J.D. from the University of Minnesota Law School, where he graduated magna cum laude.

Corporate Governance

Board Leadership Structure

Our co-founder and former Chief Executive Officer, Dr. Hamdy, serves as our chairman of the board. The board believes that having our former Chief Executive Officer serve as chairman of the board provides valuable continuity to our strategic initiatives and execution.

If the chairman of the board is an independent director, then the chairman will also serve as the lead independent director. If the chairman of the board is not an independent director, the board may appoint an independent director to serve as the board's lead independent director. The primary responsibilities of the lead independent director include presiding at all meetings of the board at which the chairman of the board is not present, including executive sessions of the independent directors, and serving as a liaison between the chairman of the board and/or the Chief Executive Officer and the independent directors. The lead independent director also has the authority to call meetings of the independent directors of the board or meetings of the board. The Company currently does not have a lead independent director.

The independent directors meet regularly in an executive session after regular board meetings, at which the independent directors have the opportunity to discuss management performance.

Role in Risk Oversight

Our board of directors is responsible for overseeing the overall risk management process at the Company. The responsibility for managing risk rests with executive management while the committees of our board of directors and our board of directors as a whole participate in the oversight process. Our board of directors' risk

oversight process builds upon management's risk assessment and mitigation processes, which include reviews of long-term strategic and operational planning, executive development and evaluation, regulatory and legal compliance, cybersecurity, financial reporting, internal risk management, and internal controls.

Corporate Governance Guidelines

Our board has adopted written Corporate Governance Guidelines to ensure that the board will have the necessary authority and practices in place to review and evaluate our business operations as needed and to make decisions that are independent of our management. The guidelines are also intended to align the interests of directors and management with those of our stockholders. Our Corporate Governance Guidelines set forth the practices the board intends to follow with respect to board composition and selection, board meetings and involvement of senior management, Chief Executive Officer performance evaluations and succession planning, and board committees and compensation. The nominating and corporate governance committee assists our board of directors in implementing and adhering to our Corporate Governance Guidelines. Our Corporate Governance Guidelines are reviewed at least annually by the nominating and corporate governance committee, and changes are recommended to our board of directors as warranted.

We believe that our corporate governance initiatives comply with the Sarbanes-Oxley Act and the rules and regulations of the SEC adopted thereunder. In addition, we believe our corporate governance initiatives comply with the rules of Nasdaq. Our board of directors will continue to evaluate our corporate governance principles and policies.

Code of Business Conduct and Ethics

Our board of directors has adopted a Code of Business Conduct and Ethics that applies to each of our directors, officers, and employees. The code addresses various topics, including:

- compliance with laws, rules and regulations;
- confidentiality;
- conflicts of interest;
- corporate opportunities;
- fair dealing;
- payments or gifts from others;
- health and safety;
- insider trading;
- international business laws;
- protection and proper use of company assets; and
- record keeping.

Our board of directors has also adopted a Code of Ethics for Senior Financial Officers applicable to our Chief Executive Officer and Chief Financial Officer as well as other key management employees addressing ethical issues. The Code of Business Conduct and Ethics is posted on our website www.vincerx.com. The Code of Business Conduct and Ethics and the Code of Ethics for Senior Financial Officers can only be amended by the approval of a majority of our board of directors. Any waiver to the Code of Business Conduct and Ethics for an executive officer or director or any waiver of the Code of Ethics for Senior Financial Officers may only be granted by our board of directors or our nominating and corporate governance committee and must be timely disclosed as required by applicable law. We have implemented whistleblower procedures that establish formal protocols for receiving and handling complaints from employees. Any concerns regarding accounting or auditing matters reported under these procedures will be communicated promptly to our audit committee.

To date, there have been no waivers under our Code of Business Conduct and Ethics or Code of Ethics for Senior Financial Officers. We intend to disclose future amendments to certain provisions of these codes or waivers of such codes granted to executive officers and directors on our website at www.vincerx.com within four business days following the date of such amendment or waiver.

Insider Trading Policy

We have adopted insider trading policies and procedures governing the purchase, sale, and/or other disposition of our securities by our directors, officers, and employees that we believe are reasonably designed to promote compliance with insider trading laws, rules, and regulations, and applicable Nasdaq listing standards. A copy of our Insider Trading Policy is filed as Exhibit 19.1 to this Annual Report on Form 10-K.

Corporate Governance Documents

Our Corporate Governance Guidelines, Code of Business Conduct and Ethics, charters for each of the audit, compensation, and nominating and corporate governance committees, and other corporate governance documents are posted on the investors section of our website at www.vincerx.com under the heading "Investors—Corporate Governance—Governance Highlights." In addition, stockholders may obtain a printed copy of these documents by writing to Secretary, Vincerx Pharma, Inc., 1825 S. Grant Street, San Mateo, CA 94402.

Delinquent Section 16(A) Reports

Section 16(a) of the Exchange Act requires our executive officers and directors, and persons who own more than 10% of a registered class of our equity securities, to file reports of ownership on Forms 3, 4 and 5 with the SEC. These persons are required to furnish us with copies of all Forms 3, 4 and 5 they file. Based solely on our review of the copies of such forms we have received and written representations from certain reporting persons that they filed all required reports, we believe that all of our executive officers, directors and greater than 10% stockholders complied on a timely basis with all Section 16(a) filing requirements applicable to them with respect to transactions during 2024, except for late reports filed by each of Dr. Hamdy, Dr. Izumi, Mr. Seelenberger, and Mr. Thomas, which were each required to be filed by May 28, 2024, but were filed on May 29, 2024.

ITEM 11. Executive Compensation.

Summary Compensation Table

The following table sets forth information for each of the last two completed fiscal years regarding compensation awarded to or earned by our former Chief Executive Officer, our Acting Chief Executive Officer and the two other most highly compensated executive officers (based on total compensation, including the value of option awards, received during the last fiscal year). These executive officers are referred to collectively as our named executive officers.

Name and Principal Position	Fiscal Year	Salary ($)	Option Awards ($)[1]	All Other Compensation ($)	Total ($)
Ahmed M. Hamdy, M.D.[2]	2024	483,000	888,092	647,932[3]	2,019,024
Chairman of the Board, Former Chief Executive Officer	2023	479,167	77,416	16,444[3]	573,027
Raquel E. Izumi, Ph.D.[4]	2024	451,500	744,532	581,253[5]	1,777,285
Acting Chief Executive Officer, Former President and Chief Operations Officer	2023	447,917	77,416	12,945[5]	538,278
Alexander A. Seelenberger[6]	2024	372,750	617,577	481,583[7]	1,471,910
Consultant, Former Chief Financial Officer	2023	369,792	73,975	13,604[7]	457,371
Tom C. Thomas[8]	2024	372,750	612,360	486,233[9]	1,471,343
Consultant, Former Chief Legal Officer	2023	369,792	73,975	16,377[9]	460,144

(1) The amounts in this column represent the aggregate grant-date fair value of the option awards granted to our named executive officers during 2024 and 2023, respectively, computed in accordance with ASC 718. Assumptions used in the calculation of these amounts are set forth in Note 10 to the audited consolidated financial statements in this Annual Report. For 2024, this amount consists of the fair value of stock options granted in March 2024 and the incremental fair value attributable to the repricing of all stock options held by such executive officer in August 2024. Note that the amounts reported in this column reflect the accounting fair value for these stock options for financial reporting purposes and do not reflect the actual economic value that may be realized by the named executive officers upon the vesting or exercise of the stock options or the sale of the common stock underlying such stock options.

(2) Dr. Hamdy's employment as our Chief Executive Officer commenced on December 23, 2020 and terminated on December 20, 2024. Dr. Hamdy continues to serve as our Chairman of the Board.

(3) The amounts in this column for 2024 include $631,615 for severance, $12,075 for matching contributions made by us under our 401(k) plan and imputed income for premiums under our employee-wide group term life insurance plan of $4,242. The amounts for 2023 include $11,550 for matching contributions made by us under our 401(k) plan, imputed income for premiums under our employee-wide group term life insurance plan of $2,898 and $1,996 for the value of in-office meals.

(4) Dr. Izumi's employment as our President and Chief Operations Officer commenced on December 23, 2020 and terminated on December 20, 2024, at which point she commenced service as our Acting Chief Executive Officer in a consulting capacity.

(5) The amounts in this column for 2024 include $567,848 for severance, $10,909 for matching contributions made by us under our 401(k) plan and imputed income for premiums under our employee-wide group term life insurance plan of $2,496. The amounts for 2023 consist of $10,641 for matching contributions made by us under our 401(k) plan, imputed income for premiums under our employee-wide group term life insurance plan of $1,386 and $918 for the value of in-office meals.

(6) Mr. Seelenberger's employment as our Chief Financial Officer commenced on December 23, 2020 and terminated on December 20, 2024, at which point he continued to provide service to the Company in a consulting capacity.

(7) The amounts in this column for 2024 include $468,805 for severance, $12,075 for matching contributions made by us under our 401(k) plan and imputed income for premiums under our employee-wide group term life insurance plan of $703. The amounts for 2023 consist of $11,550 for matching contributions made by us under our 401(k) plan, imputed income for premiums under our employee-wide group term life insurance plan of $731 and $1,323 for the value of in-office meals.

(8) Mr. Thomas' employment as our General Counsel and Chief Legal Officer commenced on March 15, 2021 and terminated on December 20, 2024, at which point he continued to provide service to the Company in a consulting capacity.

(9) The amounts in this column for 2024 include $468,805 for severance, $12,075 for matching contributions made by us under our 401(k) plan and imputed income for premiums under our employee-wide group term life insurance plan of $5,353. The amounts for 2023 consist of $11,550 for matching contributions made by us under our 401(k) plan, imputed income for premiums under our employee-wide group term life insurance plan of $3,096 and $1,731 for the value of in-office meals.

Narrative Disclosure to Summary Compensation Table

For 2024, the compensation program for our named executive officers consisted of base salary, a performance-based cash bonus opportunity, and awards of stock options. In addition, during 2024 our named executive officers were eligible to participate in our 401(k) retirement plan, employee stock purchase plan (other than Dr. Hamdy and Dr. Izumi), health and wellness plans, and other employee benefits.

Base Salary

The base salaries of our named executive officers are set at levels that are commensurate with the executive's duties and authorities, contributions, prior experience and performance, competitive with base salaries of comparable companies based on available data, and sufficient to enable us to hire and retain executives with the talent and skills we need. The base salaries of our named executive officers are established and approved by our compensation committee when such executives join the Company or upon their promotion and are reviewed on an annual basis. The base salaries of our Chief Executive Officer and our other named executive officers were increased by 5% for 2023 to help offset high levels of inflation and were not increased in 2024 in order to conserve cash.

Cash Bonus

Subject to the discretion of our compensation committee, our named executive officers are eligible to earn an annual cash bonus. The annual target bonus opportunity for each of our named executive officers is a percentage of the named executive officer's base salary. The annual target bonus opportunity was established and approved by our compensation committee for each executive when the executive joined the Company or was promoted. Our compensation committee reviews our cash bonus program, including our named executive officers' annual target bonus opportunities, annually. For 2024, all employees of the Company, including our named executive officers, were eligible to earn a cash bonus based entirely on the achievement of the corporate performance goals approved by our board of directors for 2024, including research, regulatory, clinical, business development, publication, and financial goals. Notwithstanding the achievement of corporate goals and deliverables for both 2023 and 2024, pursuant to its discretion under our annual cash bonus program, to conserve cash, our compensation committee determined that no bonuses would be earned or payable under the annual cash bonus program for 2023 or 2024.

Long-Term Stock-Based Incentives

The Company believes that stock-based incentives, including stock option awards, are an effective means for aligning the interests of our executives with the interests of our shareholders and that the long-term compensation of our named executive officers should be linked to the value provided to our shareholders. In addition, we use stock-based compensation as a retention tool. Long-term stock-based incentives granted to our executives for the last several years have been structured in the form stock option awards that vest over multiple years.

As further described in Note 10 to the audited consolidated financial statements in this Annual Report, during 2024, the board of directors and stockholders of the Company approved a one-time stock option repricing and exchange program. As a result, effective on August 12, 2024, the exercise price of all outstanding stock options held by employees (including the Company's executive officers) and consultants of the Company that were granted under the 2020 Plan and that had an exercise price per share greater than $10.97, was reduced to $11.00 per share, except that a premium exercise price will apply for certain exercises made prior to the end of a one year retention period. The vesting terms and expiration dates remain unchanged from the original grant dates. Subsequent to completion of the repricing, the Company commenced a tender offer to exchange outstanding eligible options to purchase shares of the Company's common stock for new restricted stock units. Each of our named executive officers participated in the option repricing and was eligible to participate in the tender offer to exchange outstanding options for new restricted stock units.

401(k) Retirement Plan

We have a 401(k) defined contribution retirement plan for our employees. Our 401(k) plan is intended to qualify as a tax-qualified plan under Section 401 of the Internal Revenue Code so that contributions to our 401(k) plan and income earned on such contributions are not taxable to participants until withdrawn or distributed from the 401(k) plan (except in the case of contributions under the 401(k) plan designated as Roth contributions, which are not taxable when distributed). Our 401(k) plan provides that each participant may contribute up to 100% of his or her eligible pre-tax compensation, up to a statutory limit. Participants who are at least 50 years

old can also make "catch-up" contributions. Under our 401(k) plan, each employee is fully vested in his or her deferred salary contributions. Our 401(k) plan also permits us to make discretionary matching contributions, subject to established limits and a vesting schedule. In 2024, we made matching contributions equal to 100% of a participant's contributions up to 1% of such participant's eligible compensation plus 50% of a participant's contributions between 1% and 6% of such participant's eligible compensation.

Benefits and Perquisites

We provide benefits to our named executive officers on the same basis as provided to all of our employees, including health, dental and vision insurance; life insurance; accidental death and dismemberment insurance; short-and long-term disability insurance; sick leave; parental leave; in-office meals; and an employee assistance program. We do not maintain any executive-specific benefit or perquisite programs. We do not provide tax reimbursements or any other tax payments with respect to perquisites, including excise tax "gross-ups," to any of our executive officers.

Agreements with Named Executive Officers and Potential Payments Upon Termination or Change of Control

Agreements with Dr. Ahmed M. Hamdy

Effective December 23, 2020, Dr. Ahmed M. Hamdy entered into an employment agreement with us, pursuant to which he served as our Chief Executive Officer and Chairman of our board of directors until December 20, 2024 (the "Hamdy Employment Agreement"). Pursuant to the Hamdy Employment Agreement, Dr. Hamdy's initial annual base salary was $460,000 and he was eligible to earn an annual cash bonus with an initial target of 35% of his then-applicable base salary, subject to increase (but not decrease) in light of Dr. Hamdy's performance, external market conditions, our financial condition and performance, and such other factors as our board deems appropriate. The Hamdy Employment Agreement contains customary confidentiality, non-solicitation, and intellectual property assignment provisions.

Dr. Hamdy's employment with us terminated without Cause (as defined in the Hamdy Employment Agreement) effective December 20, 2024. Pursuant to the Hamdy Employment Agreement, Dr. Hamdy received the following severance benefits: (1) a lump sum cash payment, less applicable withholding taxes, in an amount equal to (a) one times his base salary and (b) one times his target bonus opportunity for 2024; (2) the vesting of all then-outstanding unvested stock options subject to time-based vesting was accelerated so that the number of shares vested underlying each such option equaled that number of shares that would have been vested if Dr. Hamdy had continued his employment for a period of 12 continuous months following his termination date; and (3) until the earlier of 12 months following his termination date or the date he becomes eligible for group health insurance through a new employer, continuation of health insurance coverage under COBRA and monthly cash payments equal to the costs of such COBRA benefits coverage, less applicable withholding taxes. Although his employment with us has terminated, Dr. Hamdy continues to serve as the Company's Chairman of the Board. All stock options held by Dr. Hamdy as of the date of his termination from employment and following the application of the vesting acceleration described above, will vest, if at all, pursuant to their terms in respect of services provided by Dr. Hamdy as the Company's Chairman of the Board.

Agreements with Dr. Raquel E. Izumi

Effective December 23, 2020, Dr. Raquel E. Izumi entered into an employment agreement with us, pursuant to which she served as our President and Chief Operations Officer until December 20, 2024 (the "Izumi Employment Agreement"). Pursuant to the Izumi Employment Agreement, Dr. Izumi's initial annual base salary was $430,000 and she was eligible to earn an annual cash bonus with an initial target of 30% of her then-applicable base salary, subject to increase (but not decrease) in light of Dr. Izumi's performance, external market conditions, our financial condition and performance, and such other factors as our board deems appropriate. Dr. Izumi's employment agreement contains customary confidentiality, non-solicitation, and intellectual property assignment provisions.

Dr. Izumi's employment with us terminated without Cause (as defined in the Izumi Employment Agreement) effective December 20, 2024. Pursuant to the Izumi Employment Agreement, Dr. Izumi received the following severance benefits: (1) a lump sum cash payment, less applicable withholding taxes, in an amount equal to (a) one times her current base salary and (b) one times her target bonus opportunity for 2024; (2) the vesting of all then-outstanding unvested stock options subject to time-based vesting was accelerated so that the number of shares vested underlying each such option equaled that number of shares that would have been vested if Dr. Izumi had continued her employment for a period of 12 continuous months following her termination date; and (3) until the earlier of 12 months following her termination date or the date she becomes eligible for group health insurance through a new employer, continuation of health insurance coverage under COBRA and monthly cash payments equal to the costs of such COBRA benefits coverage, less applicable withholding taxes.

Although her employment with us has terminated, effective December 20, 2024, Dr. Izumi agreed to serve as the Company's Acting Chief Executive Officer in a consulting capacity. All stock options held by Dr. Izumi as of the date of her termination from employment and following the application of the vesting acceleration described above, will vest, if at all, pursuant to their terms in respect of services provided by Dr. Izumi as a consultant.

Agreements with Alexander A. Seelenberger

Effective December 23, 2020, Alexander A. Seelenberger entered into an employment agreement with us, pursuant to which he served as our Chief Financial Officer until December 20, 2024 (the "Seelenberger Employment Agreement"). Pursuant to the Seelenberger Employment Agreement, Mr. Seelenberger's initial annual base salary was $355,000 and he was eligible to earn an annual cash bonus with an initial target of 30% of his then-applicable base salary, subject to increase (but not decrease) in light of Mr. Seelenberger's performance, external market conditions, our financial condition and performance, and such other factors as our board deems appropriate. The Seelenberger Employment Agreement contains customary confidentiality, non-solicitation, and intellectual property assignment provisions.

Mr. Seelenberger's employment with us was terminated without Cause (as defined in the Seelenberger Employment Agreement), effective December 20, 2024. Pursuant to the Seelenberger Employment Agreement, Mr. Seelenberger received the following severance benefits: (1) a lump sum cash payment, less applicable withholding taxes, in an amount equal to (a) one times his current base salary and (b) one times his target bonus opportunity for 2024; (2) the vesting of all then-outstanding unvested stock options subject to time-based vesting was accelerated so that the number of shares vested underlying each such option equaled that number of shares that would have been vested if Mr. Seelenberger had continued his employment for a period of 12 continuous months following his termination date; and (3) at Mr. Seelenberger's election, until the earlier of six months following his termination date or the date he becomes eligible for group health insurance through a new employer, continuation of health insurance coverage under COBRA and monthly cash payments equal to the costs of such COBRA benefits coverage, less applicable withholding taxes. Although his employment with us has terminated, Mr. Seelenberger continues to provide services to the Company as a consultant. All stock options held by Mr. Seelenberger as of the date of his termination from employment and following the application of the vesting acceleration described above, will vest, if at all, pursuant to their terms in respect of services provided by Mr. Seelenberger as a consultant.

Agreements with Tom C. Thomas

Effective March 15, 2021, Tom C. Thomas entered into an employment agreement with us, pursuant to which he served as our General Counsel and Chief Legal Officer until December 20, 2024 (the "Thomas Employment Agreement"). Pursuant to the Thomas Employment Agreement, Mr. Thomas' initial annual base salary was $355,000 and he was eligible to earn an annual cash bonus with an initial target of 30% of his then-applicable base salary, subject to increase (but not decrease) in light of Mr. Thomas' performance, external market conditions, our financial condition and performance, and such other factors as our board deems appropriate. Mr. Thomas' employment agreement contains customary confidentiality, non-solicitation, and intellectual property assignment provisions.

Mr. Thomas' employment with us was terminated without Cause (as defined in the Thomas Employment Agreement), effective December 20, 2024. Pursuant to the Thomas Employment Agreement, Mr. Thomas received the following severance benefits: (1) a lump sum cash payment, less applicable withholding taxes, in an amount equal to (a) one times his current base salary and (b) one times his target bonus opportunity for 2024; (2) the vesting of all then-outstanding unvested stock options subject to time-based vesting was accelerated so that the number of shares vested underlying each such option equaled that number of shares that would have been vested if Mr. Thomas had continued his employment for a period of 12 continuous months following his termination date; and (3) at Mr. Thomas's election, until the earlier of six months following his termination date or the date he becomes eligible for group health insurance through a new employer, continuation of health insurance coverage under COBRA and monthly cash payments equal to the costs of such COBRA benefits coverage, less applicable withholding taxes. Although his employment with us has terminated, Mr. Thomas continues to provide services to the Company as a consultant. All stock options held by Mr. Thomas as of the date of his termination from employment and following the application of the vesting acceleration described above, will vest, if at all, pursuant to their terms in respect of services provided by Mr. Thomas as a consultant.

Incentive-Based Compensation Recoupment Policy

On November 16, 2023, we adopted an Incentive-Based Compensation Recoupment Policy (the "Recoupment Policy") that provides for the recoupment of excess incentive compensation paid to executive officers, including the named executive officers, in the event of an accounting restatement due to material noncompliance with financial reporting requirements to comply with Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, as codified by Section 10D of the Exchange Act, and Listing Rule 5608 of The Nasdaq Stock Market LLC. This Recoupment Policy applies to compensation that is granted, earned, or vested based in whole or in part upon the attainment of a financial reporting measure and provides for the reimbursement or forfeiture by the executive officer of the excess portion of the compensation received by the executive officers during the three preceding fiscal years.

Outstanding Equity Awards at Fiscal Year-End Table

The following table sets forth information regarding outstanding equity awards for each of our named executive officers as of December 31, 2024:

		Option Awards[1]			
Name	Date Granted	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date
Ahmed M. Hamdy, M.D.	02/14/22[2]	6,375	0	11.00	02/13/32
	08/25/22[3]	3,000	0	11.00	08/24/32
	11/15/22[3]	3,000	0	11.00	11/14/32
	02/15/23[3]	4,126	374	11.00	02/14/33
	02/15/23[4]	0	7,337	11.00	03/06/34
	02/15/23[4]	0	2,662	11.00	03/06/34
Raquel E. Izumi, Ph.D.	02/14/22[2]	3,825	0	11.00	02/13/32
	08/25/22[3]	3,000	0	11.00	08/24/32
	11/15/22[3]	3,000	0	11.00	11/14/32
	02/15/23[3]	4,126	374	11.00	02/14/33
	02/15/23[4]	0	6,187	11.00	03/06/34
	02/15/23[4]	0	2,062	11.00	03/06/34
Alexander A. Seelenberger	12/23/20[5]	10,000	0	11.00	12/22/30
	02/14/22[2]	2,762	0	11.00	02/13/32
	08/25/22[3]	2,900	0	11.00	08/24/32
	11/15/22[3]	2,800	0	11.00	11/14/32
	02/15/23[3]	3,942	358	11.00	02/14/33
	02/15/23[4]	0	4,687	11.00	03/06/34
	02/15/23[4]	0	1562	11.00	03/06/34
Tom C. Thomas	03/15/21[4]	8,750	0	11.00	03/14/31
	02/14/22[6]	2,762	0	11.00	02/13/32
	08/25/22[3]	2,900	0	11.00	08/24/32
	11/15/22[3]	2,800	0	11.00	11/14/32
	02/15/23[3]	3,942	358	11.00	02/14/33
	02/15/23[4]	0	4,687	11.00	03/06/34
	02/15/23[4]	0	1562	11.00	03/06/34

(1) All share amounts and exercise prices reflect (i) a repricing of all outstanding options held by employees, including executive officers, effective August 12, 2024, and (ii) a 1-for-20 reverse stock split of our common stock effective January 27, 2025 (the “Reverse Stock Split”).

(2) Option vests over three years, with 1/3 of the shares vesting on December 23, 2022 and 1/36 of the shares vesting monthly thereafter, subject to acceleration pursuant to the applicable named executive officer’s employment or other services agreement.

(3) Option vests over two years, with 1/24 of the shares vesting monthly following the date of grant, subject to acceleration pursuant to the applicable named executive officer’s employment or other services agreement.

(4) Option vests over three years, with 1/3 of the shares vesting one year following the date of grant and 1/36 of the shares vesting monthly thereafter, subject to acceleration pursuant to the applicable named executive officer’s employment or other services agreement.

(5) Option vests over two years, with 1/3 of the shares vesting on the date of grant and 1/36 of the shares vesting monthly thereafter, subject to acceleration pursuant to the applicable named executive officer’s employment or other services agreement.

Director Compensation

The following table shows certain information with respect to the compensation of our non-employee directors during 2024 (except Dr. Hamdy whose compensation is described under Item 11 of Part III of this Annual Report):

Name	Fees earned or paid in cash ($)	Option awards ($)[1]	Total ($)
Laura I. Bushnell	35,000	8,050	43,050
Brian J. Druker, M.D.	30,000	8,050	38,050
John H. Lee, M.D.	35,000	8,050	43,050
Francisco D. Salva	50,000	8,050	58,050
Ruth E. Stevens, Ph.D.	30,000	8,050	38,050

(1) Amounts represent the aggregate grant date fair value of the option awards granted in 2024 in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718 (FASB ASC 718). See Note 10 to the audited consolidated financial statements in this Annual Report for a discussion of assumptions made in determining the aggregate grant date fair value of our option awards. Note that the amounts reported in this column reflect the accounting fair value for these stock options for financial reporting purposes and do not reflect the actual economic value that may be realized by the non-employee directors upon the vesting or exercise of the stock options or the sale of the common stock underlying such stock options. As further described in Note 10 to the audited consolidated financial statements in this Annual Report, our non-employee directors were not eligible to participate in the stock option repricing program and were not eligible to participate in the tender offer to exchange outstanding options for new restricted stock units.

The following table sets forth the aggregate number of shares of common stock underlying option awards outstanding on December 31, 2024:

Name	Number of shares
Laura I. Bushnell	3,583
Brian J. Druker, M.D.	3,583
John H. Lee, M.D.	3,583
Francisco D. Salva	3,583
Ruth E. Stevens, Ph.D.	3,250

Director Compensation Arrangements

Our board of directors designed our non-employee director compensation program to reward directors for their contributions to our success, align the director compensation program with stockholder interests and our executive compensation program, and provide competitive compensation necessary to attract and retain high quality non-employee directors. Our board of directors expects to review director compensation periodically to ensure that director compensation remains competitive such that we can recruit and retain qualified directors. Our compensation committee and nominating and corporate governance committees seek input and recommendations from management for director compensation, but make all decisions regarding director and executive compensation.

Our non-employee directors are entitled to the following compensation for their service on our board of directors:

- an annual cash retainer of $25,000, to be paid in quarterly installments;
- a non-statutory stock option to purchase 1,000 shares of common stock upon their initial election to our board of directors, prorated if such initial election occurs other than at an annual meeting of

stockholders, and a non-statutory stock option to purchase 750 shares of common stock on the date of each annual meeting of stockholders after their initial election so long as they are serving as a non-employee director as of the date of such annual meeting unless they are up for re-election at such annual meeting and are not re-elected (the above number of shares subject to options has been adjusted to reflect the Reverse Stock Split of our common stock effective January 27, 2025) ;

- an annual cash retainer of $15,000 for the chair of the audit committee, $10,000 for the chair of the compensation committee, and $10,000 for the chair of the nominating and corporate governance committee; and
- an annual cash retainer of $5,000 for other members of the audit committee, compensation committee, and nominating and corporate governance committee.

The exercise price of each stock option will be the closing price of our common stock on the date of grant, as reported by the Nasdaq Stock Market LLC. Each stock option will vest in full on the earlier of 12 months following the date of grant, the next annual meeting of stockholders, or the consummation of a change of control (as defined in the Incentive Plan, subject to the director's continued service. Equity compensation under the director compensation program is subject to the annual limits on non-employee director compensation set forth in our Incentive Plan.

Our policy is to reimburse directors for reasonable and necessary out-of-pocket expenses incurred in attending board and committee meetings or performing other services in their capacities as directors. We do not provide tax gross-up payments to members of our board of directors.

Policies and Practices for Granting Certain Equity Awards.

Equity awards are, including the award of stock options, discretionary and are generally granted to our employees, including our named executive officers, and other service providers when deemed appropriate based on a periodic review of the Company's executive compensation program. Our board of directors and the compensation committee did not take material nonpublic information into account when determining the timing and terms of stock options. The Company does not time the disclosure of material nonpublic information for the purpose of affecting the value of executive compensation.

ITEM 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Equity Compensation Plan Information

The following table summarizes the number of shares of common stock to be issued upon the exercise of outstanding options, warrants and rights granted to our employees, consultants, and directors, the release of restricted stock units, as well as the number of shares of common stock remaining available for future issuance under our equity compensation plans as of December 31, 2024.

	Number of securities to be issued upon exercise of outstanding options, warrants and rights[1] (a)	Weighted average exercise price of outstanding options, warrants and rights[2] (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column[1] (a))
Equity compensation plans approved by security holders	254,565	$ 19.89	115,187[3]
Equity compensation plans not approved by security holders	—	—	—
Total	254,565		115,187

(1) Reflects the Reverse Stock Split.
(2) Reflects the Option Repricing.
(3) Represents 104,038 shares available for future issuance under the 2020 Stock Incentive Plan (the "Incentive Plan") and 11,149 shares available for future issuance under our 2021 Employee Stock Purchase Plan (the "ESPP") as of December 31, 2024.

The Incentive Plan contains an "evergreen" provision, pursuant to which the number of shares of common stock reserved for issuance pursuant to awards under such plan shall be increased on the first day of each fiscal year beginning on January 1, 2021, equal to the lesser of (x) 5% of the number of shares of common stock outstanding on the last day of the immediately preceding fiscal year or (y) such lesser amount that our compensation committee determines for purposes of the annual increase for that fiscal year. Effective January 1, 2025, the Incentive Plan was increased by 111,979 shares (after reflecting the Reverse Stock Split) pursuant to such evergreen provision.

The ESPP contains an "evergreen" provision, pursuant to which the number of shares of common stock available for purchase under such plan shall be increased on the first day of each year beginning January 1, 2022, equal to the least of (x) 1% of the number of shares of common stock outstanding on such date or (y) 25,000 shares of common stock, or (z) a lesser amount determined by our compensation committee or our board of directors. Effective January 1, 2025, the ESPP was increased by 22,395 shares (after reflecting the Reverse Stock Split) pursuant to such evergreen provision.

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth certain information as of February 28, 2025 as to shares of our common stock beneficially owned by: (1) each person who is known by us to own beneficially more than 5% of our common stock, (2) each of our named executive officers listed in the Summary Compensation Table, (3) each of our directors, and (4) our current directors and executive officers as a group.

We have determined beneficial ownership in accordance with the rules of the SEC. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of common stock that they beneficially own, subject to applicable community property laws.

The percentage of our common stock beneficially owned is based on 5,234,277 shares of common stock outstanding as of March 21, 2025 and reflects the Reverse Stock Split. In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed outstanding shares of common stock subject to options held by that person that are exercisable within 60 days of March 21, 2025. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person. All numbers of shares and percentages set forth in the table below have been adjusted to reflect the Reverse Stock Split.

Except as otherwise set forth in footnotes to the table below, the address of each of the persons listed below is c/o Vincerx Pharma, Inc., 1825 S. Grant Street, San Mateo, CA 94402.

Name and address of beneficial owner	Number of shares beneficially owned	Percentage of shares beneficially owned
Five Percent Holders:		
Armistice Capital Master Fund Ltd.(1)	581,586	9.9%
Named Executive Officers and Directors(3):		
Ahmed M. Hamdy, M.D.(4)	106,448	2.0%
Raquel E. Izumi, Ph.D.(5)	102,730	2.0%
Alexander A. Seelenberger(6)	27,082	*
Tom C. Thomas	35,671	*
Laura I. Bushnell(7)	3,793	*
Brian J. Druker, M.D.(7)	5,573	*
John H. Lee, M.D.(7)	2,872	*
Francisco D. Salva(7)	2,833	*
Ruth E. Stevens, Ph.D.(8)	2,500	*
All current executive officers and directors as a group (10 Individuals)(9)	298,860	5.6%

* Represents beneficial ownership of less than 1%.

(1) Represents warrants to purchase common stock (the "Armistice Warrants") issued to Armistice Capital Master Fund Ltd. ("Armistice"), the exercise of which is subject to a Maximum Percentage (as defined in the Armistice Warrants) of 9.99% of the number of shares of common stock outstanding immediately after giving effect to the issuance of shares of common stock issuable upon exercise. Because of this limitation, the number of shares listed in the table above represent 9.99% of the number of shares of common stock outstanding as of March 21, 2025, after giving effect to the exercise of the Armistice Warrants. If there was no Maximum Percentage on the exercise of the Armistice Warrants, Armistice would be deemed to be the beneficial owner of 935,000 shares of common stock. The principal address for Armistice is c/o Armistice Capital, LLC, 510 Madison Avenue, 7th Floor, New York, NY 10022.

(2) The business address of each of the individuals is c/o Vincerx Pharma, Inc., 1825 S. Grant Street, San Mateo, CA 94402.

(3) Includes (i) 80,909 shares of common stock held by The Hamdy Family Trust dated 10/7/2015 and (ii) options to purchase 20,736 shares of common stock that are exercisable within 60 days of March 21, 2025.

(4) Includes (i) 4,260 shares of common stock held by the Izumi-Covey 2000 Revocable Trust U/A 01/09/01, (ii) 50 shares of common stock held by Ms. Izumi's spouse's Rollover Individual Retirement Account, and (iii) options to purchase 17,510 shares of common stock that are exercisable within 60 days of March 21, 2025.

(5) Includes options to purchase 25,175 shares of common stock that are exercisable within 60 days of March 21, 2025.

(6) Includes options to purchase 2,833 shares of common stock that are exercisable within 60 days of March 21, 2025.

(7) Includes options to purchase 2,500 shares of common stock that are exercisable within 60 days of March 21, 2025.

(8) Consists of (i) 190,461 shares of common stock beneficially owned by our current executive officers and directors and (ii) options to purchase an aggregate of 108,399 shares of common stock that are exercisable within 60 days of March 21, 2025.

ITEM 13. Certain Relationships and Related Transactions, and Director Independence.

It is our policy that all employees, officers, and directors must avoid any activity that is or has the appearance of conflicting with the interests of the Company. This policy is included in our Code of Business Conduct and Ethics as discussed above. Additionally, our audit committee conducts a review of all related person transactions for potential conflict of interest situations on an ongoing basis, as discussed further below.

Other than the compensation arrangements of our directors and named executive officers discussed elsewhere in this report, and as set forth below, there were no transactions since January 1, 2024 to which we have been or will be a party, and in which the amount involved exceeded or will exceed the lesser of $120,000 or 1% of the average of our total assets at year-end for the last two completed fiscal years and in which any of our directors, executive officers, beneficial holders of more than 5% of our capital stock, or entities affiliated with, or immediate family members of, any of the foregoing, had or will have a direct or indirect material interest.

Indemnification Agreements

We entered into separate indemnification agreements with our directors and executive officers, in addition to the indemnification provided for in our Certificate of Incorporation and our Bylaws. These agreements, among other things, require us to indemnify our directors and executive officers for certain expenses, including attorneys' fees, judgments, fines, and settlement amounts incurred by a director or executive officer in any action or proceeding arising out of their services as one of our directors or executive officers or as a director or executive officer of any other company or enterprise to which the person provides services at our request. We believe that these charter provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

The limitation of liability and indemnification provisions in our Certificate of Incorporation and our Bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit us and our stockholders. A stockholder's investment may decline in value to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Related Person Transactions Policy

Our board of directors adopted a written Related Person Transactions Policy that sets forth our policies and procedures regarding the identification, review, consideration, and oversight of "related person transactions." For purposes of our policy only, a "related person transaction" is a transaction, arrangement, or relationship (or any series of similar transactions, arrangements or relationships) in which we or any of our subsidiaries are participants involving an amount that exceeds $120,000, in which any "related person" has a material interest.

Transactions involving compensation for services provided to us as an employee, consultant, or director will not be considered related person transactions under this policy. A related person is any executive officer, director, nominee to become a director, or a holder of more than 5% of any class of our voting securities (including common stock), including any of their immediate family members and affiliates, including entities owned or controlled by such persons.

Under the policy, the related person in question or, in the case of transactions with a holder of more than 5% of any class of our voting securities, an officer with knowledge of a proposed transaction, must present information regarding the proposed related person transaction to the audit committee (or, where review by the audit committee would be inappropriate, to another independent body of our board of directors) for review. To identify related person transactions in advance, we will rely on information supplied by our executive officers, directors, and certain significant stockholders. In considering related person transactions, the audit committee will take into account the relevant available facts and circumstances, which may include, but are not limited to:

- the risks, costs and benefits to the Company;
- the impact on a director's independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the terms of the transaction;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties.

Our audit committee will approve only those transactions that it determines are fair to us and in our best interests.

Director Independence

Our board of directors determined that each of our directors, other than Dr. Ahmed M. Hamdy and Dr. Raquel E. Izumi, qualify as independent directors, as defined under the Nasdaq listing rules, and our board consists of a majority of "independent directors," as defined under the rules of the SEC and Nasdaq listing rules relating to director independence requirements. In addition, we are subject to the rules of the SEC and Nasdaq relating to the membership, qualifications, and operations of the audit committee, as discussed below.

Hedging Transactions

All officers, directors, and employees are prohibited from hedging or monetization transactions under our Insider Trading Policy.

ITEM 14. Principal Accountant Fees and Services.

Principal Accountant Fees and Services

The following table sets forth the fees billed by WithumSmith+Brown, PC for audit and other services rendered:

	Year ended December 31,	
	2024	2023
Audit Fees[1]	$ 265,519	$ 167,440
Audit-Related Fees	—	—
Tax Fees	—	—
All Other Fees	—	—

(1) Audit fees consist of fees billed for services relating to the audit of our annual financial statement and review of our quarterly financial statements, services that are normally provided in connection with statutory and regulatory filings or engagements, comfort letters, reports on an issuer's internal controls, consents, and review of documents to be filed with the SEC (e.g., periodic filings, registration statements, and company responses to SEC comment letters).

Policy on Audit Committee Pre-Approval and Permissible Non-Audit Services of Independent Auditors

Our board of directors' policy is to pre-approve all audit and permissible non-audit services provided by the independent auditors. These services may include audit services, audit-related services, tax services and other services. Pre-approval is generally provided for up to one year and any pre-approval is detailed as to the particular service or category of services and is generally subject to a specific budget. The independent auditors and management are required to periodically report to our board of directors regarding the extent of services provided by the independent auditors in accordance with this pre-approval, and the fees for the services performed to date. All of the services provided were pre-approved to the extent required. Our board of directors may also pre-approve particular services on a case-by-case basis.

PART IV

ITEM 15. Exhibit and Financial Statement Schedules.

(a) Documents filed as part of this report

1. Financial Statements:

Reference is made to the Index to Financial Statements of Vincerx Pharma, Inc. included in Item 8 of Part II of this report.

2. Financial Statement Schedules

All schedules have been omitted because they are not required, not applicable, or the required information is included in the financial statements or notes thereto.

3. Exhibits

See Item 15(b) below. Each management contract or compensatory plan or arrangement required to be filed has been identified.

(b) Exhibits

Exhibit No.	Description
2.1+	Merger Agreement by and among LifeSci Acquisition Corp., LifeSci Acquisition Merger Sub Inc., Vincera Pharma, Inc. and Raquel E. Izumi, as representative of the stockholders of Vincera Pharma, Inc., dated September 25, 2020 (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed on December 30, 2020).
3.1	Second Amended and Restated Certificate of Incorporation, as amended through January 27, 2025.
3.2	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed on May 28, 2024).
4.1	Form of Warrant (incorporated by reference to Exhibit 4.2 to the Registration Statement on Form S-1 (File No. 333-252589) filed on January 29, 2021).
4.2	Warrant Agreement by and between LifeSci Acquisition Corp. and Continental Stock Transfer & Trust Company, dated March 5, 2020 (incorporated by reference to Exhibit 4.1 to the Quarterly Report on Form 10-Q filed on November 10, 2020).
4.3	Amended and Restated Registration and Stockholder Rights Agreement by and among the Company and certain stockholders of the Company, dated December 23, 2020 (incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed on December 30, 2020).
4.4	Registration Rights Agreement by and among the Company and the Investors party thereto, dated September 15, 2021 (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on September 16, 2021).
4.5	Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (incorporated by reference to Exhibit 4.7 to the Annual Report on Form 10-K for the year ended December 31, 2021).
4.6	Form of Indenture relating to debt securities (incorporated by reference to Exhibit 4.1 to the registration Statement on Form S-3 (File No. 333-284478) filed on January 24, 2025).
4.10	Form of Warrant (incorporated by reference to Exhibit 4.2 to the Current Report on Form S-1 (File No. 333-252589) filed on January 29, 2021).
4.11	Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed on April 26, 2024).

Exhibit No.	Description
4.12	Form of Common Stock Warrant (incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed on April 26, 2024).
4.13	Form of Pre-Funded Warrant (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed on December 27, 2024).
4.14	Form of Common Stock Warrant (incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed on December 27, 2024).
10.1#	Form of Indemnification Agreement by and between the Company and its directors and officers (incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-1 (File No. 333-252589) filed on January 29, 2021).
10.2#	Vincerx Pharma, Inc. 2020 Stock Incentive Plan (incorporated by reference to Exhibit 99.1 to the Registration Statement on Form S-8 (File No. 333-280382) filed on June 21, 2024).
10.3#	Forms of Stock Option Agreement, Notice of Exercise, Stock Option Grant Notice, Restricted Stock Unit Agreement, and Restricted Stock Agreement under the Vincerx Pharma, Inc. 2020 Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to the Registration Statement on Form S-1 (File No. 333-252589) filed on January 29, 2021).
10.4#	Executive Employment Agreement by and between the Company and Dr. Ahmed M. Hamdy, dated December 23, 2020 (incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K filed on December 30, 2020).
10.5#	Executive Employment Agreement by and between the Company and Dr. Raquel E. Izumi, dated December 23, 2020 (incorporated by reference to Exhibit 10.5 to the Current Report on Form 8-K filed on December 30, 2020).
10.6#	Executive Employment Agreement by and between the Company and Alexander A. Seelenberger, dated December 23, 2020 (incorporated by reference to Exhibit 10.6 to the Current Report on Form 8-K filed on December 30, 2020).
10.7#	Executive Employment Agreement by and between the Company and Tom C. Thomas, dated January 27, 2021 (incorporated by reference to Exhibit 10.8 to the Annual Report on Form 10-K for the year ended December 31, 2020).
10.8#	Vincerx Pharma, Inc. 2021 Employee Stock Purchase Plan (incorporated by reference to Exhibit 99.1 to the Registration Statement on Form S-8 (File No. 333-257042) filed on June 11, 2021).
10.9*	License Agreement by and among Vincera Pharma, Inc., Bayer Aktiengesellschaft and Bayer Intellectual Property GmbH, dated October 7, 2020 (incorporated by reference to Exhibit 10.7 to the Current Report on Form 8-K filed on December 30, 2020).
19.1	Insider Trading Policy.
21.1	Subsidiaries of the Company (incorporated by reference to Exhibit 21.1 to the Annual Report on Form 10-K filed on March 29, 2024).
23.1	Consent of independent registered public accounting firm.
24.1	Power of Attorney (included on the signature page hereof).
31.1	Principal Executive Officer's Certifications Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Principal Financial Officer's Certifications Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

Exhibit No.	Description
32.1†	Certification Pursuant to 18 U.S.C. § 1350 (Section 906 of Sarbanes-Oxley Act of 2002).
32.2†	Certification Pursuant to 18 U.S.C. § 1350 (Section 906 of Sarbanes-Oxley Act of 2002).
97.1	Policy Relating to Recovery of Erroneously Awarded Compensation (incorporated by reference to Exhibit 97.1 to the Annual Report on Form 10-K filed on March 29, 2024).
101.INS	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

+ The schedules and exhibits to this agreement have been omitted pursuant to Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the SEC upon request.
# Indicates management contract or compensatory plan or arrangement.
* Portions of this exhibit have been omitted in accordance with Item 601(b)(10)(iv) of Regulation S-K.
† In accordance with Item 601(b)(32)(ii) of Regulation S-K and SEC Release No. 34-47986, the certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Form 10-K and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act"), or deemed to be incorporated by reference into any filing under the Exchange Act or the Securities Act of 1933 except to the extent that the registrant specifically incorporates it by reference.

(c) Financial Statement Schedules

Reference is made to Item 15(a)(2) above.

ITEM 16. Form 10-K Summary.

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

VINCERX PHARMA, INC.

/s/ Dr. Raquel E. Izumi
Name: Dr. Raquel E. Izumi
Title: Acting Chief Executive Officer

Date: March 27, 2025

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENT, that each person whose signature appears below constitutes and appoints Dr. Raquel E. Izumi and Kevin Haas, and each of them, his or her true and lawful attorneys-in-fact, each with full power of substitution, for him or her in any and all capacities, to sign any amendments to this report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact or their substitute or substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons, on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Dr. Raquel E. Izumi Dr. Raquel E. Izumi	Acting Chief Executive Officer (Principal Executive Officer)	March 27, 2025
/s/ Kevin Haas Kevin Haas	Acting Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 27, 2025
/s/ Dr. Ahmed M. Hamdy Dr. Ahmed M. Hamdy	Chairman of the Board	March 27, 2025
/s/ Laura I. Bushnell Laura I. Bushnell	Director	March 27, 2025
/s/ Dr. Brian J. Druker Dr. Brian J. Druker	Director	March 27, 2025
/s/ Dr. John H. Lee Dr. John H. Lee	Director	March 27, 2025
/s/ Francisco D. Salva Francisco D. Salva	Director	March 27, 2025
/s/ Dr. Ruth E. Stevens Dr. Ruth E. Stevens	Director	March 27, 2025

Exhibit 3.1

SECOND AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION

OF

LIFESCI ACQUISITION CORP.

December 23, 2020

LifeSci Acquisition Corp., a corporation organized and existing under the laws of the State of Delaware, DOES HEREBY CERTIFY AS FOLLOWS:

1. The name of the Corporation is "***LifeSci Acquisition Corp.***". The original certificate of incorporation of the corporation was filed with the Secretary of State of the State of Delaware on December 19, 2018 (the "***Original Certificate***").

2. The Original Certificate was amended and restated on March 5, 2020 (the "***First Amended and Restated Certificate of Incorporation***").

3. This Second Amended and Restated Certificate of Incorporation (this "***Second Amended and Restated Certificate***"), which both amends and restates the provisions of the First Amended and Restated Certificate of Incorporation, was duly adopted in accordance with Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware.

4. This Second Amended and Restated Certificate shall become effective on the date of filing with the Secretary of State of the State of Delaware.

5. Pursuant to Sections 242 and 245 of the General Corporation Law of the State of Delaware, the text of the First Amended and Restated Certificate is hereby amended and restated in its entirety to read as follows:

ARTICLE I

The name of the Corporation is Vincera Pharma, Inc. (the ***"Corporation"***).

ARTICLE II

The address of the registered office of the Corporation in Delaware is 251 Little Falls Drive, Wilmington, DE 19808, County of New Castle, and the name of its registered agent at that address is Corporation Service Company.

ARTICLE III

The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the Delaware General Corporation Law (the "***DGCL***").

ARTICLE IV

A. Classes of Stock. The total number of shares of all classes of capital stock that the Corporation shall have authority to issue is One Hundred Fifty Million (150,000,000), of which One Hundred Twenty Million (120,000,000) shares shall be Common Stock, $0.0001 par value per share (the "***Common Stock***"), and of which Thirty Million (30,000,000) shares shall be Preferred Stock, $0.0001 par value per share (the "***Preferred Stock***"). The number of authorized shares of Common Stock or Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the then

outstanding shares of Common Stock, without a vote of the holders of the Preferred Stock, or of any series thereof, unless a vote of any such Preferred Stock holders is required pursuant to the provisions established by the board of directors of the Corporation (the "***Board***") in the resolution or resolutions providing for the issue of such Preferred Stock, and if such holders of such Preferred Stock are so entitled to vote thereon, then, except as may otherwise be set forth in the certificate of incorporation of the Corporation, as amended from time to time (this "***Certificate***"), the only stockholder approval required shall be the affirmative vote of a majority of the voting power of the Common Stock and the Preferred Stock so entitled to vote, voting together as a single class.

B. Preferred Stock. The Preferred Stock may be issued from time to time in one or more series, as determined by the Board. The Board is expressly authorized to provide for the issue, in one or more series, of all or any of the remaining shares of Preferred Stock and, in the resolution or resolutions providing for such issue, to establish for each such series the number of its shares, the voting powers, full or limited, of the shares of such series, or that such shares shall have no voting powers, and the designations, preferences and relative, participating, optional or other special rights of the shares of such series, and the qualifications, limitations or restrictions thereof. The Board is also expressly authorized (unless forbidden in the resolution or resolutions providing for such issue) to increase or decrease (but not below the number of shares of such series then outstanding) the number of shares of any series subsequent to the issuance of shares of that series. In case the number of shares of any such series shall be so decreased, the shares constituting such decrease shall resume the status that they had prior to the adoption of the resolution originally fixing the number of shares of such series. Unless the Board provides to the contrary in the resolution which fixes the designations, preferences, and rights of a series of Preferred Stock, neither the consent by series, or otherwise, of the holders of any outstanding Preferred Stock nor the consent of the holders of any outstanding Common Stock shall be required for the issuance of any new series of Preferred Stock regardless of whether the rights and preferences of the new series of Preferred Stock are senior or superior, in any way, to the outstanding series of Preferred Stock or the Common Stock.

C. Common Stock.

1. Relative Rights of Preferred Stock and Common Stock. All preferences, voting powers, relative, participating, optional or other special rights and privileges, and qualifications, limitations, or restrictions of the Common Stock are expressly made subject and subordinate to those that may be fixed with respect to any shares of the Preferred Stock.

2. Voting Rights. Except as otherwise required by law or this Certificate, each holder of Common Stock shall have one vote in respect of each share of stock held by such holder of record on the books of the Corporation for the election of directors and on all matters submitted to a vote of stockholders of the Corporation. No holder of shares of Common Stock shall have the right to cumulative votes.

3. Dividends. Subject to the preferential rights of the Preferred Stock and except as otherwise required by law or this Certificate, the holders of shares of Common Stock shall be entitled to receive, when, as and if declared by the Board, out of the assets of the Corporation which are by law available therefor, dividends payable either in cash, in property or in shares of capital stock.

4. Dissolution, Liquidation, or Winding Up. In the event of any dissolution, liquidation, or winding up of the affairs of the Corporation, after distribution in full of the preferential amounts, if any, to be distributed to the holders of shares of the Preferred Stock, holders of Common Stock shall be entitled, except as otherwise required by law or this Certificate, to receive all of the remaining assets of the Corporation of whatever kind available for distribution to stockholders ratably in proportion to the number of shares of Common Stock held by them respectively. A merger, conversion, exchange, or consolidation of the Corporation with or into any other person or sale or transfer of all or any part of the assets of the Corporation (which shall not in fact result in the liquidation of the Corporation and the distribution of assets to stockholders) shall not be deemed to be a voluntary or involuntary liquidation, dissolution, or winding up of the affairs of the Corporation.

5. No Conversion, Redemption, or Preemptive Rights. The holders of Common Stock shall not have any conversion, redemption, or preemptive rights.

6. Consideration for Shares. The Common Stock authorized by this Certificate shall be issued for such consideration as shall be fixed, from time to time, by the Board.

ARTICLE V

In furtherance and not in limitation of the powers conferred by the laws of the State of Delaware:

A. Authority and Number of Directors. The Board is expressly authorized to adopt, amend or repeal the bylaws of the Corporation (the "**Bylaws**"), without any action on the part of the stockholders, by the vote of at least a majority of the directors of the Corporation then in office. In addition to any vote of the holders of any class or series of stock of the Corporation required by law or this Certificate, the Bylaws may also be adopted, amended or repealed by the affirmative vote of the holders of at least a majority of the voting power of the shares of the capital stock of the Corporation entitled to vote in the election of directors, voting as one class. The business and affairs of the Corporation shall be managed by a Board. The authorized number of directors of the Corporation shall be fixed in the manner provided in the Bylaws. Other than for those directors elected by the holders of any series of Preferred Stock, which shall be as provided for or fixed pursuant to the provisions of Article IV, Paragraph B hereof, each director shall serve until his or her successor shall be duly elected and qualified or until his or her earlier resignation, removal from office, death or incapacity. Elections of directors need not be by written ballot unless the Bylaws shall so provide.

B. Vacancies; Removal. Subject to the rights of the holders of any series of Preferred Stock then outstanding, except as otherwise provided in the Bylaws, newly created directorships resulting from any increase in the authorized number of directors or any vacancies in the Board resulting from death, resignation, retirement, disqualification, removal from office or other cause shall be filled solely by a majority vote of the directors then in office, although less than a quorum, or by a sole remaining director. If there are no directors in office, then an election of directors may be held in the manner provided by statute. Directors chosen pursuant to any of the foregoing provisions shall hold office until their successors are duly elected and qualified or until their earlier resignation or removal. No decrease in the number of directors constituting the Board shall shorten the term of any incumbent director. In the event of a vacancy in the Board, the remaining directors, except as otherwise provided by law, or by this Certificate or the Bylaws, may exercise the powers of the full Board until the vacancy is filled.

ARTICLE VI

A. No Action Without a Meeting. No action required or permitted to be taken at any annual or special meeting of the stockholders may be taken without a meeting called and noticed in the manner required by the Bylaws and the DGCL. The stockholders may not in any circumstance take action by written consent.

B. Special Meetings. Special meetings of the stockholders of the Corporation may be called by such persons as provided in the Bylaws. Except as otherwise required by law or this Certificate, the Board may postpone, reschedule, or cancel any special meeting of stockholders.

C. Notice. Advance notice of stockholder nominations for the election of directors and of business to be brought by stockholders before any meeting of the stockholders of the Corporation shall be given in the manner and to the extent provided in the Bylaws.

D. Books and Records. The books of the Corporation may be kept at such place within or without the State of Delaware as the Bylaws may provide or as may be designated from time to time by the Board.

ARTICLE VII

A. Exclusive Forum; Delaware Chancery Court. Unless the Corporation consents in writing to the selection of an alternative forum, to the fullest extent permitted by law, the Court of Chancery of the State of Delaware (or, if that court lacks subject matter jurisdiction, another federal or state court situated in the State of Delaware) shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation' s stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL, or (iv) any action asserting a claim governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Article VII, Paragraph D.

B. Exclusive Forum; Federal District Courts. Unless the Corporation consents in writing to the selection of an alternative forum, the federal district courts of the United States shall be the exclusive forum for the resolution of any complaint asserting a cause of action under the Securities Act of 1933 and the Securities Exchange Act of 1934. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the corporation shall be deemed to have notice of and consented to the provisions of this Article VII, Paragraph E.

ARTICLE VIII

A. Limitation on Liability. To the fullest extent permitted by the DGCL, as the same exists or as may hereafter be amended (including, but not limited to Section 102(b)(7) of the DGCL), a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the DGCL hereafter is amended to further eliminate or limit the liability of directors, then the liability of a director of the Corporation, in addition to the limitation on personal liability provided herein, shall be limited to the fullest extent permitted by the amended DGCL. Any repeal or modification of this paragraph by the stockholders of the Corporation shall be prospective only, and shall not adversely affect any limitation on the personal liability of a director of the Corporation existing at the time of such repeal or modification.

B. Indemnification. Each person who is or was a director or officer of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, employee benefit plan or other enterprise (including the heirs, executors, administrators or estate of such person), shall be indemnified and advanced expenses by the Corporation, in accordance with the Bylaws, to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than said law permitted the Corporation to provide prior to such amendment), or any other applicable laws as presently or hereinafter in effect. The right to indemnification and advancement of expenses hereunder shall not be exclusive of any other right that any person may have or hereafter acquire under any statute, provision of this Certificate or the Bylaws, agreement, vote of stockholders or disinterested directors or otherwise.

C. Insurance. The Corporation may, to the fullest extent permitted by law, purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise against any expense, liability or loss 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 expense, liability or loss under the DGCL.

D. Repeal and Modification. Any repeal or modification of the foregoing provisions of this Article VIII shall not adversely affect any right or protection existing hereunder immediately prior to such repeal or modification.

ARTICLE IX

The affirmative vote of the holders of at least sixty-six and two-thirds percent (66-2/3%) of the voting power of the shares of the capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to amend in any respect or repeal this Article IX, Paragraph A of Article V, or Articles VI, VII or VIII.

IN WITNESS WHEREOF, the corporation has caused this Certificate to be signed by its Chief Executive Officer this 23rd day of December, 2020.

LIFESCI ACQUISITION CORP.

By: /s/ Ahmed M. Hamdy
Ahmed M. Hamdy
President and Chief Executive Officer

CERTIFICATE OF AMENDMENT OF

THE SECOND AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION

OF

VINCERA PHARMA, INC.

Vincera Pharma, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "**Company**"), DOES HEREBY CERTIFY:

FIRST: The original Certificate of Incorporation of the Company was filed with the Secretary of State of Delaware on December 19, 2018 under the name LifeSci Acquisition Corp.

SECOND: This Amendment of the Second Amended and Restated Certificate of Incorporation of the Company as set forth below, has been duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware by the directors of the Company.

THIRD: Article I of the Second Amended and Restated Certificate of Incorporation as presently in effect is hereby amended to read in its entirety as follows:

"The name of the Corporation is Vincerx Pharma, Inc. (the "***Corporation***")."

FOURTH: All other provisions of the Second Amended and Restated Certificate of Incorporation remain in full force and effect.

IN WITNESS WHEREOF, the Company has caused this Certificate to be signed by its Chief Executive Officer this 7th day of January, 2021.

VINCERA PHARMA, INC.

By /s/ Dr. Ahmed Hamdy
Dr. Ahmed Hamdy, Chief Executive Officer

CERTIFICATE OF AMENDMENT
OF
SECOND AMENDED AND RESTATED CERTIFICATE OF INCORPORATION, AS AMENDED
OF
VINCERX PHARMA, INC.

Vincerx Pharma, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "**Corporation**"), DOES HEREBY CERTIFY:

FIRST: The original Certificate of Incorporation of the Corporation was filed with the Secretary of State of Delaware on December 19, 2018 under the name LifeSci Acquisition Corp.

SECOND: This Amendment of the Second Amended and Restated Certificate of Incorporation, as amended, of the Corporation as set forth below, has been duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware by the directors and the stockholders of the Corporation.

THIRD: Upon the filing and effectiveness (the "**Effective Time**") pursuant to the General Corporation Law of the State of Delaware of this Certificate of Amendment to the Second Amended and Restated Certificate of Incorporation, as amended, of the Corporation, each 20 shares of the Common Stock, $0.0001 par value per share, of the Corporation issued and outstanding or held in treasury as of the Effective Time shall be combined, reclassified, and converted into one (1) share of Common Stock, $0.0001 par value per share, of the Corporation, without any action by the holders thereof. No fractional share shall be issued upon the combination, reclassification, and conversion of any share or shares of Common Stock. All shares of Common Stock (including fractions thereof) issuable upon the combination, reclassification, and conversion of one or more shares of Common Stock by a holder thereof shall be aggregated for purposes of determining whether the combination, reclassification, and conversion would result in the issuance of any fractional share. If, after the aforementioned aggregation, the combination, reclassification, and conversion would result in the issuance of a fraction of a share of Common Stock, this Corporation shall, in lieu of issuing any fractional share, pay the holder otherwise entitled to such fraction a sum in cash equal to the fraction multiplied by the fair market value per share of the Common Stock (as determined in a reasonable manner by the Board of Directors of the Corporation or a committee thereof) as of the Effective Time.

FOURTH: All other provisions of the Second Amended and Restated Certificate of Incorporation, as amended prior to the date hereof, remain in full force and effect.

FIFTH: This Certificate of Amendment shall become effective at 4:01 p.m. (local time in Wilmington, Delaware) on January 27, 2025.

IN WITNESS WHEREOF, the Corporation has caused this Certificate to be signed by its Acting Chief Executive Officer this 24th day of January, 2025.

VINCERX PHARMA, INC.

By /s/ Raquel E. Izumi
Raquel E. Izumi
Acting Chief Executive Officer

Exhibit 19.1

VINCERX PHARMA, INC.

INSIDER TRADING POLICY

Policy as to Trades in the Company' s Securities by Company Personnel
and
Treatment of Confidential Information

1. Purpose.

Both the Securities and Exchange Commission (the "**SEC**") and Congress are very concerned about maintaining the fairness and integrity of the U.S. capital markets. The securities laws are continually reviewed and amended to prevent people from taking advantage of "inside information" and to increase the punishment for those who do. These laws require publicly-traded companies to have clear policies on insider trading. If companies like ours do not take active steps to adopt preventive policies and procedures covering securities trades by company personnel, the consequences could be severe.

We are adopting this Insider Trading Policy to avoid even the appearance of improper conduct on the part of anyone employed by or associated with Vincerx Pharma, Inc. (the "**Company**"). We have worked hard to establish our reputation for integrity and ethical conduct, and we cannot afford to damage this reputation.

2. Applicability.

This policy applies to all employees, officers, members of the board of directors (the "**Board**"), consultants and contractors of the Company or any subsidiary of the Company (the "**Individuals**"). This Policy also applies to family members, other members of a person' s household and entities controlled by a person covered by this policy, as described below. This Policy applies to all trading or other transactions in the Company' s securities, including common stock, options to purchase common stock and restricted stock units and any other securities that the Company may issue, such as preferred stock, notes, bonds and convertible securities, as well as to derivative securities relating to any of the Company' s securities, whether or not issued by the Company.

3. The Consequences.

The consequences of insider trading violations can be substantial:

For Individuals who trade on inside information (or tip information to others):

jail term of up to 20 years (30 years in certain circumstances);

civil penalty of up to three times the profit gained or loss avoided; and

criminal fine (no matter how small the profit) of up to $5 million.

For a company (as well as possibly any supervisory person) that fails to take appropriate steps to prevent illegal trading:

civil penalty of the greater of $1 million or three times the profit gained or loss avoided as a result of the Individual' s violation; and

criminal penalty of up to $25 million.

In addition, plaintiffs may claim that Individuals or the Company are also liable to contemporaneous traders.

Further, if the Company has a reasonable basis to conclude that an employee has violated this Insider Trading Policy, whether or not knowingly, the Company may impose sanctions, including dismissal for cause. Needless to say, any of the above consequences, even an SEC investigation that does not result in prosecution, can tarnish one' s reputation (as well as the Company' s), and irreparably damage a career. Finally, the size of a transaction has no impact on potential insider trading liability. In the past, even relatively small trades (e.g., trades as small as $400) have resulted in SEC investigations and lawsuits.

4. Our Policy.

No Trading When in Possession of Material Non-Public Information. If an Individual has possession of material non-public information (often referred to as "inside information") relating to the Company or any other securities as to which the person receives information not available to investors generally, it is our policy that neither that person nor any related person may buy or sell securities of the Company, make a gift of Company securities, or engage in any other action to take advantage of, or pass on to others, that information. This policy also applies to information relating to any other company, including our customers or partners, obtained in the course of you rendering services to the Company or any subsidiary of the Company.

Transactions that may be necessary or justifiable for independent reasons (such as the need to raise money for an emergency expenditure) are no exception. Even the appearance of an improper transaction must be avoided to preserve our reputation for adhering to the highest standards of conduct.

What is Material Information? "Material information" is any information that a reasonable investor would consider important in deciding whether to buy, hold or sell securities of the Company or any other securities as to which the person receives information not available to investors generally. In short, "material information" includes any information that reasonably could affect the price of our securities or any other securities. Either positive or negative information may be material. It can be information about the Company or about a company with which we do business.

Examples: Common examples of information that will frequently be regarded as material are:

earnings information and quarterly results;

projections of future earnings, losses or other business activity;

news of a possible merger, acquisition or tender offer;

news of a possible agreement, collaboration, joint venture or partnership;

significant new products or services or delays in new product or service introduction or development;

results or delays in clinical or similar trials and development;

plans to raise additional capital through stock sales or otherwise;

bank borrowings or other financing transactions out of the ordinary course;

gain or loss of a significant partner, customer, supplier or contract;

pending or threatened significant litigation, or the resolution of such litigation;

regulatory approvals or changes in regulations;

discoveries, or grants or allowances or disallowances of patents;

changes in management;

changes in auditors or a determination that the Company' s financial statements can no longer be relied upon;

news of a significant sale of assets;

significant cybersecurity risks and incidents, such as a data breach;

impending bankruptcy, financial liquidity problems or a restructuring; and

changes in dividend policies, declaration of a stock split and stock repurchase plans.

What is Non-public Information? Information is "non-public" if it has not been disseminated in a manner making it available to investors generally, which typically entails broad dissemination through a press release to national wire services or a filing with the SEC. Speeches, television or radio appearances, magazine articles and website postings do not always suffice to render information public. The SEC has stated that insiders must wait a reasonable time after disclosure before trading and that what constitutes a reasonable time depends on the circumstances of the dissemination.

20/20 Hindsight. Remember, if your securities transactions become the subject of scrutiny, they will be viewed after-the-fact with the benefit of hindsight. As a result, before engaging in any transaction you should carefully consider how regulators and others might view your transaction in hindsight.

Transactions by Family Members. The same restrictions apply to your immediate family members and others living in your household. You are responsible for the compliance of your immediate family and personal household.

Transactions by Entities that You Influence or Control. This policy also applies to any entities that you influence or control, including any corporations, partnerships or trusts (collectively referred to as "***Controlled Entities***"), and transactions by these Controlled Entities should be treated for the purposes of this policy and applicable securities laws as if they were for your own account.

The same restrictions apply regardless of whether a person is resident within the United States.

Do Not Pass Information to Others. Whether the information is proprietary information about the Company or information that could have an impact on our stock price, Individuals must not pass the information on to others. It is illegal to advise others to trade on the basis of undisclosed material information. Liability in these cases can extend to both the "tippee" − the person to whom the insider disclosed inside information − and you, as the "tipper," and will apply whether or not you derive any benefit from another' s actions. You should not make recommendations to others concerning the purchase or sale of securities of the Company. You should never trade, tip or recommend securities (or otherwise cause the purchase or sale of securities) while in possession of material non-public information about any other company that was obtained in the course of your involvement with the Company, including communicating material non-public information to, any other person or otherwise disclose such information without the Company' s authorization.

When Information is Public. As you can appreciate, it is also improper for any Individual to enter a trade immediately after the Company has made a public announcement of material information, including earnings releases. We impose certain "trading blackouts" to ensure that the Company' s stockholders and the investing public will be afforded the time to receive the information and act upon it. These are discussed below under the heading "Trading Blackouts." To avoid the appearance of impropriety, as a general rule, you should not engage in any transaction until at least two full trading days have passed following the release of the information. Thus, if an announcement were made after the market close on a Monday, Thursday generally would be the first day on which you would be able to trade. If an announcement were made after the market close on a Friday, Wednesday generally would be the first eligible trading day.

Pre-Clearance of Trades of Company Stock. To provide assistance in preventing inadvertent violations and avoiding even the appearance of an improper transaction (which could result, for example, where an Individual engages in a trade while unaware of a pending major development), all members of the Board, all employees designated as "officers" for the purposes of Rule 16a-1(f) under the Securities Exchange Act of 1934, as amended, and certain employees

of the Company and its subsidiaries in a position to have access to material non-public information and designated on a pre-clearance list by our Chief Executive Officer or Chief Operations Officer from time to time, which may include legal, finance and business development personnel, must obtain pre-clearance in writing from our General Counsel (in the absence of a General Counsel, our Chief Operations Officer or, in the case of a transaction by any such officer, pre-clearance in writing from the other officer) of all transactions in Company securities (including without limitation, acquisitions, dispositions, transfers, and gifts). You must submit a written request for pre-clearance of a transaction no later than one business day before the proposed date of execution of the transaction unless a shorter period is permitted by our General Counsel (in the absence of a General Counsel, our Chief Operations Officer). You will be notified if you are one of the specified persons subject to this pre-clearance policy. Pre-clearance is subject to a five business day expiration and must be renewed by the applicant after five business days to be valid.

Pre-clearance does not relieve anyone of their responsibility under SEC rules. All Individuals, whether subject to pre-clearance or not, are responsible for adherence to this Insider Trading Policy, including, but not limited to: not trading on insider information; not trading during trading blackout periods; not trading for two full trading days after earnings announcements; and not trading in securities on a short-term basis. Individuals normally not subject to pre-clearance are still responsible for written pre-clearance for the sale of stock purchased in the open market and that has been owned less than six months. If any Individual is in doubt of whether or not pre-clearance is required, the Individual should inquire with our General Counsel (in the absence of a General Counsel, our Chief Operations Officer) or obtain pre-clearance as a cautionary measure.

Trading Blackouts. From time to time, the Company may require that Individuals suspend trading because of material developments known to the Company and not yet disclosed to the public. In that event, these persons are advised not to engage in any transaction involving the purchase or sale of the Company' s securities during that period and should not disclose to others the fact that they have been suspended from trading. The Company will also require the following mandatory trading blackout:

Earnings Trading Blackouts – All Individuals will be subject to a stock trading blackout period beginning at the end of a fiscal quarter until two full trading days have passed after results for that quarter are released. All such persons whose employment or affiliation with the Company ceases during a blackout period shall remain subject to the blackout period for the duration of such blackout period. Of course, no trading should be done at any time if the Individual making the trade is actually aware of material non-public information.

Options and RSUs. Cash exercise of options currently may be done at any time. This policy also does not apply to the exercise of a tax withholding right pursuant to which you elect to have the Company withhold shares subject to an option or restricted stock unit to satisfy tax withholding requirements which occur as a result of certain option exercises or the vesting or settlement of any restricted stock units. However, this policy does apply to same-day-sales to exercise stock options and any other market sale of shares subject to an option or restricted stock unit for the purpose of generating the cash needed to pay the exercise price and/or taxes (a "sell to cover").

ESPP. This policy does not apply to your election to participate in the Company' s employee stock purchase plan, to your election to increase or decrease your percentage payroll deductions or to purchases of shares resulting from your contribution of money to the plan. However, this policy does apply to your sales of Company stock purchased pursuant to the plan.

Exception for Approved 10b5-1 Plans. Trades by Individuals that are executed pursuant to an approved 10b5-1 trading (a "**Trading Plan**") are not subject to the prohibition on trading on the basis of material non-public information contained in this Insider Trading Policy or to the restrictions set forth above relating to pre-clearance procedures and blackout periods.

SEC Rule 10b5-1 provides an affirmative defense from insider trading liability under the federal securities laws for trading plans that meet certain requirements. It does not prevent someone from bringing a lawsuit. This Insider Trading Policy permits Individuals to adopt Trading Plans with brokers that outline a pre-set plan for trading of the Company' s securities, including those received upon the exercise of options, settlement of restricted stock units and purchases under the employee stock purchase plan. Trading Plans are to be implemented only during open windows and at a time when the Individual is not aware of any material non-public information.

Any Trading Plan must comply with SEC Rule 10b5-1 and be approved in writing in advance by our General Counsel (in the absence of a General Counsel, our Chief Operations Officer). The establishment of such a plan with respect to an Individual may be publicly announced by the Company.

Establishing a Trading Plan does not exempt Individuals from complying with the Section 16 six-month short swing profit rules or liability.

Under certain circumstances, a Trading Plan must be revoked. This includes circumstances such as the announcement of a merger or the occurrence of an event that would cause the transaction either to violate the law or to have an adverse effect on the Company. Our Chief Operations Officer, General Counsel or their designee, or any stock administrator of the Company, is authorized to notify the broker in such circumstances, thereby insulating the insider in the event of revocation.

Post-Termination Transactions. This Insider Trading Policy continues to apply to your transactions in Company securities even after your employment, board service or consulting services terminate. If you are in possession of material non-public information when your service to the Company or a subsidiary of the Company terminates, you may not trade in Company securities until that information has become public or is no longer material.

5. Additional Prohibited Transactions.

We believe it is improper and inappropriate for any Individual to engage in short-term or speculative transactions involving Company securities. We believe that this trading can reflect badly on the Company and that Individuals should not engage in any types of transactions that are commonly viewed as a form of "betting" for or against the Company. Accordingly, it is the Company' s policy that Individuals may not engage in any of the following activities with respect

to securities of the Company, without prior written pre-clearance from our General Counsel (in the absence of a General Counsel, our Chief Operations Officer):

Director and officer cashless exercise − In response to the restrictions set forth in the Sarbanes-Oxley Act of 2002, the Company will not arrange with brokers to administer cashless exercises on behalf of directors and officers of the Company. Directors and officers of the Company may only utilize the cashless exercise feature of their options if (i) the director or officer retains a broker independently of the Company, (ii) the Company' s involvement is limited to confirming that it will deliver the stock promptly upon payment of the exercise price and (iii) the director or officer uses a "T+3" cashless exercise arrangement, in which the Company agrees to deliver stock against the payment of the purchase price on the same day the sale of the stock underlying the option settles. Under a T+3 cashless exercise, a stock broker, the issuer, and the transfer agent of the issuer work together to make all transactions settle simultaneously. This approach is to avoid any inference that the Company has "extended credit" in the form of a personal loan to the director or executive officer. Any employee who has any questions about cashless exercises may obtain additional guidance from our General Counsel (in the absence of a General Counsel, our Chief Operations Officer).

Director and officer trading during pension and 401(k) plan blackout periods − If Company securities are available as an investment option or used as a Company match in the Company' s 401(k) plan, directors and officers of the Company are prohibited from trading Company securities during pension and 401(k) plan blackouts, if any, in response to the restrictions set forth in the Sarbanes-Oxley Act of 2002.

Trading in securities on a short-term basis − As a general rule, any Company securities purchased in the open market (i.e., not including stock purchased upon exercise of an employee stock option or restricted stock unit) should be held for a minimum of six months and ideally longer. The directors and officers of the Company are already subject to the SEC' s "short-swing" profit rule, which penalizes purchases and sales within any six-month period. Any Individual who wishes to sell Company securities that were purchased in the open market and that have been owned less than six months must obtain prior written clearance from our General Counsel (in the absence of a General Counsel, our Chief Operations Officer). You must submit a written request for pre-clearance of a transaction no later than one business day before the proposed date of execution of the transaction unless a shorter period is permitted by our General Counsel (in the absence of a General Counsel, our Chief Operations Officer).

Purchases of Company securities on margin − This means borrowing from a brokerage firm, bank or other entity in order to buy Company securities (other than in connection with a so-called "cashless" exercise of options under the Company' s stock plans).

Short sales of Company securities − This involves selling Company securities that you do not own in the expectation that the price of the securities will fall, or as part of an arbitrage transaction.

Hedging transactions − Hedging or monetization transactions accomplished through a number of possible mechanisms, including through the use of financial instruments such as prepaid variable forwards, equity swaps, collars and exchange funds. Such hedging transactions may permit an Individual to continue to own Company securities obtained through employee benefit plans or otherwise, but without the full risks and rewards of ownership. When that occurs, the Individual may no longer have the same interests as the Company' s other stockholders.

Buying or selling puts or calls, or their equivalent positions, on Company securities − This includes options and derivatives trading on any of the stock exchanges or futures exchanges, including cashless collars.

6. Confidential Information.

Unauthorized disclosure of internal information relating to the Company (including information regarding facilities, products or services or the Company' s partners, suppliers or customers) could cause competitive harm to the Company and in some cases could result in liability for the Company.

Individuals should not disclose internal information about the Company to anyone outside the Company, except as required in the performance of regular duties for the Company. In this regard, Individuals are prohibited from posting internal information about the Company on a "bulletin board," "blog" or other social media on the Internet, communicating about the Company and its business in Internet-based "chat" rooms or blogs or having a blog that discusses the Company and its business.

Care must be taken to safeguard the confidentiality of internal information. For example, sensitive documents should not be left lying on desks, and visitors should not be left unattended in offices containing internal Company documents.

7. Company Assistance.

Any Individual who has any questions about specific transactions may obtain additional guidance from our General Counsel (in the absence of a General Counsel, our Chief Operations Officer).

Remember, however, that you are ultimately responsible for adhering to this Insider Trading Policy and avoiding improper transactions. In this regard, it is imperative that you use your best judgment.

While the Company expects to assist each officer, director and other employee subject to Section 16 reporting requirements (including immediate family members and others in their household) (collectively, "**Section 16 Reporting Persons**") with such Section 16 filings, and expects such assistance to include form preparation for all Section 16 Reporting Persons other than those who do not require such assistance, the obligation to file Section 16 reports (Forms 3, 4 and 5) is a personal obligation of each such person, and the Company is not responsible for any failure to file accurate and timely Section 16 reports. Each Section 16 Reporting Person must ensure that his or her broker provides the Company with detailed information (including trade date, number of shares, and exact price) regarding every transaction involving the securities of the Company, including gifts, transfers, pledges and all Rule 10b5-1 transactions, both in connection with mandatory pre-clearance requirements for such Section 16 Reporting Persons and immediately following execution.

8. Modifications.

This Insider Trading Policy has been approved by the Company' s Board. Officers of the Company are authorized to administer and interpret the provisions and the application of this policy and may, from time to time, make non-substantive modifications that are not inconsistent with the purposes of this policy.

9. Acknowledgements.

All Individuals will be required to acknowledge, electronically or in writing, their understanding of, and intent to comply with, this Insider Trading Policy. This agreement will constitute each such person' s consent for the Company to issue any necessary stop-transfer orders to the Company' s transfer agent to enforce compliance with this policy. As a condition of continued employment or engagement, all Individuals must periodically acknowledge, electronically or in writing, that they have read and agree to abide by this policy.

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (Registration Nos. 333-252589, 333-260246, 333-262239 and 333-284478) and Form S-8 (Registration Nos. 333-254583, 333-257042, 333-263929, 333-270908 and 333-280382) of Vincerx Pharma, Inc. of our report dated March 27, 2025, which includes an explanatory paragraph regarding the substantial doubt about the Company' s ability to continue as a going concern, relating to the consolidated financial statements of the Company as of and for the years ended December 31, 2024 and 2023, which appear in this Form 10-K.

/s/ WithumSmith+Brown, PC

East Brunswick, New Jersey
March 27, 2025

Exhibit 31.1

Certification of Principal Executive Officer Pursuant to Exchange Act Rule 13a-14(a)/15d-14(a) as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Dr. Raquel E. Izumi, certify that:

1. I have reviewed this Annual Report on Form 10-K of Vincerx Pharma, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant' s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant' s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant' s internal control over financial reporting that occurred during the registrant' s fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant' s internal control over financial reporting; and

5. The registrant' s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant' s auditors and the audit committee of the registrant' s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant' s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant' s internal control over financial reporting.

Date: March 27, 2025

/s/ Dr. Raquel E. Izumi

Dr. Raquel E. Izumi
Acting Chief Executive Officer (Principal Executive Officer)

Exhibit 31.2

Certification of Principal Financial Officer Pursuant to Exchange Act Rule 13a-14(a)/15d-14(a) as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Kevin Haas, certify that:

1. I have reviewed this Annual Report on Form 10-K of Vincerx Pharma, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant' s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant' s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant' s internal control over financial reporting that occurred during the registrant' s fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant' s internal control over financial reporting; and

5. The registrant' s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant' s auditors and the audit committee of the registrant' s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant' s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant' s internal control over financial reporting.

Date: March 27, 2025

/s/ Kevin Haas

Kevin Haas
Acting Chief Financial Officer (Principal Financial Officer)

Exhibit 32.1

Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Dr. Raquel E. Izumi, the Acting Chief Executive Officer (Principal Executive Officer) of Vincerx Pharma, Inc. (the "Company"), hereby certify, that, to my knowledge:

1. The Annual Report on Form 10-K for the year ended December 31, 2024 (the "Report") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 27, 2025

/s/ Dr. Raquel E. Izumi
Dr. Raquel E. Izumi
Acting Chief Executive Officer (Principal Executive Officer)

This certification shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing.

Exhibit 32.2

Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Kevin Haas, the Acting Chief Financial Officer (Principal Financial Officer) of Vincerx Pharma, Inc. (the "Company"), hereby certify, that, to my knowledge:

1. The Annual Report on Form 10-K for the year ended December 31, 2024 (the "Report") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 27, 2025

/s/ Kevin Haas
Kevin Haas
Acting Chief Financial Officer (Principal Financial Officer)

This certification shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing.

Cover Page - USD ($) $ in Millions	12 Months Ended Dec. 31, 2024	Mar. 21, 2025	Jun. 30, 2024
Document Information [Line Items]			
Document Type	10-K		
Amendment Flag	false		
Document Period End Date	Dec. 31, 2024		
Document Fiscal Year Focus	2024		
Document Fiscal Period Focus	FY		
Entity Registrant Name	Vincerx Pharma, Inc.		
Entity Central Index Key	0001796129		
Entity Current Reporting Status	Yes		
Entity Voluntary Filers	No		
Entity Interactive Data Current	Yes		
Current Fiscal Year End Date	--12-31		
Entity Filer Category	Non-accelerated Filer		
Entity Well-known Seasoned Issuer	No		
Entity Public Float			$ 21.0
Entity Common Stock, Shares Outstanding		5,234,277	
Entity Shell Company	false		
Entity Small Business	true		
Entity Emerging Growth Company	true		
Entity Ex Transition Period	false		
Entity File Number	001-39244		
Entity Incorporation, State or Country Code	DE		
Entity Tax Identification Number	83-3197402		
Entity Address, Address Line One	1825 S. Grant Street		
Entity Address, City or Town	San Mateo		
Entity Address, State or Province	CA		
Entity Address, Postal Zip Code	94402		
City Area Code	650		
Local Phone Number	800-6676		
Document Annual Report	true		
Document Transition Report	false		
Title of 12(b) Security	Common Stock, $0.0001 par value per share		
Trading Symbol	VINC		
Security Exchange Name	NASDAQ		
ICFR Auditor Attestation Flag	false		
Auditor Name	WithumSmith+Brown, PC		
Auditor Firm ID	100		
Auditor Location	East Brunswick, New Jersey		
Document Financial Statement Error Correction [Flag]	false		

Consolidated Balance Sheets - USD ($) $ in Thousands		Dec. 31, 2024	Dec. 31, 2023
Current assets:			
Cash and cash equivalents		$ 4,987	$ 12,782
Restricted cash		79	72
Prepaid expenses		89	51
Grant receivable		1,041	1,044
Other current assets		214	784
Total current assets		6,410	14,733
Right-of-use assets, net		0	2,201
Property, plant and equipment, net		0	125
Other assets		1,595	1,158
Total assets		8,005	18,217
Current liabilities			
Accounts payable		2,029	2,497
Accrued expenses		3,244	1,755
Lease liability		0	1,162
Common stock warrant liabilities		8	191
Total current liabilities		5,281	5,605
Lease liability, net of current portion		0	1,340
Other noncurrent liabilities		0	50
Total liabilities		5,281	6,995
Commitments and contingencies (Note 8)			
Stockholders' equity			
Preferred stock, $0.0001 par value; 30,000,000 shares authorized, none issued and outstanding as of December 30, 2024 and 2023		0	0
Common stock, $0.0001 par value; 120,000,000 shares authorized; 2,239,580 shares and 1,070,375 shares issued and outstanding as of December 31, 2024 and 2023, respectively	[1]	0	0
Additional paid-in capital		191,791	170,326
Accumulated other comprehensive income		119	8
Accumulated deficit		(189,186)	(159,112)
Total stockholders' equity		2,724	11,222
Total liabilities and stockholders' equity		$ 8,005	$ 18,217

[1] In January 2025, the stockholders approved, and the Company effected a 1-for-20 reverse stock split. All share and per-share data have been retroactively adjusted throughout this report to account for this stock split.

Consolidated Balance Sheets (Parenthetical)	Jan. 01, 2025	Dec. 31, 2024	Dec. 31, 2023
		$ / shares shares	$ / shares shares
Statement of Financial Position [Abstract]			
Preferred stock par value | $ / shares		$ 0.0001	$ 0.0001
Preferred stock shares authorized		30,000,000	30,000,000
Preferred stock shares issued		0	0
Preferred stock shares outstanding		0	0
Common stock par value | $ / shares		$ 0.0001	$ 0.0001
Common stock shares authorized		120,000,000	120,000,000
Common stock shares issued		2,239,580	1,070,375
Common stock shares outstanding		2,239,580	1,070,375
Stockholders' Equity Note, Stock Split, Conversion Ratio	0.05		

Consolidated Statements of Operations and Comprehensive Loss - USD ($) $ in Thousands		12 Months Ended	
		Dec. 31, 2024	Dec. 31, 2023
Operating expenses:			
General and administrative		$ 15,977	$ 13,636
Research and development		15,486	28,973
Total operating expenses		31,463	42,609
Loss from operations		(31,463)	(42,609)
Other income (expense)			
Change in fair value of warrant liabilities		183	(47)
Interest income		472	1,251
Other income (expense), net		734	1,248
Total other income (expense)		1,389	2,452
Net loss		(30,074)	(40,157)
Other comprehensive income (loss):			
Net foreign currency translation gain (loss)		110	(40)
Net unrealized gain on marketable securities		1	74
Comprehensive loss		$ (29,963)	$ (40,123)
Net loss per common share, basic		$ (15.85)	$ (37.72)
Net loss per common share, diluted		$ (15.85)	$ (37.72)
Weighted average common shares outstanding, basic	[1]	1,898	1,065
Weighted average common shares outstanding, diluted	[1]	1,898	1,065

[1] In January 2025, the stockholders approved, and the Company effected a 1-for-20 reverse stock split. All share and per-share data have been retroactively adjusted throughout this report to account for this stock split.

Consolidated Statements of Changes in Stockholders' Equity - USD ($) $ in Thousands	Total	Common Stock [Member]	Additional Paid-in Capital [Member]	Accumulated Other Comprehensive Income (Loss) [Member]	Accumulated Deficit [Member]
Beginning Balance at Dec. 31, 2022	$ 47,668	$ 2	$ 166,647	$ (26)	$ (118,955)
Beginning Balance, Shares at Dec. 31, 2022	[1]	1,062			
Retroactive reclassification of par value in connection with January 2025 reverse split		$ (2)	2		
Issuance of common stock from employee stock plans, Shares	[1]	8			
Issuance of common stock from employee stock plans	114		114		
Stock-based compensation	3,563		3,563		
Cumulative translation adjustment	(40)			(40)	
Unrealized gain on marketable securities	74			74	
Net loss	(40,157)				(40,157)
Ending Balance at Dec. 31, 2023	11,222	$ 0	170,326	8	(159,112)
Ending Balance, Shares at Dec. 31, 2023	[1]	1,070			
Issuance of pre-funded warrants and common stock from public offerings, net of commissions and expenses of $697 shares	[1]	441			
Issuance of pre-funded warrants and common stock from public offering, net of commissions and expenses of $657,Value	15,712	$ 0	15,712		
Issuance of common stock in connection with at-the-market offering, net of issuance costs of $239,Shares	[1]	106			
Issuance of common stock in connection with at-the-market offering, net of issuance costs of $239,Value	2,161		2,161		
Issuance of common stock in connection with exercise of pre-funded warrants shares	[1]	561			
Issuance of common stock in connection with exercise of pre-funded warrants Value	1		1		
Issuance of common stock from employee stock plans, Shares	[1]	62			

Issuance of common stock from employee stock plans	118		118		
Stock-based compensation	3,473		3,473		
Cumulative translation adjustment	110			110	
Unrealized gain on marketable securities	1			1	
Net loss	(30,074)				(30,074)
Ending Balance at Dec. 31, 2024	$ 2,724	$ 0	$ 191,791	$ 119	$ (189,186)
Ending Balance, Shares at Dec. 31, 2024	[1]	2,240			

[1] In January 2025, the stockholders approved, and the Company effected a 1-for-20 reverse stock split. All share and per-share data have been retroactively adjusted throughout this report to account for this stock split.

Consolidated Statements of Changes in Stockholders' Equity (Parenthetical) $ in Thousands	12 Months Ended Dec. 31, 2024 USD ($)
Payments for Commissions	$ 697
Payments of Stock Issuance Costs	$ 239

Consolidated Statements of Cash Flows - USD ($) $ in Thousands	12 Months Ended	
	Dec. 31, 2024	Dec. 31, 2023
Cash Flows from Operating Activities		
Net loss	$ (30,074)	$ (40,157)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	52	52
Stock-based compensation	3,473	3,563
Amortization of right-of-use assets	1,038	863
Gain on early termination of lease, net of asset disposals	(44)	0
Change in fair value of warrant liabilities	(183)	47
Net amortization of discounts on marketable securities	(211)	(630)
Changes in operating assets and liabilities:		
Prepaid and other current assets	532	1,228
Grant receivable	0	328
Other assets	(519)	(1,077)
Accounts payable	(468)	(1,568)
Accrued expenses	1,489	(2,168)
Lease liabilities	(1,162)	(934)
Other noncurrent liabilities	(50)	0
Net cash used in operating activities	(26,127)	(40,453)
Cash Flows from Investing Activities:		
Purchases of marketable securities	(11,463)	(11,821)
Sales and maturities of marketable securities	11,675	53,321
Net cash provided by investing activities	212	41,500
Cash Flows from Financing Activities:		
Proceeds from public offerings, net of transaction costs	15,713	0
Proceeds from at-the-market offering, net of transaction costs	2,161	0
Proceeds from issuance of common stock from employee stock plans	118	114
Net cash provided by financing activities	17,992	114
Effect of exchange rate changes on cash, cash equivalents and restricted cash	135	(40)
Net increase (decrease) in cash, cash equivalents and restricted cash	(7,788)	1,121
Cash, cash equivalents, and restricted cash at beginning of the period	12,854	11,733
Cash, cash equivalents, and restricted cash at end of the period	5,066	12,854
Supplemental disclosure of cash flow information:		
Cash paid for interest	0	0
Cash paid for income taxes	$ 0	$ 0

Pay vs Performance Disclosure - USD ($) $ in Thousands	12 Months Ended	
	Dec. 31, 2024	Dec. 31, 2023
Pay vs Performance Disclosure		
Net Income (Loss)	$ (30,074)	$ (40,157)

Insider Trading Arrangements	12 Months Ended Dec. 31, 2024
Trading Arrangements, by Individual	
Rule 10b5-1 Arrangement Adopted	false
Non-Rule 10b5-1 Arrangement Adopted	false
Rule 10b5-1 Arrangement Terminated	false
Non-Rule 10b5-1 Arrangement Terminated	false

Insider Trading Policies and Procedures	12 Months Ended Dec. 31, 2024
Insider Trading Policies and Procedures [Line Items]	
Insider Trading Policies and Procedures Adopted	true

N-2	12 Months Ended Dec. 31, 2024
Cover [Abstract]	
Entity Central Index Key	0001796129
Amendment Flag	false
Securities Act File Number	001-39244
Document Type	10-K
Entity Registrant Name	Vincerx Pharma, Inc.
Entity Address, Address Line One	1825 S. Grant Street
Entity Address, City or Town	San Mateo
Entity Address, State or Province	CA
Entity Address, Postal Zip Code	94402
City Area Code	650
Local Phone Number	800-6676
Entity Well-known Seasoned Issuer	No
Entity Emerging Growth Company	true
Entity Ex Transition Period	false

Cybersecurity Risk Management and Strategy Disclosure	12 Months Ended
	Dec. 31, 2024
Cybersecurity Risk Management, Strategy, and Governance [Line Items]	
Cybersecurity Risk Management Processes for Assessing, Identifying, and Managing Threats [Text Block]	**Risk Management and Strategy** We have developed and implemented a cybersecurity policy for assessing, identifying, and managing material risks from cybersecurity threats and have integrated this policy into our overall risk management framework and policies. This policy applies to all of our employees, contractors, and consultants, and any other users who have permanent or temporary access to our data and systems, regardless of their location, device, or network, and all of our employees, contractors, consultants and other users are expected to read, understand, and adhere to this policy and its associated processes and procedures. Our cybersecurity policy also encompasses the risks associated with our use of third-party service providers. We conduct assessments of our third-party service providers before engagement and maintain ongoing monitoring intended to ensure compliance with our cybersecurity standards. We are subject to various cybersecurity risks that could adversely affect our business, financial condition, and results of operations, including intellectual property theft; fraud; extortion; harm to employees, customers, or patients; violation of privacy laws; and litigation, legal, and reputational risk. We have implemented an approach to identify and assess the threats and vulnerabilities that could affect our data and systems. Our policy is aligned with industry standards and best practices, such as the National Institute of Standards and Technology's ("NIST") Cybersecurity Framework Standard (800-53 -Security and Privacy Controls for information Systems and Organizations). Supporting technologies, processes, and procedures under our cybersecurity policy include the following: • identification, credential/authentication, and access management for all users prior to accessing any data and systems; • encryption of all data at rest and in transit for all devices and cloud services; • firewalls, antivirus software, security traffic inspections, and other endpoint protection and monitoring tools and techniques; • automatic updates and patches of all software and systems regularly and fix of all known or reported bugs or vulnerabilities promptly; • data loss prevention through regular backup of all data and systems and storage of backups in secure and separate locations; • cybersecurity awareness training for users to educate them on our policy and procedures as well as best practices, potential vulnerabilities, and common threats and promote a culture of cybersecurity risk management; • cybersecurity incident response plans that include procedures for analyzing, reporting, and responding to cybersecurity incidents; and • third-party risk management procedures for service providers, suppliers, and vendors. We have security personnel to monitor our data and technology infrastructure, report and respond to cybersecurity incidents, work with users, and report to management and the audit committee. We also maintain a cybersecurity risk insurance policy.

	We have not encountered any cybersecurity incidents that have materially affected our business, results of operations, or financial condition. **Governance** Our board of directors considers cybersecurity risk as part of its overall risk oversight function and has delegated that oversight role to the audit committee. The audit committee oversees the implementation of our cybersecurity risk management under the cybersecurity policy. The audit committee receives reports from management on our cybersecurity risks, controls, tools, and incidents. The audit committee reports to the full board of directors regarding its activities, including those related to cybersecurity. Our Director, IT, SaaS Applications Management, Enterprise Collaboration, has primary responsibility for developing and implementing our cybersecurity policy and procedures and assessing, monitoring, and managing the prevention, detection, mitigation, and remediation of our cybersecurity risks and incidents. He has served in various roles in information technology and information security for over 20 years.
Cybersecurity Risk Management Processes Integrated [Flag]	true
Cybersecurity Risk Management Third Party Engaged [Flag]	true
Cybersecurity Risk Third Party Oversight and Identification Processes [Flag]	true
Cybersecurity Risk Materially Affected or Reasonably Likely to Materially Affect Registrant [Flag]	false
Cybersecurity Risk Board of Directors Oversight [Text Block]	Our board of directors considers cybersecurity risk as part of its overall risk oversight function and has delegated that oversight role to the audit committee. The audit committee oversees the implementation of our cybersecurity risk management under the cybersecurity policy.
Cybersecurity Risk Role of Management [Text Block]	**Governance** Our board of directors considers cybersecurity risk as part of its overall risk oversight function and has delegated that oversight role to the audit committee. The audit committee oversees the implementation of our cybersecurity risk management under the cybersecurity policy. The audit committee receives reports from management on our cybersecurity risks, controls, tools, and incidents. The audit committee reports to the full board of directors regarding its activities, including those related to cybersecurity. Our Director, IT, SaaS Applications Management, Enterprise Collaboration, has primary responsibility for developing and implementing our cybersecurity policy and procedures and assessing, monitoring, and managing the prevention, detection, mitigation, and remediation of our cybersecurity risks and incidents. He has served in various roles in information technology and information security for over 20 years.
Cybersecurity Risk Management Positions or	true

Committees Responsible [Flag]	
Cybersecurity Risk Management Positions or Committees Responsible [Text Block]	We have security personnel to monitor our data and technology infrastructure, report and respond to cybersecurity incidents, work with users, and report to management and the audit committee. We also maintain a cybersecurity risk insurance policy.
Cybersecurity Risk Management Expertise of Management Responsible [Text Block]	Our Director, IT, SaaS Applications Management, Enterprise Collaboration, has primary responsibility for developing and implementing our cybersecurity policy and procedures and assessing, monitoring, and managing the prevention, detection, mitigation, and remediation of our cybersecurity risks and incidents. He has served in various roles in information technology and information security for over 20 years.
Cybersecurity Risk Management Positions or Committees Responsible Report to Board [Flag]	true

Nature of Business

[Organization, Consolidation and Presentation of Financial Statements [Abstract]]

Nature of Business

12 Months Ended
Dec. 31, 2024

1. Nature of Business

LSAC was initially formed on December 19, 2018 as a Delaware corporation for the purpose of effecting a merger, share exchange, asset acquisition, share purchase, reorganization, or similar business combination with one or more businesses. In December 2020, the LSAC Merger Sub merged with and into Legacy Vincera Pharma, with Legacy Vincera Pharma surviving the LSAC Merger as a wholly- owned subsidiary of LSAC. In connection with the LSAC Business Combination, LSAC changed its name to Vincera Pharma, Inc., and subsequently in January 2021, changed its name to Vincerx Pharma, Inc. (together with its consolidated subsidiaries, the "Company").

The Company is a clinical-stage biopharmaceutical company. The Company's current pipeline is entirely derived from the Bayer License Agreement (see Note 4), pursuant to which the Company has been granted an exclusive, royalty-bearing, worldwide license under certain Bayer patents and know-how to develop, use, manufacture, commercialize, sublicense, and distribute a clinical-stage and follow-on small molecule drug program and a preclinical stage bioconjugation platform, which includes next-generation antibody-drug conjugates and small molecule drug conjugates.

Reverse Stock Split

In January 2025, the stockholders approved, and the Company effected a 1-for-20 reverse stock split. All share and per-share data have been retroactively adjusted to account for the reverse stock split. Proportionate adjustments have been made to the number of shares of common stock underlying our outstanding equity awards and warrants, the number of shares issuable under our equity incentive plans, and other existing agreements, as well as the exercise price. The reverse stock split does not affect the par value of the common stock.

Summary of Significant Accounting Policies	12 Months Ended Dec. 31, 2024
Accounting Policies [Abstract]	
Summary of Significant Accounting Policies	

2. Summary of Significant Accounting Policies

Basis of Presentation

The Company's consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") as determined by the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") and pursuant to the regulations of the U.S. Securities and Exchange Commission ("SEC"). They include the accounts of Vincerx and its wholly-owned subsidiaries, VNRX Corp., Vincerx Pharma GmbH and Vincerx Pharma Australia Pty Limited. All intercompany accounts and transactions have been eliminated.

Liquidity and Going Concern

As of December 31, 2024, the Company had approximately $5.0 million in cash. The Company has incurred recurring operating losses and negative cash flows from operating activities since its inception and expects to continue to incur operating losses and negative cash flows in the future. Based on current business plans and assumptions, the Company believes that its existing cash and cash equivalents will be sufficient to fund its operating expenses and capital expenditure requirements into the third quarter of 2025, although this estimate is based on plans and assumptions that may prove to be wrong, and the Company could use its available capital resources sooner than it currently expects. Accordingly, the Company will need to raise additional capital through public or private equity offerings, debt financings, collaborations and licensing arrangements, or other sources, and such additional capital may not be available on favorable terms or at all, particularly in light of the current economic and market conditions. Market volatility resulting from pandemics or other epidemics, inflation

and other economic and market conditions, the wars in Ukraine and Israel, the inability to maintain the listing on The Nasdaq Capital Market of the Company's common stock, and other factors could also adversely impact the Company's ability to raise additional capital. The failure to raise additional capital as and when needed or on acceptable terms would have a negative impact on the Company's financial condition and the ability to pursue its business strategy, and the Company may have to reduce its workforce or delay, reduce the scope of, suspend, or eliminate one or more preclinical programs, clinical trials, or future commercialization efforts, or curtail its business operations.

In accordance with Accounting Standards Update ("ASU") 2014-15, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern (Subtopic 205-40), the Company has evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about its ability to continue as a going concern for a period of one year after the date that its audited consolidated financial statements are issued. In light of the Company's existing cash resources and current and expected operating losses and negative cash flows, the Company will need additional capital prior to the one-year anniversary of the issuance of its consolidated financial statements, and such additional capital may not be available as and when needed on acceptable terms or at all. As a result, the Company has concluded that these circumstances and the uncertainties associated with its ability to obtain additional capital raise substantial doubt about the Company's ability to continue as a going concern for a period of one year after the date that its audited consolidated financial statements are issued.

The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business, and do not include any adjustments relating to the recoverability and

classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of the uncertainties described above.

Emerging Growth Company

The Company is an "emerging growth company," as defined in Section 2(a) of 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 independent registered public accounting firm 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 consolidated 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.

Use of Estimates

The preparation of consolidated financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of commitments and contingencies at the date of the consolidated financial statements as well as reported amounts of expenses during the reporting periods. Estimates made by the Company include, but are not limited to, common stock warrant liabilities and stock-based compensation. The Company bases these estimates on historical experience and on various other assumptions that it believes are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying amounts of assets and liabilities that are not readily apparent from other sources. Actual results could differ materially from those estimates.

Concentrations of Credit Risk

The Company has cash balances at financial institutions which exceed the federally insured limit of $250,000. Any loss incurred or a lack of access to such funds could have a significant adverse impact on the Company's financial condition, results of operations, and cash flows.

The Company is subject to risks common to companies in the biotechnology industry, including, but not limited to, development by the Company or its competitors of technological innovations, risks of failure of clinical studies, dependence on key personnel, protection of proprietary technology, compliance with government regulations, and ability to transition from preclinical manufacturing to commercial production of products.

The Company's product candidates will require approvals from the U.S. Food and Drug Administration and comparable foreign regulatory agencies prior to commercial sales in their

respective jurisdictions. There can be no assurance that any product candidates will receive the necessary approvals. If the Company was denied approval, approval was delayed or the Company was unable to maintain approval for any product candidate, it could have a material adverse impact on the Company.

Cash and Cash Equivalents

Management considers all highly liquid investments with an insignificant interest rate risk and original maturities of three months or less to be cash equivalents.

Restricted Cash

Restricted cash represents cash deposits with a financial institution in support of the Company's corporate credit card program.

Marketable Securities

The Company generally invests its excess cash in money market funds and investment grade short-term to intermediate-term fixed income securities. Such investments are included in cash and cash equivalents, short-term marketable securities or long-term marketable securities on the consolidated balance sheets. Marketable securities with a maturity date greater than 90 days and less than one year at each consolidated balance sheet date are classified as short-term. Marketable securities with a maturity date greater than one year, if any, are classified as long-term. All of the Company's marketable securities are considered available-for-sale and are reported at fair value with unrealized gains and losses included as a component of stockholders' equity. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, which is included in interest income on the consolidated statements of operations and comprehensive loss. Realized gains and losses and declines in value judged to be other-than-temporary, if any, on marketable securities are included in interest income on the consolidated statements of operations and comprehensive loss. The cost of securities sold is determined using specific identification.

The Company periodically evaluates whether declines in the fair values of its marketable securities below their amortized cost are other-than-temporary. This evaluation consists of several qualitative and quantitative factors regarding the severity and duration of the unrealized loss, as well as the Company's ability and intent to hold the marketable security until a forecasted recovery occurs. Additionally, the Company assesses whether it has plans to sell the marketable security or it is more likely than not it will be required to sell any marketable securities before recovery of its amortized cost basis. Factors considered include quoted market prices, recent financial results and operating trends, implied values from any recent transactions or offers of investee securities, credit quality of debt instrument issuers, other publicly available information that may affect the value of the marketable security, duration and severity of the decline in value, and the Company's strategy and intentions for holding the marketable security.

Property, Plant and Equipment

Property, plant and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation and amortization are provided for using straight-line methods, in amounts sufficient to charge the cost of depreciable assets to operations over their estimated service lives. Repairs and maintenance costs are charged to operations as incurred.

The Company assesses its long-lived assets for impairment whenever facts and circumstances indicate that the carrying amounts may not be fully recoverable. To analyze recoverability, the Company projects undiscounted net future cash flows over the remaining lives of such assets. If these projected undiscounted net future cash flows are less than the carrying amounts, an impairment loss would be recognized, resulting in a write-down of the assets with a corresponding charge to earnings. The impairment loss is measured based upon the difference between the carrying amounts and the fair values of the assets. In connection with the early

termination of the lease during the fourth quarter of 2024, the Company incurred an impairment loss of approximately $50,000, included within other income (expense), net.

Fair Value Measurement

The Company applies fair value accounting for all financial assets and liabilities measured on a recurring and nonrecurring basis. Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. The accounting guidance established a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, used to determine the fair value of its financial instruments. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Level 1—Quoted prices in active markets for identical assets or liabilities that the entity has the ability to access.

Level 2—Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets and liabilities.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities.

Legacy Warrant Liability

As of December 31, 2024 and 2023, there were 3,295,000 legacy warrants to purchase common stock outstanding. The legacy warrants will expire at 5:00 p.m., New York City time, on December 23, 2025 (five years from the closing of the LSAC Business Combination).

The legacy warrants are exercisable on the basis of 20 warrants for one share of common stock at an aggregate exercise price of $230 per share and are exercisable for cash (even if a registration statement covering the shares of common stock issuable upon exercise of such warrants is not effective) or on a cashless basis, at the holder's option (except with respect to 500,000 of the legacy warrants held by Rosedale Park, LLC and 500,000 of the legacy warrants held by LifeSci Holdings LLC, which were amended to remove the cashless exercise provision), and will not be redeemable by the Company (except with respect to 500,000 of the legacy warrants held by Rosedale Park, LLC and 500,000 of the legacy warrants held by LifeSci Holdings LLC, which were amended to include a redemption provision. The legacy warrants held by Rosedale Park, LLC, expire on March 5, 2025, provided that once the legacy warrants are not beneficially owned by Chardan Capital Markets, LLC or any of its related persons, the legacy warrants will expire on December 23, 2025 (five years from the closing of the LSAC Business Combination).

The legacy warrants issued to LifeSci Holdings LLC that were amended as described above were determined to be equity classified in accordance with ASC 815, Derivatives and Hedging. The remaining legacy warrants were determined to be liability classified in accordance with ASC 815, Derivatives and Hedging (see Note 6).

Since the legacy warrants meet the definition of a derivative under ASC 815, the Company recorded these warrants as liabilities on the consolidated balance sheets at fair value, with subsequent changes in their respective fair values recognized in the consolidated statements of operations and comprehensive loss at each reporting date. The estimated fair value of the legacy warrants is determined with Level 3 inputs using Black-Scholes and Monte Carlo simulations.

Leases

The Company adopted FASB ASC Topic 842, "Leases" ("ASC 842"), using the required modified retrospective approach and utilizing the effective date as its date of initial application, for which prior periods are presented in accordance with the previous guidance in ASC 840, "Leases".

At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on the unique facts and circumstances present in the arrangement. Most leases with a term greater than one year are recognized on the balance sheet as right-of-use assets and short-term and long-term lease liabilities, as applicable. The Company has elected not to recognize on the balance sheet leases with terms of 12 months or less. The Company typically only includes an initial lease term in its assessment of a lease arrangement. Options to renew a lease are not included in the Company's assessment unless there is reasonable certainty that the Company will renew.

Operating lease liabilities and their corresponding right-of-use assets are recorded based on the present value of lease payments over the expected remaining lease term. Certain adjustments to the right-of-use assets may be required for items such as incentives received. The interest rate implicit in the Company's leases is typically not readily determinable. As a result, the Company utilizes its incremental borrowing rate, which reflects the fixed rate at which the Company could borrow on a collateralized basis the amount of the lease payments in the same currency, for a similar term and in a similar economic environment (see Note 9).

In accordance with ASC 842, components of a lease should be allocated between lease components (e.g., land, building) and non-lease components (e.g., common area maintenance, consumables). The fixed and in-substance fixed contract consideration (including any consideration related to non-components) must be allocated based on the respective relative fair values to the lease components and non-lease components.

Segments

Operating segments are identified as components of an enterprise about which separate discrete financial information is regularly reviewed for evaluation by the chief operating decision-maker ("CODM") in making

decisions regarding resource allocation and assessing performance. The Company views its operations and manages its business as a single operating segment. The Company's CODM, its chief executive officer, reviews operating results on an aggregate basis and manages the operations as a single operating segment.

The accounting policies of the Company's single operating and reportable segment are the same as those described in the summary of significant accounting policies. The measure of segment assets is reported on the consolidated balance sheets as total assets. The CODM evaluates performance and allocates resources based on consolidated net loss that also is reported on the consolidated statements of operations as net loss, and consolidated cash used in operations. The significant expenses regularly reviewed by the CODM are consistent with those reported on the Company's consolidated statement of operations, and expenses are not regularly provided to or reviewed on a more disaggregated basis for purposes of assessing segment performance and deciding how to allocate resources.

Research and Development Costs

The Company expenses research and development costs as operating expenses as incurred. These expenses include acquired in-process research and development expenses for which there is no alternative future use, salaries for research and development personnel, consulting fees, product development, pre-clinical studies, clinical trial costs, and other fees and costs related to the development of the technology.

Stock-Based Compensation

The Company measures and recognizes compensation expense for all stock-based awards made to employees, directors, and non-employees, including stock options and restricted shares, based on estimated fair values recognized over the requisite service period.

The fair value of options granted is estimated on the grant date using the Black-Scholes option valuation model. This valuation model for stock-based compensation expense requires the Company to make assumptions and judgments about the variables used in the calculation, including the expected term (weighted-average period of time that the options granted are expected to be outstanding), the volatility of the Company's common stock, and an assumed risk-free interest rate. The Company accounts for forfeitures when they occur. The Company uses the simplified calculation of the expected life, which takes into consideration the grant's contractual life and vesting period and assumes that all options will be exercised between the vesting date and the contractual term of the option. No awards have been issued with a market condition or other non-standard terms.

The estimate for volatility is based on an average of the historical volatilities of the common stock of several entities with characteristics similar to those of the Company. Since these comparable companies operate in the same industry segment, the Company expects that it would share similar characteristics, such as risk profiles, volatility, capital intensity and market growth patterns and drivers.

The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant for periods corresponding with the expected life of the option.

Income Taxes

Income taxes are recorded in accordance with ASC 740, "Income Taxes" ("ASC 740"), which provides for deferred taxes using an asset and liability approach. The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse, and net operating loss carryforwards and research and development tax credit ("R&D Credit") carryforwards. Valuation allowances are provided, if based upon the weight of available evidence, it is

more likely than not that some or all of the deferred tax assets will not be realized. The Company has recorded a full valuation allowance to reduce its net deferred income tax assets to zero. In the event the Company were to determine that it would be able to realize some or all its deferred income tax assets in the future, an adjustment to the deferred income tax asset valuation allowance would increase income in the period such determination was made.

The Company accounts for uncertain tax positions in accordance with the provisions of ASC 740. When uncertain tax positions exist, the Company recognizes the tax benefit of tax positions to the extent that the benefit would more likely than not be realized assuming examination by the taxing authority. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances. At December 31, 2024 and 2023, the Company had no liability for income tax associated with uncertain tax positions. The Company would recognize any corresponding interest and penalties associated with its income tax positions in income tax expense. There was no income tax interest or penalties incurred in 2024 or 2023.

German Grant Income

In accordance with ASC 958, the Company recognizes grant income in the period when the underlying eligible expenses are incurred. The German government grant program provides for

tax refunds or direct reimbursements of eligible research expenses of up to 1.0 million euros per year over a period of six years. The grant was approved in 2022 and is retroactive to 2021. Grant income for the years ended December 31, 2024 and 2023 has been recorded in other income (expense), net on the consolidated statements of operations and comprehensive loss. The corresponding receivable is included within current assets and other assets, $1.0 million and $1.6 million, respectively, at December 31, 2024 on the consolidated balance sheet depending upon expectations for collection within twelve months of the balance sheet date.

Foreign Currency Translation and Transactions

The consolidated financial statements are presented in U.S. dollars. The functional currency for the Company's foreign subsidiaries is the local currency. Expenses, gains and losses for this entity are translated into U.S. dollars using average currency exchange rates for the period. Assets and liabilities are translated using exchange rates in effect at the balance sheet date. Foreign currency translation adjustments are recorded as a component of accumulated other comprehensive loss on the Company's consolidated balance sheets. Foreign currency transaction gains and losses on transactions not denominated in the functional currency are recorded in other income (expense), net, on the consolidated statements of operations and comprehensive loss.

Comprehensive Income or Loss

Comprehensive loss is equal to net loss, net foreign currency translation gain (loss), and net unrealized gain on marketable securities as presented in the accompanying consolidated statements of operations and comprehensive loss.

Net Loss per Share of Common Stock

Basic net loss per share is computed by dividing the net loss by the weighted-average number of shares of common stock outstanding during the period.

Diluted earnings per share adjusts basic earnings per share for the potentially dilutive impact of stock options and warrants. As the Company has reported losses for all periods presented, all potentially dilutive securities including stock options and warrants, are antidilutive and accordingly, basic net loss per share equals diluted net loss per share.

Recent Accounting Pronouncements

In November 2023, Financial Accounting Standards Board ("FASB") issued ASU No. 2023-07 "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures." ASU 2023-07 requires incremental annual and quarterly disclosures about segment measures of profit or loss as well as significant segment expenditures. It also requires public entities with a single reportable segment to provide all segment disclosures required by the amendments in the update and all existing segment disclosures in Topic 280. The Company adopted this guidance on January 1, 2025 on a retrospective basis and the adoption did not have a significant impact to the consolidated financial statements.

In December 2023, FASB issued ASU No. 2023-09 "Income Taxes (Topic 740): Improvements to Income Tax Disclosures." ASU 2023-09 requires incremental annual disclosures around income tax rate reconciliations, income taxes paid and other related disclosures. This guidance requires prospective application and permits retrospective application to prior periods presented. The Company has adopted this guidance on January 1, 2025. The Company expects the adoption of this standard to result in increased disclosures in its notes to consolidated financial statements.

LSAC Business Combination

12 Months Ended
Dec. 31, 2024

Business Combinations [Abstract]
LSAC Business Combination

3. LSAC Business Combination

As discussed in Note 1, on December 23, 2020, the Company consummated the LSAC Business Combination, with Legacy Vincera Pharma surviving the LSAC Merger as a wholly-owned subsidiary of the Company.

Immediately prior to the effective time of the LSAC Business Combination, each share of Legacy Vincera Pharma Common Stock was canceled, and the Legacy Holders received (i) 0.028545 shares of common stock, for each share of Legacy Vincera Pharma Common Stock held by them immediately prior to the effective time of the LSAC Business Combination and (ii) certain rights to Earnout Shares after the closing of the LSAC Business Combination.

The Legacy Holders are entitled to receive Earnout Shares if the daily volume-weighted average price of the Company's common stock equals or exceeds the following prices for any 20 trading days within any 30 trading-day period following the closing of the LSAC Business Combination: (1) during any such trading period prior to the six year anniversary of the closing, upon achievement of a daily volume-weighted average price of at least $700.00 per share, such number of shares of the Company's common stock as equals the quotient of $20.0 million divided by the Closing Price Per Share; and (2) during any such trading period prior to the eight year anniversary of the closing, upon achievement of a daily volume-weighted average price of at least $900.00 per share, such number of shares of the Company's common stock as equals the quotient of $20.0 million divided by the Closing Price Per Share. A total of 90.6% of (rounded to the nearest whole share) of the Earnout Shares then earned and issuable shall be issued to the Legacy Holders on a pro-rata basis based on the percentage of the number of shares of Vincera Pharma Common Stock owned by them immediately prior to the closing of the LSAC Business Combination, and the remaining Earnout Shares that would otherwise have been issuable shall not be issuable to the Legacy Holders but in lieu thereof the number of authorized shares available for issuance under the Company's 2020 Stock Incentive Plan (the "2020 Plan") shall be automatically increased by an equivalent number of shares of the Company's common stock.

Bayer License Agreement

12 Months Ended
Dec. 31, 2024

Bayer License [Abstract]
Bayer License Agreement

4. Bayer License Agreement

On October 7, 2020, Legacy Vincerx Pharma entered into the Bayer License Agreement, which became effective on December 23, 2020 upon the closing of the LSAC Business Combination. Pursuant to the Bayer License Agreement, Legacy Vincerx Pharma has an exclusive, worldwide, royalty-bearing license under certain Bayer patents and know-how to develop, use, manufacture, commercialize, sublicense and distribute (i) a clinical-stage and follow-on small molecule drug platform, including a P-TEFb inhibitor compound, and (ii) a

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preclinical stage bioconjugation platform, which includes next-generation antibody-drug conjugates and innovative small molecule drug conjugates.

During 2023, the Company recorded a $1.0 million development milestone payable to Bayer in connection with the Company's IND filing for VIP943. This milestone obligation was expensed as incurred.

If the Company achieves all of the development and commercial sales milestones for license products under the Bayer License Agreement for each of the countries and disease indications, the Company would be obligated to pay milestone payments that range from $110.0 million to up to $318.0 million per licensed product, and upon successful commercialization of at least five licensed products, the Company could be required to pay aggregate milestone payments in excess of $1 billion. In addition to milestone payments, the Company is also required to pay Bayer under the Bayer License Agreement ongoing royalties in the single digit to low double-digit percentage range on net commercial sales of licensed products.

Workforce Reduction	12 Months Ended Dec. 31, 2024
Workforce Reduction [Abstract]	
Workforce Reduction	

5. Workforce Reduction

In December 2024, the Board of Directors of the Company approved a plan to implement cost-controls and explore strategic alternatives. To streamline operations and focus resources, the Company initially implemented a significant reduction in force of the Company's full-time employees by approximately 55% and then further reduced the workforce in connection with the signing of a binding term sheet and proposed business combination, which binding term sheet was subsequently terminated by the parties. Affected employees were offered separation benefits, including severance payments and payments to cover premiums for continuation of healthcare coverage for a limited period.

The Company incurred approximately $2.6 million of severance and related expenses during 2024, of which approximately $2.4 million is included within accrued expenses at December 31, 2024.

Fair Value Measurement

12 Months Ended
Dec. 31, 2024

Fair Value Disclosures [Abstract]
Fair Value Measurement

6. Fair Value Measurement

The Company's financial assets and liabilities are subject to fair value measurements on a recurring basis and the level of inputs used for such measurements were as follows (amounts in thousands):

	Fair Value Measured as of December 31, 2023			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash Equivalents:				
Money market funds	$ 4,682	$ —	$ —	$ 4,682
U.S. government treasuries	6,233	—	—	6,233
U.S. government agency securities	—	999	—	999
Total cash equivalents	$ 10,915	$ 999	$ —	$ 11,914

There were no cash equivalents or marketable securities at December 31, 2024. There were no marketable securities at December 31, 2023. The Company's Level 2 securities are valued using third-party pricing sources. The pricing services utilize industry standard valuation models, including both income and market-based approaches, for which all significant inputs are observable, either directly or indirectly. There were no transfers of assets between Level 1, Level 2, or Level 3 during the years ended December 31, 2024 and 2023.

	Fair Value Measured as of December 31, 2024			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Common stock warrant liabilities	$ —	$ —	$ 8	$ 8
Total fair value	$ —	$ —	$ 8	$ 8

	Fair Value Measured as of December 31, 2023			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Common stock warrant liabilities	$ —	$ —	$ 191	$ 191
Total fair value	$ —	$ —	$ 191	$ 191

The estimated fair value of the warrant liability for the legacy warrants at December 31, 2024 and 2023 was determined using Level 3 inputs. Inherent in a Monte Carlo options pricing model are assumptions related to expected stock-price volatility, expected life, risk-free interest rate and dividend yield. The Company estimates the volatility of its ordinary shares based on its historical volatility for a time period that approximates the expected remaining life of the warrants. The risk-free interest rate is based on the U.S. Treasury zero-coupon yield curve on the grant date for a maturity similar to the expected remaining life of the warrants. The dividend rate is based on the historical rate, which the Company anticipates to remain at zero. There were no changes to the number of legacy warrants underlying the Level 3 financial instruments during the year ended December 31, 2024. There were no transfers between Level 1, 2, or 3 during the years ended December 31, 2024 and 2023.

The following table presents changes in Level 3 liabilities measured at fair value for the years ended December 31, 2024 and 2023. Both observable and unobservable inputs were used to determine the fair value of positions that the Company has classified within the Level 3 category.

Unrealized gains and losses associated with liabilities within the Level 3 category include changes in fair value that were attributable to both observable (e.g., changes in market interest rates) and unobservable (e.g., changes in unobservable long-dated volatilities) inputs (in thousands).

	Warrant Liability
Balance – January 1, 2023	**$ 144**
Change in fair value	47
Balance – December 31, 2023	**191**
Change in fair value	(183)
Balance – December 31, 2024	**$ 8**

A summary of the weighted average (in aggregate) significant unobservable inputs (Level 3 inputs) used in measuring the Company's warrant liabilities that are categorized within Level 3 of the fair value hierarchy as of December 31, 2024 and 2023 is as follows:

	As of December 31, 2024	As of December 31, 2023
Stock price	$ 5.26	$ 23.60
Exercise price	$ 230.00	$ 230.00
Option term (years)	1.0	2.0
Volatility (annual)	144.2%	90.9%
Risk-free rate	4.1%	4.2%
Dividend yield (per share)	0%	0%

Balance Sheet Details

12 Months Ended
Dec. 31, 2024

Balance Sheet Related Disclosures [Abstract]
Balance Sheet Details

7. Balance Sheet Details

Other current assets consist of the following at December 31, 2024 and 2023 (in thousands):

	December 31, 2024	December 31, 2023
Clinical related vendor prepayments	$ 165	$ 407
Other	49	377
	$ 214	$ 784

Property, plant and equipment, net consist of the following at December 31, 2024 and 2023 (in thousands):

	December 31, 2024	December 31, 2023	Estimated Useful Life
Furniture and fixtures	$ —	$ 236	5 years
Computers	—	20	3-5 years
Total	—	256	
Less: accumulated depreciation	—	(131)	
Total property, plant and equipment, net	$ —	$ 125	

Depreciation expense was approximately $52,000 for each of the years ended December 31, 2024 and 2023.

The following table sets forth the components of accrued expenses at December 31, 2024 and 2023, respectively (in thousands):

	December 31, 2024	December 31, 2023
Accrued severance	$ 2,356	$ —
Accrued payroll	144	332
Accrued benefits	278	918
Accrued manufacturing, clinical trial and related	466	505
	$ 3,244	$ 1,755

Commitments and Contingencies

Commitments and Contingencies Disclosure [Abstract]

Commitments and Contingencies

12 Months Ended
Dec. 31, 2024

8. Commitments and Contingencies

Litigation

The Company is not currently a party to any material legal proceedings and is not aware of any pending or threatened claims. From time to time, the Company may be subject to various legal proceedings and claims that arise in the ordinary course of its business activities.

Leases

On December 23, 2020, the Company entered into a five-year term lease agreement which commenced on January 1, 2021. In April and May, 2021, the lease was amended to include additional space. The annual rent expense is approximately $1.2 million.

At December 31, 2023, the Company had operating lease liabilities of approximately $2.5 million and right of use assets of approximately $2.2 million, which were included in the consolidated balance sheets.

Effective July 2022, the Company subleased substantially all of its unused office space for a term of 18 months at a base rent of $50,000 per month. The Company had not been legally released from its primary obligations under the original lease and subsequent amendments and, therefore, continued to account for the original lease according to Accounting Standard Codification ("ASC") Topic 842, "Leases." The Company records both fixed and variable payments received from the sublessee in its consolidated statements of operations and comprehensive loss on a straight-line basis as an offset to rent expense. Such payments received in the years ended December 31, 2024 and 2023 were $0.6 million each. The Company also received a $50,000 deposit, recorded as a noncurrent liability in the consolidated balance sheet at December 31, 2023. During the fourth quarter of 2024, the Company further streamlined its operations and significantly reduced its workforce (see Note 5). In connection with this workforce reduction, the Company terminated its lease effective December 31, 2024. In consideration for this early termination, the Company relinquished the original deposit of approximately $82,000, as well as the $50,000 deposit received from the sublessor, to the landlord. The Company recorded a gain of approximately $95,000 from early termination of the lease, recorded in other income (expense), net in the consolidated statements of operations.

The following summarizes quantitative information about the Company's operating leases (dollars in thousands):

	For the years ended	
	December 31, 2024	December 31, 2023
Lease cost		
Operating lease cost	$ 1,196	$ 1,196
Variable lease cost	—	—
Total operating lease expense	$ 1,196	$ 1,196
Other information		
Operating cash flows from operating leases	$ 1,320	$ 1,270
Right-of-use assets obtained in exchange for operating lease liabilities	$ —	$ —

Weighted-average remaining lease term—operating leases	—	2.0
Weighted-average discount rate—operating leases	8%	8%

As of December 31, 2024, future minimum lease payments are de minimus and consist solely of the remaining lease obligation in Germany into 2026.

Stockholders' Equity

12 Months Ended
Dec. 31, 2024

Equity [Abstract]
Stockholders' Equity

9. Stockholders' Equity

The Company's Certificate of Incorporation authorizes the issuance of 120,000,000 shares of common stock, $0.0001 par value per share and 30,000,000 shares of undesignated preferred stock, $0.0001 par value per share. As of December 31, 2024 and 2023, there were 2,239,580 shares and 1,070,375 shares of common stock outstanding, respectively, and no shares of preferred stock outstanding.

During the years ended December 31, 2024 and 2023, 11,625 shares and 8,083 shares, respectively, were issued pursuant to the Company's Employee Stock Purchase Program ("ESPP") (see Note 10) for approximately $114,000 and $112,000 in proceeds, respectively.

Public and At-the-Market Offerings

The Company entered into a Sales Agreement dated as of March 29, 2024 between the Company and Leerink Partners LLC, as sales agent, which provided for the issuance and sale by the Company of shares of common stock in "at-the-market" offerings having an aggregate offering price of up to $50.0 million. As of December 31, 2024, the Company sold an aggregate of 106,042 shares of its common stock at an average price of $23.34 per share, resulting in net proceeds of approximately $2.2 million, after paying commissions and offering expenses of approximately $0.2 million. As of December 31, 2024, approximately $47.5 million remained available under the ATM Agreement.

On April 30, 2024, the Company closed an underwritten public offering of (i) 0.3 million shares of its common stock and accompanying warrants to purchase up to 0.3 million shares of common stock, and (ii) to certain investors, pre-funded warrants to purchase up to an aggregate of 0.8 million shares of common stock and accompanying warrants to purchase up to 0.8 million shares of common stock. Each share of common stock was sold together with an accompanying common stock warrant at a combined offering price of $15.00, and each pre-funded warrant was sold together with an accompanying common stock warrant at a combined offering price of $14.998, which is equal to the combined offering price per share of common stock and accompanying common stock warrant less the $0.002 exercise price of each pre-funded warrant. The Company received net proceeds of approximately $14.8 million from this offering, after deducting underwriting discounts and commissions and offering expenses of approximately $0.7 million.

Registered Direct Offering

The Company entered into a definitive securities purchase agreement dated December 26, 2024 for the purchase, in a registered direct offering, of an aggregate of (i) 140,812 shares of its common stock and accompanying common stock warrants to purchase 281,625 shares of common stock at a combined offering price of $3.68, and (ii) for certain purchasers, in lieu of common stock, pre-funded warrants to purchase 131,791 shares of common stock and accompanying common stock warrants to purchase 263,582 shares of common stock at a combined offering price of $3.66, which is equal to the combined offering price per share of common stock and accompanying common warrant less the $0.02 exercise price of each pre-funded warrant. The offering closed on December 27, 2024. The Company received net proceeds of approximately $0.9 million from this offering, after deducting offering expenses of approximately $0.1 million.

Legacy Warrants

As of December 31, 2023, there were 3,295,000 legacy warrants to purchase common stock outstanding.

The legacy warrants are exercisable on the basis of 20 warrants for one share of common stock at an aggregate exercise price of $230 per share and will be exercisable for cash (even if a registration statement covering the shares of common stock issuable upon exercise of such warrants is not effective) or on a cashless basis, at the holder's option (except with respect to 500,000 of the legacy warrants held by Rosedale Park, LLC and 500,000 of the legacy warrants held by LifeSci Holdings LLC, which were amended to remove the cashless exercise provision), and will not be redeemable by the Company (except with respect to 500,000 of the legacy warrants held by Rosedale Park, LLC and 500,000 of the legacy warrants held by LifeSci Holdings LLC, which were amended to include a redemption provision. The legacy warrants held by Rosedale Park, LLC expire on March 5, 2025, provided that once the legacy warrants are not beneficially owned by Chardan Capital Markets, LLC or any of its related persons, the legacy warrants will expire on December 23, 2025 (five years from the closing of the LSAC Business Combination).

The legacy warrants issued to LifeSci Holdings LLC that were amended as described above were determined to be equity classified in accordance with ASC 815, Derivatives and Hedging. The remaining legacy warrants were determined to be liability classified in accordance with ASC 815, Derivatives and Hedging (see Note 6).

Restricted Shares

In May 2020, Legacy Vincera Pharma issued 8,677 shares of restricted stock at a fair value of $1.40 per share in exchange for services. Pursuant to these restricted share agreements, the term vesting represents the expiration of the Company's repurchase right for the underlying shares.

A summary of restricted stock activity for the years ended December 31, 2024 and 2023 is presented below:

	Number of Shares	Weighted Average Grant Date Fair Value per Share
Nonvested at January 1, 2023	**3,350**	**$ 1.30**
Vested	(2,447)	—
Nonvested at December 31, 2023	**903**	**$ 2.06**
Vested	(903)	—
Nonvested at December 31, 2024	**—**	**$ —**

Equity Incentive Plans

12 Months Ended
Dec. 31, 2024

Share-based Payment Arrangement [Abstract]
Equity Incentive Plans

10. Equity Incentive Plans

In connection with the LSAC Business Combination, the stockholders approved the 2020 Plan, which became effective upon the closing of the LSAC Business Combination on December 23, 2020. As of December 31, 2024, the Company had 254,565 shares of common stock reserved for issuance and 104,038 shares available for future awards under the 2020 Plan.

The 2020 Plan allows for the grant of stock options and rights to acquire restricted stock to employees, directors and consultants of the Company. The terms and conditions of specific awards are set at the discretion of the Company's board of directors. Options granted under the 2020 Plan expire no later than 10 years from the date of grant. Unvested common shares obtained upon early exercise of options are subject to repurchase by the Company at the original issue price.

Stock Option Repricing and Exchange Program

The board of directors and stockholders of the Company approved a one-time stock option repricing and exchange program. As a result, effective on August 12, 2024 (the "Effective Date"), the exercise price of all outstanding stock options held by employees (including the Company's executive officers) and consultants of the Company that were granted under the 2020 Plan and that had an exercise price per share greater than $10.97, the closing price of the Company's common stock on the Effective Date, was reduced to $11.00 per share, except that a premium exercise price will apply for certain exercises made prior to the end of a one year retention period. The exercise price of outstanding eligible options with a weighted average exercise price of $163.81 for 369,890 shares of common stock was reduced to the $11.00 per share exercise price with an estimated common stock fair value of $8.20 per share at the date of the repricing. The vesting terms and expiration dates remain unchanged from the original grant dates. Our non-employee directors were not eligible to participate in the stock option repricing program.

The stock option repricing was treated as an option modification for accounting purposes and resulted in total incremental expense of approximately $0.9 million, of which approximately $0.6 million incremental expense associated with the vested options was recognized on the modification date of August 12, 2024. The remaining $0.3 million incremental expense associated with the unvested options as of the modification date will be recognized over the remainder of the original requisite service period.

Subsequent to completion of the repricing, the Company commenced a tender offer to exchange outstanding eligible options to purchase shares of the Company's common stock for new restricted stock units (each, a "New RSU"). At the completion of the tender offer on September 27, 2024, a total of 95,560 eligible options were tendered for New RSUs. The surrendered options were cancelled, and a total of 73,507 New RSUs were granted, each effective as of September 30, 2024. There was no incremental expense associated with this exchange. Our non-employee directors were not eligible to participate in the tender offer to exchange outstanding options for new restricted stock units.

Stock option activity under the Plan is as follows (amounts in thousands, except per share amount):

	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value

Outstanding at January 1, 2023	218	$217.44	8.6	$ 125
Options granted	57	24.30	—	—
Options exercised	(1)	16.40	—	—
Options cancelled	(13)	235.11	—	—
Outstanding at December 31, 2023	261	174.81	8.1	—
Options granted	133	143.83	—	—
Options exercised	(1)	17.93	—	—
Options cancelled	(141)	22.54	—	—
Outstanding at December 31, 2024	252	$ 19.89	6.9	$ —
Options vested and exercisable at December 31, 2024	176	$ 23.65	5.9	$ —

Stock-based compensation expense is based on the grant-date fair value. The Company recognizes compensation expense for all stock-based awards on a straight-line basis over the requisite service period of the awards, which is generally the option vesting term of either two or three years.

As of December 31, 2024, the Company had stock-based compensation of approximately $3.7 million related to unvested stock options not yet recognized that are expected to be recognized over an estimated weighted average period of 2.0 years.

The following weighted average assumptions were used as inputs to the Black-Scholes option valuation model in determining the estimated grant-date fair value of the Company's stock options granted during the years ended December 31, 2024 and 2023:

	For the years ended December 31,	
	2024	2023
Exercise price	$61.99	$18.00
Expected term (years)	6.0	5.6
Volatility (annual)	91.9%	89.5%
Risk-free rate	4.3%	4.0%
Dividend yield (per share)	0%	0%

Restricted stock unit activity under the 2020 Plan is as follows (in thousands):

	Restricted Stock Units	Weighted Average Purchase Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value
Outstanding at January 1, 2024	—	$ —	—	$ —
Awarded	73	—	—	—
Released	(50)	—	—	—
Cancelled	(21)	—	—	—
Outstanding at December 31, 2024	2	$ —	1.1	$ 12

Stock-based compensation expense associated with the New RSUs is based on the grant-date fair value, or $14.32 for all restricted stock units granted during the year ended December 31, 2024, as well as the remaining unrecognized compensation expense associated with the options that were tendered in exchange for these New RSUs. The Company recognizes compensation expense for all stock-based awards on a straight-line basis over the requisite service period of the awards, which is the vesting term of approximately three years.

As of December 31, 2024, the Company had stock-based compensation of approximately $52,000 related to unvested restricted stock units not yet recognized that are expected to be recognized over an estimated weighted average period of 2.7 years.

Total stock-based compensation expense recognized in the accompanying consolidated statements of operations and comprehensive loss for all equity awards is as follows (amounts in thousands):

	For the years ended December 31,	
	2024	2023
Research and development	$1,655	$1,712
General and administrative	1,818	1,851
Total stock-based compensation expense	**$3,473**	**$3,563**

Employee Stock Purchase Plan

The Company's 2021 Employee Stock Purchase Plan (the "ESPP") became effective in May 2021 upon stockholder approval and is intended to qualify as an "employee stock purchase plan" under Section 423 of the Internal Revenue Code. 10,000 of the Company's authorized but unissued or reacquired shares of common stock have been reserved for issuance under the ESPP, plus an additional number of shares to be reserved annually on the first day of each fiscal year from January 1, 2022 through January 1, 2031, equal to the least of (i) one percent (1%) of the outstanding shares of the Company's common stock on such date, (ii) 25,000 shares, or (iii) a lesser amount determined by the compensation committee or the Company's board.

The ESPP allows eligible employees to purchase shares of the Company's common stock at a discount of up to 15% of their eligible compensation through payroll deductions, subject to any plan limitations. The ESPP consists of a series of offerings of purchase rights to eligible employees, each with a duration of not more than 12 months and purchase dates every six months. The purchase price cannot, under the terms of the ESPP, be less than 85% of the fair market value per share of the Company's common stock on either the offering date or on the purchase date, whichever is less. If the fair market value of a share of the Company's common stock on any purchase date within a particular offering period is less than or equal to the fair market value on the start date of that offering period, then the offering period will automatically terminate and the employees in that offering period will automatically be transferred and enrolled in a new offering period which will begin on the next day following such purchase date.

As of December 31, 2024, 11,149 shares of common stock were reserved for future issuance under the ESPP. Shares issued under the ESPP were 11,625 and 8,083 shares for the years ended December 31, 2024 and 2023, respectively. The Company recorded approximately $179,000 and $133,000 of stock-based compensation expense for the years ended December 31, 2024 and 2023, respectively, related to the ESPP.

Net Loss per Share Applicable to Common Stockholders	12 Months Ended
	Dec. 31, 2024
Earnings Per Share [Abstract]	
Net Loss per Share Applicable to Common Stockholders	

11. Net Loss per Share Applicable to Common Stockholders

Basic loss per common share is computed by dividing net loss by the weighted average number of common shares outstanding during the reporting period. Diluted loss per common share is computed similarly to basic loss per common share except that it reflects the potential dilution that could occur if dilutive securities or other obligations to issue common stock were exercised or converted into common stock.

The following table sets forth the computation of loss per share for the years ended December 31, 2024 and 2023, respectively (amounts in thousands, except per share number):

	For the year ended December 31,	
	2024	2023
Numerator:		
Net loss	$(30,074)	$(40,157)
Denominator:		
Weighted average common shares outstanding, basic and diluted	1,898	1,065
Net loss per common share, basic and diluted	$ (15.85)	$ (37.72)

The following table presents the potential common stock outstanding that was excluded from the computation of diluted net loss per share of common stock as of the periods presented because including them would have been antidilutive:

	For the year ended December 31,	
	2024	2023
Options outstanding	252	261
Restricted stock units	2	—
Warrants	1,810	165
Restricted stock	—	1
Total	2,064	427

In accordance with ASC 260-10-45-13, a pre-funded, or penny, warrant is an instrument that requires the holder to pay little or no consideration to receive the shares upon exercise of the warrant (see Note 9). Since the shares underlying the warrants are issuable for little or no consideration, the Company considered them outstanding in the context of basic earnings per share.

Income Taxes

12 Months Ended
Dec. 31, 2024

Income Tax Disclosure [Abstract]
Income Taxes

12. Income Taxes

The Company has no provision for income taxes for the years ended December 31, 2024 and 2023. The Company has no current tax expense from losses and no deferred expense from the valuation allowance.

Income (loss) before provision for income taxes consisted of the following (amounts in thousands):

	For the year ended December 31,	
	2024	2023
United States	$ (30,412)	$ (35,281)
International	338	(4,876)
	$(30,074)	**$(40,157)**

The effective tax rate of the Company's provision (benefit) for income taxes differs from the federal statutory rate as follows:

	For the year ended December 31,	
	2024	2023
Statutory federal income tax rate	21.0%	21.0%
State taxes, net of federal tax benefit	0.6%	0.1%
Research and development	1.0%	2.0%
Other	(3.3%)	0.5%
Change in valuation allowance	(19.3%)	(23.6%)
Income taxes provision (benefit)	0.0%	0.0%

Significant components of the Company's net deferred tax assets as of December 31, 2024 and 2023, are as follows (amounts in thousands):

	As of December 31,	
	2024	2023
Deferred tax assets:		
Net operating loss	$ 19,357	$ 15,475
Stock-based compensation	3,322	5,235
Capitalized research and development	15,814	14,734
Research and development credit	2,404	2,231
Accruals and reserves	57	137
Lease liability	—	462
Total deferred income tax assets	40,954	38,274
Less: Valuation allowances	(40,954)	(37,748)
Deferred tax assets, net of valuation allowances	$ —	$ 526
Deferred tax liabilities:		
Right of use asset	—	(526)
Total deferred income tax liabilities	$ —	$ (526)
Net deferred taxes	$ —	$ —

ASC 740 requires that the tax benefit of net operating losses, temporary differences and credit carryforwards be recorded as an asset to the extent that management assesses that realization is "more likely than not." Realization of the future tax benefits is dependent on the Company's ability to generate sufficient taxable income within the carryforward period. Because of the Company's recent history of operating losses, management believes that recognition of the deferred tax assets arising from the above-mentioned future tax benefits is currently not likely to be realized and, accordingly, has provided a valuation allowance. The Company's valuation allowance increased by $4.1 million and $9.4 million for the years ended December 31, 2024 and 2023, respectively.

Effective for tax years beginning after December 31, 2021, taxpayers are required to capitalize any expenses incurred that are considered incidental to research and experimentation (R&E) activities under IRC Section 174. While taxpayers historically had the option of deducting these expenses under IRC Section 174, the December 2017 Tax Cuts and Jobs Act mandates capitalization and amortization of R&E expenses for tax years beginning after December 31, 2021. Expenses incurred in connection with R&E activities in the U.S. must be amortized over a five-year period and over a fifteen-year period if incurred outside the U.S. R&E activities are broader in scope than qualified research activities considered under IRC Section 41 (relating to the research tax credit). For the year ended December 31, 2024, the Company performed an analysis based on available guidance and determined that it will continue to be in a loss position even after the required capitalization and amortization of its R&E expenses. The Company will continue to monitor this issue for future developments, but it does not expect R&E capitalization and amortization to require it to pay cash taxes now or in the near future.

At December 31, 2024, the Company had federal and state net operating loss carryforwards of approximately $85.9 million and $0.7 million, respectively. The federal net operating loss carryforwards can be carried forward indefinitely, with certain limitations. A portion of the state net operating loss carryforwards will expire beginning in 2039, if not utilized.

As of December 31, 2024, the Company also has Federal and California research and development credits of $2.8 million and $1.3 million, respectively. The federal tax credit carryforwards will expire beginning in 2039, if not utilized. The state tax credit carryforwards do not expire.

The following table summarizes activity related to the Company's gross unrecognized tax benefits (amounts in thousands):

	Total
Balance as of December 31, 2022	$ 979
Increase/decrease due to prior year positions	—
Increase/decrease due to current year positions	259
Balance as of December 31, 2023	1,238
Increase/decrease due to prior year positions	136
Increase/decrease due to current year positions	166
Balance as of December 31, 2024	$1,540

The unrecognized tax benefits, if recognized, would not have an impact on the Company's effective tax rate due to the valuation allowance. The Company does not expect a significant change to its unrecognized tax benefits over the next twelve months. The Company files income tax returns in the United States, California and Germany jurisdictions and is not currently under examination by federal, state or local taxing authorities for any open tax years. The tax years 2019 through 2024 remain open to examination by the major taxing authorities. In addition, net operating losses arising from prior years are also subject to examination at the time they are utilized in future years. The Company records interest related to uncertain tax positions as interest, and any penalties are recorded as income tax expense in its consolidated statements of operations and comprehensive loss.

Utilization of net operating losses and tax credit carryforwards may be limited by the "ownership change" rules, as defined in Section 382 of the Internal Revenue Code (any such limitation, a "Section 382 limitation"). Similar rules may apply under state tax laws. The Company has not performed an analysis to determine whether an "ownership change" occurred from inception to December 31, 2024. If a change in ownership were to have occurred, additional net operating loss and tax credit carryforwards could be eliminated or restricted. If eliminated, the related asset would be removed from the deferred tax asset schedule with a corresponding reduction in the valuation allowance.

ASC 740-10, "Income Taxes", prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of uncertain tax positions taken or expected to be taken in the Company's income tax return and also provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition.

Subsequent Events

12 Months Ended
Dec. 31, 2024

Subsequent Events [Abstract]
Subsequent Events

13. Subsequent Events

On January 21, 2025, the Company entered into a Sales Agreement (the "Agreement") with H.C. Wainwright & Co., LLC (the "Agent"). The Agreement provides for the issuance and sale by the Company of shares of common stock in "at-the-market" offerings having an aggregate offering price of up to $30.0 million (the "Shares"). Pursuant to the Agreement, the Company may offer and sell the Shares in transactions deemed to be an "at-the-market" offering as defined in Rule 415(a)(4) of the Securities Act of 1933, which Shares can be sold by the Company from time to time, depending upon market demand, with the Agent acting as an agent for sales. As of March 21, 2025, the Company sold an aggregate of 2,624,276 shares of its common stock at an average price of $1.63 per share, resulting in net proceeds of approximately $3.9 million, after paying commissions and offering expenses of approximately $0.4 million. On January 10, 2025, the Company terminated its Sales Agreement with Leerink Partners LLC.

On March 14, 2025, the Company entered into a non-binding letter of intent (the "Letter of Intent") with Global Digital Holdings Inc., a Georgia corporation that conducts business under the name QumulusAI ("QumulusAI"), relating to a proposed business combination between the Company and QumulusAI. The parties currently contemplate a reverse triangular merger structure, pursuant to which (i) a subsidiary of Vincerx would merge into QumulusAI, (ii) QumulusAI stockholders would receive shares of the Company's common stock in exchange for their shares of QumulusAI capital stock ("QumulusAI Capital Stock") based on the Exchange Ratio (defined below), and (iii) outstanding options, warrants, and other rights to acquire QumulusAI Capital Stock ("QumulusAI Stock Rights") would be assumed by the Company and converted into options, warrants, and rights to acquire the Company's common stock based on the Exchange Ratio.

The conversion of the QumulusAI Capital Stock and QumulusAI Stock Rights would be pursuant to an exchange ratio (the "Exchange Ratio") intended to result in the following aggregate post-closing percentage ownership: (i) the equity holders of QumulusAI immediately prior to the closing (including all QumulusAI Stock Rights) would own 95% of the equity of the combined company, and (ii) the equity holders of the Company immediately prior to the closing (including all outstanding options and warrants) would own 5% of the equity of the combined company. These ownership percentages assume a valuation of $285.0 million for QumulusAI and $15.0 million for the Company and "net cash" (defined as cash minus liabilities) of zero at closing. To the extent requested by the Company, QumulusAI or its designees will invest up to $1.5 million in the equity of the Company prior to the closing.

Summary of Significant Accounting Policies (Policies)	12 Months Ended Dec. 31, 2024
Accounting Policies [Abstract]	
Basis of Presentation	***Basis of Presentation***

The Company's consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") as determined by the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") and pursuant to the regulations of the U.S. Securities and Exchange Commission ("SEC"). They include the accounts of Vincerx and its wholly-owned subsidiaries, VNRX Corp., Vincerx Pharma GmbH and Vincerx Pharma Australia Pty Limited. All intercompany accounts and transactions have been eliminated.

Liquidity and Going Concern

Liquidity and Going Concern

As of December 31, 2024, the Company had approximately $5.0 million in cash. The Company has incurred recurring operating losses and negative cash flows from operating activities since its inception and expects to continue to incur operating losses and negative cash flows in the future. Based on current business plans and assumptions, the Company believes that its existing cash and cash equivalents will be sufficient to fund its operating expenses and capital expenditure requirements into the third quarter of 2025, although this estimate is based on plans and assumptions that may prove to be wrong, and the Company could use its available capital resources sooner than it currently expects. Accordingly, the Company will need to raise additional capital through public or private equity offerings, debt financings, collaborations and licensing arrangements, or other sources, and such additional capital may not be available on favorable terms or at all, particularly in light of the current economic and market conditions. Market volatility resulting from pandemics or other epidemics, inflation

and other economic and market conditions, the wars in Ukraine and Israel, the inability to maintain the listing on The Nasdaq Capital Market of the Company's common stock, and other factors could also adversely impact the Company's ability to raise additional capital. The failure to raise additional capital as and when needed or on acceptable terms would have a negative impact on the Company's financial condition and the ability to pursue its business strategy, and the Company may have to reduce its workforce or delay, reduce the scope of, suspend, or eliminate one or more preclinical programs, clinical trials, or future commercialization efforts, or curtail its business operations.

In accordance with Accounting Standards Update ("ASU") 2014-15, Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern (Subtopic 205-40), the Company has evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about its ability to continue as a going concern for a period of one year after the date that its audited consolidated financial statements are issued. In light of the Company's existing cash resources and current and expected operating losses and negative cash flows, the Company will need additional capital prior to the one-year anniversary of the issuance of its consolidated financial statements, and such additional capital may not be available as and when needed on acceptable terms or at all. As a result, the Company has concluded that these circumstances and the uncertainties associated with its ability to obtain additional capital raise substantial doubt about the Company's ability to continue as a going concern for a period of one year after the date that its audited consolidated financial statements are issued.

The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business, and do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of the uncertainties described above.

Emerging Growth Company

Emerging Growth Company

The Company is an "emerging growth company," as defined in Section 2(a) of 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 independent registered public accounting firm 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 consolidated 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.

Use of Estimates

Use of Estimates

The preparation of consolidated financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of commitments and contingencies at the date of the consolidated financial statements as well as reported amounts of expenses during the reporting periods. Estimates made by the Company include, but are not limited to, common stock warrant liabilities and stock-based compensation. The Company bases these estimates on historical experience and on various other assumptions that it believes are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying amounts of assets and liabilities that are not readily apparent from other sources. Actual results could differ materially from those estimates.

Concentration of Credit Risk

Concentrations of Credit Risk

The Company has cash balances at financial institutions which exceed the federally insured limit of $250,000. Any loss incurred or a lack of access to such funds could have a significant adverse impact on the Company's financial condition, results of operations, and cash flows.

The Company is subject to risks common to companies in the biotechnology industry, including, but not limited to, development by the Company or its competitors of technological innovations, risks of failure of clinical studies, dependence on key personnel, protection of proprietary technology, compliance with government regulations, and ability to transition from preclinical manufacturing to commercial production of products.

The Company's product candidates will require approvals from the U.S. Food and Drug Administration and comparable foreign regulatory agencies prior to commercial sales in their respective jurisdictions. There can be no assurance that any product candidates will receive the necessary approvals. If the Company was denied approval, approval was delayed or the Company was unable to maintain approval for any product candidate, it could have a material adverse impact on the Company.

Cash and Cash Equivalents

Cash and Cash Equivalents

Management considers all highly liquid investments with an insignificant interest rate risk and original maturities of three months or less to be cash equivalents.

Restricted Cash

Restricted Cash

Restricted cash represents cash deposits with a financial institution in support of the Company's corporate credit card program.

Marketable Securities

Marketable Securities

The Company generally invests its excess cash in money market funds and investment grade short-term to intermediate-term fixed income securities. Such investments are included in cash and cash equivalents, short-term marketable securities or long-term marketable securities on the consolidated balance sheets. Marketable securities with a maturity date greater than 90 days and less than one year at each consolidated balance sheet date are classified as short-term. Marketable securities with a maturity date greater than one year, if any, are classified as long-term. All of the Company's marketable securities are considered available-for-sale and are reported at fair value with unrealized gains and losses included as a component of stockholders' equity. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, which is included in interest income on the consolidated statements of operations and comprehensive loss. Realized gains and losses and declines in value judged to be other-than-temporary, if any, on marketable securities are included in interest income on the consolidated statements of operations and comprehensive loss. The cost of securities sold is determined using specific identification.

The Company periodically evaluates whether declines in the fair values of its marketable securities below their amortized cost are other-than-temporary. This evaluation consists of several qualitative and quantitative factors regarding the severity and duration of the unrealized loss, as well as the Company's ability and intent to hold the marketable security until a forecasted recovery occurs. Additionally, the Company assesses whether it has plans to sell the marketable security or it is more likely than not it will be required to sell any marketable securities before recovery of its amortized cost basis. Factors considered include quoted market prices, recent financial results and operating trends, implied values from any recent transactions or offers of investee securities, credit quality of debt instrument issuers, other publicly available information that may affect the value of the marketable security, duration and severity of the decline in value, and the Company's strategy and intentions for holding the marketable security.

Property, Plant and Equipment

Property, Plant and Equipment

Property, plant and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation and amortization are provided for using straight-line methods, in amounts sufficient to charge the cost of depreciable assets to operations over their estimated service lives. Repairs and maintenance costs are charged to operations as incurred.

The Company assesses its long-lived assets for impairment whenever facts and circumstances indicate that the carrying amounts may not be fully recoverable. To analyze recoverability, the Company projects undiscounted net future cash flows over the remaining lives of such assets. If these projected undiscounted net future cash flows are less than the carrying amounts, an impairment loss would be recognized, resulting in a write-down of the assets with a corresponding charge to earnings. The impairment loss is measured based upon the difference between the carrying amounts and the fair values of the assets. In connection with the early termination of the lease during the fourth quarter of 2024, the Company incurred an impairment loss of approximately $50,000, included within other income (expense), net.

Fair Value Measurement

Fair Value Measurement

The Company applies fair value accounting for all financial assets and liabilities measured on a recurring and nonrecurring basis. Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. The accounting guidance established a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, used to determine the fair value of its financial instruments. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Level 1—Quoted prices in active markets for identical assets or liabilities that the entity has the ability to access.

Level 2—Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets and liabilities.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities.

Leases

Leases

The Company adopted FASB ASC Topic 842, "Leases" ("ASC 842"), using the required modified retrospective approach and utilizing the effective date as its date of initial application, for which prior periods are presented in accordance with the previous guidance in ASC 840, "Leases".

At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on the unique facts and circumstances present in the arrangement. Most leases with a term greater than one year are recognized on the balance sheet as right-of-use assets and short-term and long-term lease liabilities, as applicable. The Company has elected not to recognize on the balance sheet leases with terms of 12 months or less. The Company typically only includes an initial lease term in its assessment of a lease arrangement. Options to renew a lease are not included in the Company's assessment unless there is reasonable certainty that the Company will renew.

Operating lease liabilities and their corresponding right-of-use assets are recorded based on the present value of lease payments over the expected remaining lease term. Certain adjustments to the right-of-use assets may be required for items such as incentives received. The interest rate implicit in the Company's leases is typically not readily determinable. As a result, the Company utilizes its incremental borrowing rate, which reflects the fixed rate at which the Company could borrow on a collateralized basis the amount of the lease payments in the same currency, for a similar term and in a similar economic environment (see Note 9).

In accordance with ASC 842, components of a lease should be allocated between lease components (e.g., land, building) and non-lease components (e.g., common area maintenance, consumables). The fixed and in-substance fixed contract consideration (including any consideration related to non-components) must be allocated based on the respective relative fair values to the lease components and non-lease components.

Segments

Segments

Operating segments are identified as components of an enterprise about which separate discrete financial information is regularly reviewed for evaluation by the chief operating decision-maker ("CODM") in making

decisions regarding resource allocation and assessing performance. The Company views its operations and manages its business as a single operating segment. The Company's CODM, its chief executive officer, reviews operating results on an aggregate basis and manages the operations as a single operating segment.

The accounting policies of the Company's single operating and reportable segment are the same as those described in the summary of significant accounting policies. The measure of segment assets is reported on the consolidated balance sheets as total assets. The CODM evaluates performance and allocates resources based on consolidated net loss that also is reported on the consolidated statements of operations as net loss, and consolidated cash used in operations. The significant expenses regularly reviewed by the CODM are consistent with those reported on the Company's consolidated statement of operations, and expenses are not regularly provided to or reviewed on a more disaggregated basis for purposes of assessing segment performance and deciding how to allocate resources.

Research and Development Costs

Research and Development Costs

The Company expenses research and development costs as operating expenses as incurred. These expenses include acquired in-process research and development expenses for which there is no alternative future use, salaries for research and development personnel, consulting fees, product development, pre-clinical studies, clinical trial costs, and other fees and costs related to the development of the technology.

Stock-Based Compensation

Stock-Based Compensation

The Company measures and recognizes compensation expense for all stock-based awards made to employees, directors, and non-employees, including stock options and restricted shares, based on estimated fair values recognized over the requisite service period.

The fair value of options granted is estimated on the grant date using the Black-Scholes option valuation model. This valuation model for stock-based compensation expense requires the Company to make assumptions and judgments about the variables used in the calculation, including the expected term (weighted-average period of time that the options granted are expected to be outstanding), the volatility of the Company's common stock, and an assumed risk-free interest rate. The Company accounts for forfeitures when they occur. The Company uses the simplified calculation of the expected life, which takes into consideration the grant's contractual life and vesting period and assumes that all options will be exercised between the vesting date and the contractual term of the option. No awards have been issued with a market condition or other non-standard terms.

The estimate for volatility is based on an average of the historical volatilities of the common stock of several entities with characteristics similar to those of the Company. Since these comparable companies operate in the same industry segment, the Company expects that it would share similar characteristics, such as risk profiles, volatility, capital intensity and market growth patterns and drivers.

The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant for periods corresponding with the expected life of the option.

Income Taxes

Income Taxes

Income taxes are recorded in accordance with ASC 740, "Income Taxes" ("ASC 740"), which provides for deferred taxes using an asset and liability approach. The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse, and net operating loss carryforwards and research and development tax credit ("R&D

Credit") carryforwards. Valuation allowances are provided, if based upon the weight of available evidence, it is

more likely than not that some or all of the deferred tax assets will not be realized. The Company has recorded a full valuation allowance to reduce its net deferred income tax assets to zero. In the event the Company were to determine that it would be able to realize some or all its deferred income tax assets in the future, an adjustment to the deferred income tax asset valuation allowance would increase income in the period such determination was made.

The Company accounts for uncertain tax positions in accordance with the provisions of ASC 740. When uncertain tax positions exist, the Company recognizes the tax benefit of tax positions to the extent that the benefit would more likely than not be realized assuming examination by the taxing authority. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances. At December 31, 2024 and 2023, the Company had no liability for income tax associated with uncertain tax positions. The Company would recognize any corresponding interest and penalties associated with its income tax positions in income tax expense. There was no income tax interest or penalties incurred in 2024 or 2023.

German Grant Income

German Grant Income

In accordance with ASC 958, the Company recognizes grant income in the period when the underlying eligible expenses are incurred. The German government grant program provides for tax refunds or direct reimbursements of eligible research expenses of up to 1.0 million euros per year over a period of six years. The grant was approved in 2022 and is retroactive to 2021. Grant income for the years ended December 31, 2024 and 2023 has been recorded in other income (expense), net on the consolidated statements of operations and comprehensive loss. The corresponding receivable is included within current assets and other assets, $1.0 million and $1.6 million, respectively, at December 31, 2024 on the consolidated balance sheet depending upon expectations for collection within twelve months of the balance sheet date.

Foreign Currency Translation and Transactions

Foreign Currency Translation and Transactions

The consolidated financial statements are presented in U.S. dollars. The functional currency for the Company's foreign subsidiaries is the local currency. Expenses, gains and losses for this entity are translated into U.S. dollars using average currency exchange rates for the period. Assets and liabilities are translated using exchange rates in effect at the balance sheet date. Foreign currency translation adjustments are recorded as a component of accumulated other comprehensive loss on the Company's consolidated balance sheets. Foreign currency transaction gains and losses on transactions not denominated in the functional currency are recorded in other income (expense), net, on the consolidated statements of operations and comprehensive loss.

Comprehensive Income or Loss

Comprehensive Income or Loss

Comprehensive loss is equal to net loss, net foreign currency translation gain (loss), and net unrealized gain on marketable securities as presented in the accompanying consolidated statements of operations and comprehensive loss.

Net Loss per Share of Common Stock

Net Loss per Share of Common Stock

Basic net loss per share is computed by dividing the net loss by the weighted-average number of shares of common stock outstanding during the period.

Diluted earnings per share adjusts basic earnings per share for the potentially dilutive impact of stock options and warrants. As the Company has reported losses for all periods presented, all potentially dilutive securities including stock options and warrants, are antidilutive and accordingly, basic net loss per share equals diluted net loss per share.

Recent Accounting Pronouncements

Recent Accounting Pronouncements

In November 2023, Financial Accounting Standards Board ("FASB") issued ASU No. 2023-07 "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures." ASU 2023-07 requires incremental annual and quarterly disclosures about segment measures of profit or loss as well as significant segment expenditures. It also requires public entities with a single reportable segment to provide all segment disclosures required by the amendments in the update and all existing segment disclosures in Topic 280. The Company adopted this guidance on January 1, 2025 on a retrospective basis and the adoption did not have a significant impact to the consolidated financial statements.

In December 2023, FASB issued ASU No. 2023-09 "Income Taxes (Topic 740): Improvements to Income Tax Disclosures." ASU 2023-09 requires incremental annual disclosures around income tax rate reconciliations, income taxes paid and other related disclosures. This guidance requires prospective application and permits retrospective application to prior periods presented. The Company has adopted this guidance on January 1, 2025. The Company expects the adoption of this standard to result in increased disclosures in its notes to consolidated financial statements.

Legacy Warrant Liability

Legacy Warrant Liability

As of December 31, 2024 and 2023, there were 3,295,000 legacy warrants to purchase common stock outstanding. The legacy warrants will expire at 5:00 p.m., New York City time, on December 23, 2025 (five years from the closing of the LSAC Business Combination).

The legacy warrants are exercisable on the basis of 20 warrants for one share of common stock at an aggregate exercise price of $230 per share and are exercisable for cash (even if a registration statement covering the shares of common stock issuable upon exercise of such warrants is not effective) or on a cashless basis, at the holder's option (except with respect to 500,000 of the legacy warrants held by Rosedale Park, LLC and 500,000 of the legacy warrants held by LifeSci Holdings LLC, which were amended to remove the cashless exercise provision), and will not be redeemable by the Company (except with respect to 500,000 of the legacy warrants held by Rosedale Park, LLC and 500,000 of the legacy warrants held by LifeSci Holdings LLC, which were amended to include a redemption provision. The legacy warrants held by Rosedale Park, LLC, expire on March 5, 2025, provided that once the legacy warrants are not beneficially owned by Chardan Capital Markets, LLC or any of its related persons, the legacy warrants will expire on December 23, 2025 (five years from the closing of the LSAC Business Combination).

The legacy warrants issued to LifeSci Holdings LLC that were amended as described above were determined to be equity classified in accordance with ASC 815, Derivatives and Hedging. The remaining legacy warrants were determined to be liability classified in accordance with ASC 815, Derivatives and Hedging (see Note 6).

Since the legacy warrants meet the definition of a derivative under ASC 815, the Company recorded these warrants as liabilities on the consolidated balance sheets at fair value, with subsequent changes in their respective fair values recognized in the consolidated statements of operations and comprehensive loss at each reporting date. The estimated fair value of the legacy warrants is determined with Level 3 inputs using Black-Scholes and Monte Carlo simulations.

Fair Value Measurement (Tables)

12 Months Ended Dec. 31, 2024

Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]

Summary of Fair Value Assets Measured on Recurring Basis

The Company's financial assets and liabilities are subject to fair value measurements on a recurring basis and the level of inputs used for such measurements were as follows (amounts in thousands):

	Fair Value Measured as of December 31, 2023			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash Equivalents:				
Money market funds	$ 4,682	$ —	$ —	$ 4,682
U.S. government treasuries	6,233	—	—	6,233
U.S. government agency securities	—	999	—	999
Total cash equivalents	$ 10,915	$ 999	$ —	$ 11,914

Summary of Liabilities Measured at Fair Value on Recurring Basis

	Fair Value Measured as of December 31, 2024			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Common stock warrant liabilities	$ —	$ —	$ 8	$ 8
Total fair value	$ —	$ —	$ 8	$ 8

	Fair Value Measured as of December 31, 2023			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Common stock warrant liabilities	$ —	$ —	$ 191	$ 191
Total fair value	$ —	$ —	$ 191	$ 191

Summary of Changes in Level 3 Warrant liabilities measured at fair value

The following table presents changes in Level 3 liabilities measured at fair value for the years ended December 31, 2024 and 2023. Both observable and unobservable inputs were used to determine the fair value of positions that the Company has classified within the Level 3 category. Unrealized gains and losses associated with liabilities within the Level 3 category include changes in fair value that were attributable to both observable (e.g., changes in market interest rates) and unobservable (e.g., changes in unobservable long-dated volatilities) inputs (in thousands).

	Warrant Liability
Balance – January 1, 2023	**$ 144**
Change in fair value	47
Balance – December 31, 2023	**191**
Change in fair value	(183)
Balance – December 31, 2024	**$ 8**

Summary of Fair Value of the Company's warrant liabilities

A summary of the weighted average (in aggregate) significant unobservable inputs (Level 3 inputs) used in measuring the Company's warrant liabilities that are categorized within Level 3 of the fair value hierarchy as of December 31, 2024 and 2023 is as follows:

	As of December 31, 2024	As of December 31, 2023
Stock price	$ 5.26	$ 23.60

Exercise price	$ 230.00	$ 230.00
Option term (years)	1.0	2.0
Volatility (annual)	144.2%	90.9%
Risk-free rate	4.1%	4.2%
Dividend yield (per share)	0%	0%

Balance Sheet Details (Tables)

12 Months Ended Dec. 31, 2024

Balance Sheet Related Disclosures [Abstract]

Summary of Other Current Assets

Other current assets consist of the following at December 31, 2024 and 2023 (in thousands):

	December 31, 2024	December 31, 2023
Clinical related vendor prepayments	$ 165	$ 407
Other	49	377
	$ 214	$ 784

Summary Of Property Plant And Equipment

Property, plant and equipment, net consist of the following at December 31, 2024 and 2023 (in thousands):

	December 31, 2024	December 31, 2023	Estimated Useful Life
Furniture and fixtures	$ —	$ 236	5 years
Computers	—	20	3-5 years
Total	—	256	
Less: accumulated depreciation	—	(131)	
Total property, plant and equipment, net	$ —	$ 125	

Summary Of Accrued Expenses

The following table sets forth the components of accrued expenses at December 31, 2024 and 2023, respectively (in thousands):

	December 31, 2024	December 31, 2023
Accrued severance	$ 2,356	$ —
Accrued payroll	144	332
Accrued benefits	278	918
Accrued manufacturing, clinical trial and related	466	505
	$ 3,244	$ 1,755

Commitments and Contingencies (Tables)

12 Months Ended
Dec. 31, 2024

Contractual Obligation, Fiscal Year Maturity [Abstract]

Summary of Quantitative Information About the Company's Operating Leases

The following summarizes quantitative information about the Company’s operating leases (dollars in thousands):

	For the years ended	
	December 31, 2024	December 31, 2023
Lease cost		
Operating lease cost	$ 1,196	$ 1,196
Variable lease cost	—	—
Total operating lease expense	$ 1,196	$ 1,196
Other information		
Operating cash flows from operating leases	$ 1,320	$ 1,270
Right-of-use assets obtained in exchange for operating lease liabilities	$ —	$ —
Weighted-average remaining lease term—operating leases	—	2.0
Weighted-average discount rate—operating leases	8%	8%

Stockholders' Equity (Tables)

Equity [Abstract]

Summary of Restricted Stock Activity

12 Months Ended Dec. 31, 2024

A summary of restricted stock activity for the years ended December 31, 2024 and 2023 is presented below:

	Number of Shares	Weighted Average Grant Date Fair Value per Share
Nonvested at January 1, 2023	**3,350**	**$ 1.30**
Vested	(2,447)	—
Nonvested at December 31, 2023	**903**	**$ 2.06**
Vested	(903)	—
Nonvested at December 31, 2024	**—**	**$ —**

Equity Incentive Plans (Tables)	12 Months Ended Dec. 31, 2024

Share-based Payment Arrangement [Abstract]

Summary of Stock Option Activity

Stock option activity under the Plan is as follows (amounts in thousands, except per share amount):

	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value
Outstanding at January 1, 2023	218	$217.44	8.6	$ 125
Options granted	57	24.30	—	—
Options exercised	(1)	16.40	—	—
Options cancelled	(13)	235.11	—	—
Outstanding at December 31, 2023	261	174.81	8.1	—
Options granted	133	143.83	—	—
Options exercised	(1)	17.93	—	—
Options cancelled	(141)	22.54	—	—
Outstanding at December 31, 2024	252	$ 19.89	6.9	$ —
Options vested and exercisable at December 31, 2024	176	$ 23.65	5.9	$ —

Summary of Weighted-Average Assumptions Used to Estimate Fair Value of Stock Options and Restricted Stock Awards using Black-Scholes Option Valuation Model

The following weighted average assumptions were used as inputs to the Black-Scholes option valuation model in determining the estimated grant-date fair value of the Company's stock options granted during the years ended December 31, 2024 and 2023:

	For the years ended December 31,	
	2024	2023
Exercise price	$61.99	$18.00
Expected term (years)	6.0	5.6
Volatility (annual)	91.9%	89.5%
Risk-free rate	4.3%	4.0%
Dividend yield (per share)	0%	0%

Summary of Stock Based Compensation Expense

Total stock-based compensation expense recognized in the accompanying consolidated statements of operations and comprehensive loss for all equity awards is as follows (amounts in thousands):

	For the years ended December 31,	
	2024	2023
Research and development	$1,655	$1,712
General and administrative	1,818	1,851

Total stock-based compensation expense	**$3,473**	**$3,563**

Summary Of Non vested Restricted Stock Units Activity

Restricted stock unit activity under the 2020 Plan is as follows (in thousands):

	Restricted Stock Units	Weighted Average Purchase Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value
Outstanding at January 1, 2024	—	$ —	—	$ —
Awarded	73	—	—	—
Released	(50)	—	—	—
Cancelled	(21)	—	—	—
Outstanding at December 31, 2024	2	$ —	1.1	$ 12

Net Loss per Share Applicable to Common Stockholders (Tables)

12 Months Ended

Dec. 31, 2024

Earnings Per Share [Abstract]

Summary of Earnings Per Share, Basic and Diluted

The following table sets forth the computation of loss per share for the years ended December 31, 2024 and 2023, respectively (amounts in thousands, except per share number):

	For the year ended December 31,	
	2024	2023
Numerator:		
Net loss	$(30,074)	$(40,157)
Denominator:		
Weighted average common shares outstanding, basic and diluted	1,898	1,065
Net loss per common share, basic and diluted	$ (15.85)	$ (37.72)

Summary of Potential Common Stock Outstanding that was excluded from the Computation of Diluted Net Loss Per Share of Common Stock

The following table presents the potential common stock outstanding that was excluded from the computation of diluted net loss per share of common stock as of the periods presented because including them would have been antidilutive:

	For the year ended December 31,	
	2024	2023
Options outstanding	252	261
Restricted stock units	2	—
Warrants	1,810	165
Restricted stock	—	1
Total	2,064	427

Income Taxes (Tables)

12 Months Ended
Dec. 31, 2024

Income Tax Disclosure [Abstract]

Schedule of Income (Loss) before Provision for Income Taxes

Income (loss) before provision for income taxes consisted of the following (amounts in thousands):

	For the year ended December 31,	
	2024	2023
United States	$ (30,412)	$ (35,281)
International	338	(4,876)
	$(30,074)	**$(40,157)**

Schedule of Effective Income Tax Rate Reconciliation

The effective tax rate of the Company's provision (benefit) for income taxes differs from the federal statutory rate as follows:

	For the year ended December 31,	
	2024	2023
Statutory federal income tax rate	21.0%	21.0%
State taxes, net of federal tax benefit	0.6%	0.1%
Research and development	1.0%	2.0%
Other	(3.3%)	0.5%
Change in valuation allowance	(19.3%)	(23.6%)
Income taxes provision (benefit)	0.0%	0.0%

Schedule of Net Deferred Tax Assets

Significant components of the Company's net deferred tax assets as of December 31, 2024 and 2023, are as follows (amounts in thousands):

	As of December 31,	
	2024	2023
Deferred tax assets:		
Net operating loss	$ 19,357	$ 15,475
Stock-based compensation	3,322	5,235
Capitalized research and development	15,814	14,734
Research and development credit	2,404	2,231
Accruals and reserves	57	137
Lease liability	—	462
Total deferred income tax assets	40,954	38,274
Less: Valuation allowances	(40,954)	(37,748)
Deferred tax assets, net of valuation allowances	$ —	$ 526
Deferred tax liabilities:		
Right of use asset	—	(526)
Total deferred income tax liabilities	$ —	$ (526)
Net deferred taxes	$ —	$ —

Schedule of Income Tax Contingencies

The following table summarizes activity related to the Company's gross unrecognized tax benefits (amounts in thousands):

	Total
Balance as of December 31, 2022	$ 979
Increase/decrease due to prior year positions	—
Increase/decrease due to current year positions	259

Balance as of December 31, 2023	1,238
Increase/decrease due to prior year positions	136
Increase/decrease due to current year positions	166
Balance as of December 31, 2024	$1,540

Nature of Business - Additional Information (Details)	12 Months Ended
	Dec. 31, 2024
Collaborative Arrangement and Arrangement Other than Collaborative [Line Items]	
Incorporation date	Dec. 19, 2018

Summary of Significant Accounting Policies - Additional Information (Details) $ / shares in Units, $ in Thousands, € in Millions	12 Months Ended			
	Sep. 27, 2024 USD ($)	Dec. 31, 2024 USD ($) $ / shares shares	Dec. 31, 2024 EUR (€)	Dec. 31, 2023 shares
Summary Of Significant Accounting Policies [Line Items]				
No of Warrants outstanding | shares		3,295,000		3,295,000
Shares Issued, Price Per Share | $ / shares		$ 23.34		
Cash equivalents		$ 5,000		
Federal depository insurance coverage amount		$ 250,000		
German grant income | €			€ 1.0	
Government Assistance, Statement of Income or Comprehensive Income [Extensible Enumeration]		Research and Development Expense (Excluding Acquired in Process Cost)	Research and Development Expense (Excluding Acquired in Process Cost)	
Operating Lease, Impairment Loss	$ 50,000			
Current asset [Member]				
Summary Of Significant Accounting Policies [Line Items]				
German grant income		$ 1,000		
Other Assets [Member]				
Summary Of Significant Accounting Policies [Line Items]				
German grant income		$ 1,600		
Public Warrant [Member]				
Summary Of Significant Accounting Policies [Line Items]				
Shares Issued, Price Per Share | $ / shares		$ 230		
Private Warrants [Member]				
Summary Of Significant Accounting Policies [Line Items]				
No of Warrants outstanding | shares				3,295,000
Warrant expiration term		5 years		
Private Warrants [Member] | Rosedale Park LLC [Member]				
Summary Of Significant Accounting Policies [Line Items]				
Class of warrants exercised | shares		500,000		
Warrents expiration date		Mar. 05, 2025	Mar. 05, 2025	

Private Warrants [Member] | LifeSci Holdings LLC [Member]

Summary Of Significant Accounting Policies [Line Items]

Class of warrants exercised | shares	500,000

LSAC Business Combination - Additional Information (Details) $ / shares in Units, $ in Millions	12 Months Ended Dec. 31, 2024 USD ($) $ / shares
Business Acquisition [Line Items]	
Business combination share issue ratio	0.028545
Vincera Pharma [Member]	
Business Acquisition [Line Items]	
Number of consecutive trading days	20 days
Number of trading days	30 days
Percentage of the earnout shares to be issued to the shareholders of the acquiree company	90.60%
Vincera Pharma [Member] | Volume Weighted Average Price One [Member]	
Business Acquisition [Line Items]	
Daily volume weighted average price per share | $ / shares	$ 700
Base amount for determining daily volume weighted average price per share | $	$ 20.0
Vincera Pharma [Member] | Volume Weighted Average Price Two [Member]	
Business Acquisition [Line Items]	
Daily volume weighted average price per share | $ / shares	$ 900
Base amount for determining daily volume weighted average price per share | $	$ 20.0

Bayer License - Additional Information (Details) - USD ($) $ in Millions	12 Months Ended	
	Dec. 31, 2024	Dec. 31, 2023
Bayer License Agreement [Line Items]		
Date of licence agreement with Bayer	Oct. 07, 2020	
Licence fee payable to Bayer		$ 1.0
Aggregate milestone payments Payable to Bayer	$ 1,000.0	
Maximum [Member]		
Bayer License Agreement [Line Items]		
Milestone payments payables per licenced product to Bayer	318.0	
Minimum [Member]		
Bayer License Agreement [Line Items]		
Milestone payments payables per licenced product to Bayer	$ 110.0	

Workforce Reduction - Additional Information (Details) - USD ($) $ in Thousands	12 Months Ended	
	Dec. 31, 2024	Dec. 31, 2023
Workforce Reduction [Line Items]		
Restructuring costs expected to be incurred through the year	$ 2,600	
Share-based Payment Arrangement, Expense	$ 3,473	$ 3,563
Percentage Of Employees Reduction	55.00%	
Employee Stock Option		
Workforce Reduction [Line Items]		
Share-based Payment Arrangement, Expense	$ 2,400	

Fair Value Measurement - Summary of Fair Value Assets Measured on Recurring Basis (Details) $ in Thousands	Dec. 31, 2023 USD ($)
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Total cash equivalents and marketable securities	$ 11,914
Cash equivalents [Member] | Money market funds [Member]	
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Total cash equivalents and marketable securities	4,682
Short-term marketable securities [Member] | U.S. government treasuries [Member]	
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Total cash equivalents and marketable securities	6,233
Short-term marketable securities [Member] | U.S. government agency securities [Member]	
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Total cash equivalents and marketable securities	999
Level 1 [Member]	
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Total cash equivalents and marketable securities	10,915
Level 1 [Member] | Cash equivalents [Member] | Money market funds [Member]	
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Total cash equivalents and marketable securities	4,682
Level 1 [Member] | Short-term marketable securities [Member] | U.S. government treasuries [Member]	
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Total cash equivalents and marketable securities	6,233
Level 1 [Member] | Short-term marketable securities [Member] | U.S. government agency securities [Member]	
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Total cash equivalents and marketable securities	0
Level 2 [Member]	
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Total cash equivalents and marketable securities	999
Level 2 [Member] | Cash equivalents [Member] | Money market funds [Member]	
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Total cash equivalents and marketable securities	0
Level 2 [Member] | Short-term marketable securities [Member] | U.S. government treasuries [Member]	
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Total cash equivalents and marketable securities	0
Level 2 [Member] | Short-term marketable securities [Member] | U.S. government agency securities [Member]	
Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]	
Total cash equivalents and marketable securities	999

Level 3 [Member]

Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]

Total cash equivalents and marketable securities	0

Level 3 [Member] | Cash equivalents [Member] | Money market funds [Member]

Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]

Total cash equivalents and marketable securities	0

Level 3 [Member] | Short-term marketable securities [Member] | U.S. government treasuries [Member]

Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]

Total cash equivalents and marketable securities	0

Level 3 [Member] | Short-term marketable securities [Member] | U.S. government agency securities [Member]

Fair Value, Balance Sheet Grouping, Financial Statement Captions [Line Items]

Total cash equivalents and marketable securities	$ 0

Fair Value Measurement - Summary of Liabilities Measured at Fair Value on Recurring Basis (Details) - Recurring [Member] - USD ($) $ in Thousands	Dec. 31, 2024	Dec. 31, 2023
Liabilities:		
Liabilities fair value disclosure	$ 8	$ 191
Level 1 [Member]		
Liabilities:		
Liabilities fair value disclosure	0	0
Level 2 [Member]		
Liabilities:		
Liabilities fair value disclosure	0	0
Level 3 [Member]		
Liabilities:		
Liabilities fair value disclosure	8	191
Common Stock Warrant Liabilities Restates [Member]		
Liabilities:		
Liabilities fair value disclosure	8	191
Common Stock Warrant Liabilities Restates [Member] | Level 1 [Member]		
Liabilities:		
Liabilities fair value disclosure	0	0
Common Stock Warrant Liabilities Restates [Member] | Level 2 [Member]		
Liabilities:		
Liabilities fair value disclosure	0	0
Common Stock Warrant Liabilities Restates [Member] | Level 3 [Member]		
Liabilities:		
Liabilities fair value disclosure	$ 8	$ 191

Fair Value Measurement - Summary of Changes in Level 3 Warrant liabilities measured at fair value (Details) - USD ($) $ in Thousands	12 Months Ended	
	Dec. 31, 2024	Dec. 31, 2023
Fair Value, Net Derivative Asset (Liability) Measured on Recurring Basis, Unobservable Input Reconciliation [Line Items]		
Fair Value, Net Derivative Asset (Liability), Recurring Basis, Still Held, Unrealized Gain (Loss), Statement of Income or Comprehensive Income [Extensible Enumeration]	Marketable Securities, Unrealized Gain (Loss)	Marketable Securities, Unrealized Gain (Loss)
Level 3 [Member] | Warrant [Member]		
Fair Value, Net Derivative Asset (Liability) Measured on Recurring Basis, Unobservable Input Reconciliation [Line Items]		
Beginning balance	$ 191	$ 144
Change in fair value	(183)	47
Ending balance	$ 8	$ 191

Fair Value Measurement - Summary of Fair Value Of Private Warrants was Re-measured Based on the Assumptions (Details)	12 Months Ended	
	Dec. 31, 2024 $ / shares	Dec. 31, 2023 $ / shares
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]		
Exercise price	$ 61.99	$ 18
Option term (years)	6 years	5 years 7 months 6 days
Volatility (annual)	91.90%	89.50%
Risk-free rate	4.30%	4.00%
Fair Value, Inputs, Level 3 [Member]		
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]		
Dividend yield (per share)	0	0
Measurement Input, Share Price [Member] | Fair Value, Inputs, Level 3 [Member]		
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]		
Stock price	$ 5.26	$ 23.6
Measurement Input, Exercise Price [Member] | Fair Value, Inputs, Level 3 [Member]		
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]		
Exercise price	$ 230	$ 230
Measurement Input, Expected Term [Member] | Fair Value, Inputs, Level 3 [Member]		
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]		
Option term (years)	1 year	2 years
Measurement Input, Price Volatility [Member] | Fair Value, Inputs, Level 3 [Member]		
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]		
Volatility (annual)	144.20%	90.90%
Measurement Input, Risk Free Interest Rate [Member] | Fair Value, Inputs, Level 3 [Member]		
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]		
Risk-free rate	4.10%	4.20%

Balance Sheet Details - Summary of Other Current Assets (Details) - USD ($) $ in Thousands	Dec. 31, 2024	Dec. 31, 2023
Disclosure Of Balance Sheet Details [Line Items]		
Clinical related vendor prepayments	$ 165	$ 407
Other	49	377
Other current assets	$ 214	$ 784

Balance Sheet Details - Summary Of Property Plant And Equipment (Details) - USD ($) $ in Thousands	Dec. 31, 2024	Dec. 31, 2023
Property, Plant and Equipment [Line Items]		
Property, Plant and Equipment, Gross	$ 0	$ 256
Less: accumulated depreciation	0	(131)
Total property, plant and equipment, net	0	125
Furniture and Fixtures [Member]		
Property, Plant and Equipment [Line Items]		
Property, Plant and Equipment, Gross	$ 0	236
Property plant and equipment, useful life	5 years	
Computer Equipment [Member]		
Property, Plant and Equipment [Line Items]		
Property, Plant and Equipment, Gross	$ 0	$ 20
Computer Equipment [Member] | Maximum [Member]		
Property, Plant and Equipment [Line Items]		
Property plant and equipment, useful life	5 years	
Computer Equipment [Member] | Minimum [Member]		
Property, Plant and Equipment [Line Items]		
Property plant and equipment, useful life	3 years	

Balance Sheet Details - Summary Of Accrued Expenses (Details) - USD ($) $ in Thousands	Dec. 31, 2024	Dec. 31, 2023
Payables and Accruals [Abstract]		
Accrued severance	$ 2,356	$ 0
Accrued payroll	144	332
Accrued benefits	278	918
Accrued manufacturing, clinical trial and related	466	505
Total Accrued Liabilities	$ 3,244	$ 1,755

Commitments and Contingencies - Additional Information (Details) - USD ($) $ in Thousands		1 Months Ended	12 Months Ended	
	Dec. 23, 2020	Jul. 31, 2022	Dec. 31, 2024	Dec. 31, 2023
Loss Contingencies [Line Items]				
Duration of lease agreement	5 years			
Date of lease Commencement	Jan. 01, 2021			
Annual lease rent	$ 1,200		$ 1,196	$ 1,196
Operating lease liabilities				2,500
Operating Right of Use Assets			0	2,201
Lessee Operating Sub Lease Term Of Contract		18 months		
Lessee, operating sub lease, rent amount		$ 50,000		
Sublease Income			600	600
Relinquishment of sublessor deposit			82,000	
Relinquishment of original deposit			50,000	
Gain (loss) on termination of lease		$ 95,000	44	$ 0
Other Noncurrent Liabilities [Member]				
Loss Contingencies [Line Items]				
Lease Deposit Liability			$ 50,000	

Commitments and Contingencies - Summary of Quantitative Information About the Company's Operating Leases (Details) - USD ($) $ in Thousands		12 Months Ended	
	Dec. 23, 2020	Dec. 31, 2024	Dec. 31, 2023
Lease cost			
Operating lease cost		$ 1,196	$ 1,196
Variable lease cost		0	0
Total operating lease expense	$ 1,200	1,196	1,196
Operating cash flows from operating leases		1,320	1,270
Right-of-use assets obtained in exchange for operating lease liabilities		$ 0	$ 0
Weighted-average remaining lease term—operating leases		0 years	2 years
Weighted-average discount rate—operating leases		8.00%	8.00%

Stockholders' Equity - Schedule of Restricted Stock Activity (Details) - Restricted Stock [Member] - $ / shares	12 Months Ended	
	Dec. 31, 2024	Dec. 31, 2023
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Beginning balance, Shares	903	3,350
Vested, Shares	(903)	(2,447)
Ending balance, Shares	0	903
Beginning balance, Weighted Average	$ 2.06	$ 1.3
Vested, Weighted Average	0	0
Ending balance, Weighted Average	$ 0	$ 2.06

Stockholders' Equity - Additional Information (Details) - USD ($)	Dec. 31, 2024	Dec. 26, 2024	Apr. 30, 2024	Mar. 29, 2024	May 31, 2020	12 Months Ended	
						Dec. 31, 2024	Dec. 31, 2023
Class Of Stock [Line Items]							
Preferred stock shares authorized	30,000,000					30,000,000	30,000,000
Preferred stock par value	$ 0.0001					$ 0.0001	$ 0.0001
Preferred stock shares outstanding	0					0	0
Common stock shares authorized	120,000,000					120,000,000	120,000,000
Common stock par value	$ 0.0001					$ 0.0001	$ 0.0001
No of Warrents outstanding	3,295,000					3,295,000	3,295,000
Sale of units, price per unit	$ 23.34					$ 23.34	
Common stock shares outstanding	2,239,580					2,239,580	1,070,375
Non interest expense offering cost	$ 47,500,000			$ 50,000,000			
Commission and offering expenses to the agent involved in the share issue			$ 700,000			$ 200,000	
Employee Stock Purchase Plan [Member]							
Class Of Stock [Line Items]							
Stock issued during period shares employee stock purchase plans						11,625	8,083
Stock issued during period value employee stock purchase plans						$ 114,000	$ 112,000
Private Placement [Member]							
Class Of Stock [Line Items]							
Common stock conversion						exercisable on the basis of 20 warrants for one share of common stock at an aggregate exercise price of $230	
Sale of units, price per unit	$ 230					$ 230	
Private Warrants [Member]							
Class Of Stock [Line Items]							
No of Warrents outstanding							3,295,000
Warrant expiration term						5 years	

Private Warrants [Member] | Rosedale Park LLC [Member]				
Class Of Stock [Line Items]				
Class of warrents exercised	500,000			500,000
Warrants expiration date				Mar. 05, 2025
Private Warrants [Member] | LifeSci Holdings LLC [Member]				
Class Of Stock [Line Items]				
Class of warrents exercised	500,000			500,000
PreFunded Warrant [Member]				
Class Of Stock [Line Items]				
Redemption price per warrant		$ 0.002		
Conversion of stock, shares converted		800,000		
Warrants offering price		$ 14.998		
Class of Warrant or Right, Exercise Price of Warrants or Rights		$ 0.002		
PreFunded Warrant [Member] | Definitive Securities Purchase Agreement [Member]				
Class Of Stock [Line Items]				
Redemption price per warrant	$ 0.02			
Warrants offering price	3.66			
Class of Warrant or Right, Exercise Price of Warrants or Rights	0.02			
Restricted Stock [Member]				
Class Of Stock [Line Items]				
Stock issued for services			8,677	
Stock issued per share			$ 1.4	
Common Stock [Member]				
Class Of Stock [Line Items]				
Common stock shares issued				106,042
Sale of Stock, Consideration Received on Transaction				$ 2,200,000
Warrant [Member]				
Class Of Stock [Line Items]				
Common stock shares outstanding	140,812	300,000		140,812
Conversion of stock, shares converted		300,000		281,625
Warrants offering price		$ 15		

Payments for underwriting expense		$ 14,800,000	$ 900,000
Commission and offering expenses to the agent involved in the share issue			$ 100,000
Warrant [Member] | Definitive Securities Purchase Agreement [Member]			
Class Of Stock [Line Items]			
Warrants offering price		$ 3.68	
Warrant [Member] | PreFunded Warrant [Member]			
Class Of Stock [Line Items]			
Common stock shares outstanding	131,791	800,000	131,791
Conversion of stock, shares converted			263,582

Equity Incentive Plans - Additional Information (Details) - USD ($) $ / shares in Units, $ in Thousands	12 Months Ended						
	Sep. 30, 2024	Sep. 27, 2024	Aug. 12, 2024	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2022	May 31, 2021
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]							
Unrecognized stock based compensation				$ 3,700			
Amotization period of unrecognized stock based compensation				2 years			
Share-based Payment Arrangement, Expense				$ 3,473	$ 3,563		
Share-based Compensation Arrangement by Share-based Payment Award, Options, Outstanding, Weighted Average Exercise Price				$ 174.81	$ 19.89	$ 217.44	
Share-based Compensation Arrangement by Share-based Payment Award, Options, Exercises in Period				1,000	1,000		
Share-based Compensation Arrangement by Share-based Payment Award, Fair Value Assumptions, Exercise Price				$ 61.99	$ 18		
Employee Stock Option [Member]							
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]							
Share-based Payment Arrangement, Expense				$ 2,400			
Employee Stock Option [Member] | Maximum [Member]							
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]							
Share-Based Compensation Arrangement by Share-Based Payment Award, Award Vesting Period				3 years			
Employee Stock Option [Member] | Minimum [Member]							
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]							
Share-Based Compensation Arrangement by Share-Based Payment Award, Award Vesting Period				2 years			
Restricted Stock Units (RSUs) [Member]							
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]							
Unrecognized stock based compensation				$ 52,000,000			
Amotization period of unrecognized stock based compensation	2 years 8 months 12 days						
Share-Based Compensation Arrangement by Share-Based Payment Award, Award Vesting Period				3 years			

Share-based Compensation Arrangement by Share-based Payment Award, Fair Value Assumptions, Exercise Price			$ 14.32	
Employee Stock Purchase Plan [Member]				
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]				
Shares of common stock reserved for issuance			11,149	10,000
Employee stock purchase plan annual increase shares percentage			1.00%	
Employee stock purchase plan annual increase shares, shares			25,000	
Share based compensation arrangement by share based payment award, discount from market price			15.00%	
Purchase price of common stock expressed as a percentage of its fair value			85.00%	
Stock issued during period shares employee stock purchase plans			11,625	8,083
Share-based Payment Arrangement, Expense			$ 179,000	$ 133,000
Two Thousand Twenty Plan [Member]				
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]				
Shares of common stock reserved for issuance			254,565	
Number of shares available for grant			104,038	
Share-Based Payment Arrangement, Plan Modification, Incremental Cost		$ 900		
Share Based Compensation Arrangement By Share Based Payment Award Plan Modification Incremental Compensation Cost Vested		600		
Share Based Compensation Arrangement By Share Based Payment Award Plan Modification Incremental Compensation Cost UnVested		$ 300		
Two Thousand Twenty Plan [Member] | Maximum [Member]				
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]				
Share price		$ 10.97		
Two Thousand Twenty Plan [Member] | Restricted Stock Units (RSUs) [Member]				
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]				
Share-Based Payment Arrangement, Plan Modification, Incremental Cost	$ 0			
Stock Issued During Period, Shares, Restricted Stock Award, Gross		95,560		

Share-based Compensation Arrangement by Share-based Payment Award, Equity Instruments Other than Options, Grants in Period	73,507	73,000
Common Stock [Member] | Two Thousand Twenty Plan [Member]		
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Share-based Compensation Arrangement by Share-based Payment Award, Options, Exercises in Period		369,890
Share-based Compensation Arrangement by Share-based Payment Award, Fair Value Assumptions, Exercise Price		$ 8.2
Common Stock [Member] | Two Thousand Twenty Plan [Member] | Minimum [Member]		
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Share price		11
Share-based Compensation Arrangement by Share-based Payment Award, Options, Outstanding, Weighted Average Exercise Price		11
Common Stock [Member] | Two Thousand Twenty Plan [Member] | Weighted Average [Member]		
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Share-based Compensation Arrangement by Share-based Payment Award, Options, Outstanding, Weighted Average Exercise Price		$ 163.81

Equity Incentive Plans - Schedule of Stock Option Activity (Details) - USD ($) $ / shares in Units, $ in Thousands	12 Months Ended		
	Dec. 31, 2024	Dec. 31, 2023	Dec. 31, 2022
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]			
Outstanding, Stock Options	252	218	
Options granted, Stock Options	133,000	57,000	
Options exercised, Stock Options	(1,000)	(1,000)	
Options cancelled, Stock Options	(141,000)	(13,000)	
Outstanding, Stock Options	261	252	218
Options vested and exercisable, Stock Options	176,000		
Outstanding, Weighted Average Exercise Price	$ 19.89	$ 217.44	
Options granted, Weighted Average Exercise Price	143.83	24.3	
Options exercised, Weighted Average Exercise Price	17.93	16.4	
Options cancelled, Weighted Average Exercise Price	22.54	235.11	
Outstanding, Weighted Average Exercise Price	174.81	$ 19.89	$ 217.44
Options vested and exercisable, Weighted Average Exercise Price	$ 23.65		
Outstanding, Outstanding, Weighted Average Remaining Contractual Life (in years)	6 years 10 months 24 days	8 years 1 month 6 days	8 years 7 months 6 days
Outstanding, Outstanding, Weighted Average Remaining Contractual Life (in years)	6 years 10 months 24 days	8 years 1 month 6 days	8 years 7 months 6 days
Options vested and exercisable, Weighted Average Remaining Contractual Life (in years)	5 years 10 months 24 days		
Outstanding, Aggregate Intrinsic Value	$ 0	$ 125	
Outstanding, Aggregate Intrinsic Value	0	$ 0	$ 125
Options vested and exercisable, Aggregate Intrinsic Value	$ 0		

Equity Incentive Plans - Schedule of Weighted-Average Assumptions Used to Estimate Fair Value of Stock Options and Restricted Stock Awards using Black-Scholes Option Valuation Model (Details) - $ / shares	12 Months Ended	
	Dec. 31, 2024	Dec. 31, 2023
Share-based Payment Arrangement [Abstract]		
Exercise price	$ 61.99	$ 18
Expected term (years)	6 years	5 years 7 months 6 days
Volatility (annual)	91.90%	89.50%
Risk-free rate	4.30%	4.00%
Dividend yield (per share)	0.00%	0.00%

Equity Incentive Plans - Summary Of Non vested Restricted Stock Units Activity (Details) - Restricted Stock Units (RSUs) [Member] - Two Thousand Twenty Plan [Member] - USD ($) $ / shares in Units, $ in Thousands	Sep. 30, 2024	12 Months Ended Dec. 31, 2024
Schedule Of Non vested Restricted Stock Units Activity [Line Items]		
Beginning balance, Shares		0
Awarded, Restricted Stock Units	73,507	73,000
Released, Restricted Stock Units		(50,000)
Cancelled, Restricted Stock Units		(21,000)
Ending balance, Shares		2,000
Beginning balance, Weighted Average		$ 0
Awarded, Weighted Average Purchase Price		0
Released, Weighted Average Purchase Price		0
Cancelled, Weighted Average Purchase Price		0
Ending balance, Weighted Average		$ 0
Outstanding, Weighted Average Remaining Contractual Life (in years)		1 year 1 month 6 days
Outstanding, Aggregate Intrinsic Value		$ 12

Equity Incentive Plans - Schedule of Employee Service Share Based Compensation Allocation of Recognized Period Costs (Details) - USD ($) $ in Thousands	12 Months Ended	
	Dec. 31, 2024	Dec. 31, 2023
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Share-based Payment Arrangement, Expense	$ 3,473	$ 3,563
Research and Development [Member]		
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Share-based Payment Arrangement, Expense	1,655	1,712
General and Administrative [Member]		
Share-based Compensation Arrangement by Share-based Payment Award [Line Items]		
Share-based Payment Arrangement, Expense	$ 1,818	$ 1,851

Net Loss per Share Applicable to Common Stockholders - Schedule of Earnings Per Share Basic and Diluted (Details) - USD ($) $ / shares in Units, $ in Thousands	3 Months Ended		12 Months Ended	
	Sep. 30, 2024	Sep. 30, 2023	Dec. 31, 2024	Dec. 31, 2023
Earnings Per Share [Abstract]				
Net loss			$ (30,074)	$ (40,157)
Denominator:				
Weighted Average Number of Shares Outstanding, Basic	1,898	1,065	1,898 [1]	1,065 [1]
Weighted Average Number of Shares Outstanding, Diluted	[1]		1,898	1,065
Earnings Per Share, Basic			$ (15.85)	$ (37.72)
Earnings Per Share, Diluted	$ (15.85)	$ (37.72)	$ (15.85)	$ (37.72)

[1] In January 2025, the stockholders approved, and the Company effected a 1-for-20 reverse stock split. All share and per-share data have been retroactively adjusted throughout this report to account for this stock split.

Net Loss per Share Applicable to Common Stockholders - Schedule of Potential Common Stock Outstanding that was excluded from the Computation of Diluted Net Loss Per Share of Common Stock (Details) - shares shares in Thousands	12 Months Ended	
	Dec. 31, 2024	Dec. 31, 2023
Antidilutive Securities Excluded from Computation of Earnings Per Share [Line Items]		
Antidilutive Securities Excluded from Computation of Earnings Per Share, Amount Option Outstanding [Member]	2,064	427
Antidilutive Securities Excluded from Computation of Earnings Per Share [Line Items]		
Antidilutive Securities Excluded from Computation of Earnings Per Share, Amount Restricted stock units [Member]	252	261
Antidilutive Securities Excluded from Computation of Earnings Per Share [Line Items]		
Antidilutive Securities Excluded from Computation of Earnings Per Share, Amount Warrant [Member]	2	0
Antidilutive Securities Excluded from Computation of Earnings Per Share [Line Items]		
Antidilutive Securities Excluded from Computation of Earnings Per Share, Amount Restricted Stock [Member]	1,810	165
Antidilutive Securities Excluded from Computation of Earnings Per Share [Line Items]		
Antidilutive Securities Excluded from Computation of Earnings Per Share, Amount	0	1

Income Taxes - Schedule of Income (Loss) before Provision for Income Taxes (Details) - USD ($) $ in Thousands	12 Months Ended	
	Dec. 31, 2024	Dec. 31, 2023
Income (Loss) from Continuing Operations before Equity Method Investments, Income Taxes, Noncontrolling Interest [Abstract]		
United States	$ (30,412)	$ (35,281)
International	338	(4,876)
Total	$ (30,074)	$ (40,157)

Income Taxes - Schedule of Effective Income Tax Rate Reconciliation (Details)	12 Months Ended	
	Dec. 31, 2024	Dec. 31, 2023
Income Tax Disclosure [Abstract]		
Statutory federal income tax rate	21.00%	21.00%
State taxes, net of federal tax benefit	0.60%	0.10%
Research and development	1.00%	2.00%
Other	(3.30%)	0.50%
Change in valuation allowance	(19.30%)	(23.60%)
Income taxes provision (benefit)	0.00%	0.00%

Income Taxes - Schedule of Deferred Tax Assets (Details) - USD ($)	Dec. 31, 2024	Dec. 31, 2023
Deferred tax assets:		
Net operating loss	$ 19,357,000	$ 15,475,000
Stock-based compensation	3,322,000	5,235,000
Capitalized research and development	15,814,000	14,734,000
Research and development credit	2,404,000	2,231,000
Accruals and reserves	57,000	137,000
Lease liability	0	462,000
Total deferred income tax assets	40,954,000	38,274,000
Less: Valuation allowances	(40,954,000)	(37,748,000)
Deferred tax assets, net of valuation allowances	0	526,000
Deferred tax liabilities:		
Right of use asset	0	(526,000)
Total deferred income tax liabilities	0	(526,000)
Net deferred taxes	$ 0	$ 0

Income Taxes - Schedule of Income Tax Contingencies (Details) - USD ($) $ in Thousands	12 Months Ended	
	Dec. 31, 2024	Dec. 31, 2023
Income Tax Uncertainties [Abstract]		
Unrecognized Tax Benefits	$ 1,238	$ 979
Unrecognized Tax Benefits, Increase Decrease Resulting From Prior Period Tax Positions	136	0
Unrecognized Tax Benefits, Increase Decrease Resulting From Current Period Tax Positions	166	259
Unrecognized Tax Benefits	$ 1,540	$ 1,238

Income Taxes - Additional Information (Details) - USD ($)	12 Months Ended	
	Dec. 31, 2024	Dec. 31, 2023
Operating Loss Carryforwards [Line Items]		
Provision for income tax	$ 0	$ 0
Current tax expense	0	
Deferred tax assets valuation allowance	0	0
Increase in valuation allowance	$ 4,100,000	$ 9,400,000
Tax credit carry forward expiration year	2039 years	
Minimum [Member]		
Operating Loss Carryforwards [Line Items]		
Open Tax Year	2019	
Maximum [Member]		
Operating Loss Carryforwards [Line Items]		
Open Tax Year	2024	
U.S. Federal [Member]		
Operating Loss Carryforwards [Line Items]		
Net operating loss carryforward	$ 85,900,000	
State [Member]		
Operating Loss Carryforwards [Line Items]		
Operating loss carry forward expiration year	2039 years	
Net operating loss carryforward	$ 700,000	
Research [Member] | U.S. Federal [Member]		
Operating Loss Carryforwards [Line Items]		
Tax carry forward	2,800,000	
Research [Member] | State [Member]		
Operating Loss Carryforwards [Line Items]		
Tax carry forward	$ 1,300,000	

Subsequent Events - Additional Information (Details) - USD ($) $ / shares in Units, $ in Millions	Mar. 21, 2025	Jan. 21, 2025	Apr. 30, 2024	12 Months Ended Dec. 31, 2024	Mar. 14, 2025
Subsequent Event [Line Items]					
Shares Issued, Price Per Share				$ 23.34	
Commission And Offering Expenses To The Agent Involved In The Share Issue			$ 0.7	$ 0.2	
Subsequent Event [Member]					
Subsequent Event [Line Items]					
Commission And Offering Expenses To The Agent Involved In The Share Issue	$ 0.4				
Subsequent Event [Member] | Retained Investment in Subsidiary [Member]					
Subsequent Event [Line Items]					
Cash					$ 15.0
Subsequent Event [Member] | QumulusAI [Member]					
Subsequent Event [Line Items]					
Equity Method Investments					1.5
Subsequent Event [Member] | QumulusAI [Member] | Retained Investment in Subsidiary [Member]					
Subsequent Event [Line Items]					
Investments					$ 285.0
Common Stock [Member]					
Subsequent Event [Line Items]					
Sale of Stock, Number of Shares Issued in Transaction				106,042	
Sale of Stock, Consideration Received on Transaction				$ 2.2	
Common Stock [Member] | Subsequent Event [Member]					
Subsequent Event [Line Items]					
Stock Issued During Period, Value, New Issues		$ 30.0			
Sale of Stock, Number of Shares Issued in Transaction	2,624,276				
Shares Issued, Price Per Share	$ 1.63				
Sale of Stock, Consideration Received on Transaction	$ 3.9				
Common Stock [Member] | Subsequent Event [Member] | QumulusAI [Member]					
Subsequent Event [Line Items]					
Proportion Of Equity Interest Held By Common Stockholders					95.00%
Option And Warrants [Member] | Subsequent Event [Member] | Vincerx Pharma Inc [Member]					
Subsequent Event [Line Items]					
Proportion Of Equity Interest Held By Common Stockholders					5.00%