FORM 10-Q

Quarterly report pursuant to sections 13 or 15(d)

Filing Date: **1996-11-12** | Period of Report: **1996-09-30**
SEC Accession No. 0000950109-96-007386

FILER

ZYNAXIS INC
CIK:**864076**| IRS No.: **232562913** | State of Incorp.:**PA** | Fiscal Year End: **1231**
Type: **10-Q** | Act: **34** | File No.: **000-19701** | Film No.: **96659477**
SIC: **2834** Pharmaceutical preparations

Mailing Address
371 PHOENIXVILLE PIKE
MALVERN PA 19355

Business Address
371 PHOENIXVILLE PIKE
MALVERN PA 19355
6108892200

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

FORM 10-Q

(MARK ONE:)

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended SEPTEMBER 30, 1996

[ ] 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 0-19701

ZYNAXIS, INC.
(Exact name of Registrant as specified in its charter)

Pennsylvania	23-2562913
(State or other jurisdiction of incorporation or organization)	(IRS Employer I.D. No.)

371 Phoenixville Pike, Malvern, Pennsylvania 19355
(Address of principal executive offices) (Zip Code)

(610) 889-2200
(Registrant's telephone number, including area code)

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 X No
----- -----

Shares of Common Stock outstanding at November 7, 1996 were 10,332,550.

PART I. FINANCIAL INFORMATION
ITEM 1. CONSOLIDATED FINANCIAL STATEMENTS

ZYNAXIS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(UNAUDITED)

<TABLE>
<CAPTION>

	SEPTEMBER 30, 1996	DECEMBER 31, 1995
<S>	<C>	<C>
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 223,177	$ 411,706
Short-term securities	--	97,437
Collaborative, contract and grant revenue receivable (Note 6)	134,111	111,263
Restricted cash	25,157	23,735
Prepaid expenses	41,062	25,765
Other current assets	21,498	43,226
Total current assets	445,005	713,132
PROPERTY AND EQUIPMENT (NOTE 9):		
Equipment	2,896,333	2,907,858
Leasehold improvements	3,044,256	3,028,323
	5,940,589	5,936,181
Less accumulated depreciation and amortization	(3,880,206)	(3,090,640)
Net property and equipment	2,060,383	2,845,541
OTHER ASSETS:		
Restricted cash	77,320	109,711
Other long-term assets	36,045	31,869
Note receivable	314,516	287,575
Total other assets	427,881	429,155

	$ 2,933,269	$ 3,987,828

</TABLE>

The accompanying notes are an integral part of these statements.

ZYNAXIS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(CONTINUED)
(UNAUDITED)

<TABLE>
<CAPTION>

	SEPTEMBER 30, 1996	DECEMBER 31, 1995
<S>	<C>	<C>
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$ 863,147	$ 747,777
Accrued expenses	335,544	487,794
Notes payable to shareholders (Note 3)	450,000	150,000
Current maturities of long-term debt (Note 4)	34,117	25,050
Current portion of other long-term obligations	40,698	36,209
Deferred income	29,159	--
Total current liabilities	1,752,665	1,446,830
LONG-TERM DEBT (NOTE 4)	58,745	79,909
OTHER LONG-TERM OBLIGATIONS	98,342	103,494
COMMITMENTS AND CONTINGENCIES (NOTE 2)		
STOCKHOLDERS' EQUITY (NOTE 5):		
Series A preferred stock, 8% cumulative, 2,000,000 authorized shares. 1,412,500 and 1,500,000 issued and outstanding at September 30, 1996 and December 31, 1995, respectively (liquidation preference of $3,150,266 at September 30, 1996)	2,554,305	2,712,535
Common Stock, $.01 par value, 25,000,000 shares authorized and 10,298,002 and		

9,460,676 issued and outstanding at September, 30, 1996 and December 31, 1995, respectively	102,980	94,607
Additional paid-in capital	45,881,678	45,071,223
Accumulated deficit	(47,515,446)	(45,520,770)
	1,023,517	2,357,595
	$ 2,933,269	$ 3,987,828

</TABLE>

The accompanying notes are an integral part of these statements.

ZYNAXIS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)

<TABLE>
<CAPTION>

	THREE MONTHS ENDED SEPTEMBER 30, 1996	1995
<S>	<C>	<C>
REVENUES:		
Collaborative, contract and grant revenues (Note 6)	$ 650,512	$ 133,148
	650,512	133,148
COSTS AND EXPENSES:		
Research and development	910,214	1,222,359
Marketing, general and administrative	420,226	569,911
Charge for acquired research and development	--	3,647,321
	1,330,440	5,439,591
OPERATING LOSS	(679,928)	(5,306,443)
OTHER INCOME (EXPENSE):		
Interest income	12,950	39,543
Interest expense	(17,908)	(6,498)
Other	214,591	83,652

Gain on sale of diagnostic technologies and assets (Note 8)	--	494,354
	209,633	611,051
NET LOSS	$ (470,295)	$(4,695,392)
Net loss per common share	($0.05)	($0.63)
Shares used in computing net loss per common share	10,297,288	7,419,847

</TABLE>

The accompanying notes are an integral part of these statements.

ZYNAXIS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)

<TABLE>
<CAPTION>

	NINE MONTHS ENDED SEPTEMBER 30, 1996	1995
<S>	<C>	<C>
REVENUES:		
Collaborative, contract and grant revenues (Note 6)	$ 1,689,205	$ 164,627
Sales	--	141,189
	1,689,205	305,816
COSTS AND EXPENSES:		
Research and development	2,781,827	4,192,422
Marketing, general and administrative	1,333,356	1,547,162
Restructuring charge (Note 7)	--	347,436
Charge for acquired research and development	--	3,647,321
Cost of sales	--	40,261
	4,115,183	9,774,602

OPERATING LOSS	(2,425,978)	(9,468,786)
OTHER INCOME (EXPENSE):		
Interest income	42,687	70,517
Interest expense	(31,731)	(32,413)
Other	420,346	91,134
Gain on sale of diagnostic technologies and assets (Note 8)	--	1,595,616
	431,302	1,724,854
NET LOSS	$(1,994,676)	$(7,743,932)
Net loss per common share	$ (0.20)	$ (1.29)
Shares used in computing net loss per common share	10,060,509	5,988,748

</TABLE>

The accompanying notes are an integral part of these statements.

ZYNAXIS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

<TABLE>
<CAPTION>

	NINE MONTHS ENDED SEPTEMBER 30, 1996	1995
<S>	<C>	<C>
CASH FLOW FROM OPERATING ACTIVITIES:		
Net loss	$(1,994,676)	$(7,743,932)
Adjustments to reconcile net loss to net cash used for operating activities:		
Charge for acquired research and development	--	3,647,321
Gain on sale of diagnostic technologies and assets	--	(1,595,616)
Depreciation and amortization	762,694	878,445

Deferred compensation	--	3,771
Issuance of Common Stock to 401k plan	8,428	13,760
Decrease (increase) in		
Restricted cash	30,969	20,433
Prepaid expenses	(15,297)	6,863
Collaborative, contract and grant revenue receivable	(22,848)	(125,775)
Other current assets	21,727	(49,660)
Other long term assets	(4,176)	16,881
Increase (decrease) in		
Accounts payable	115,370	267,126
Accrued expenses	(152,249)	114,870
Deferred income	29,159	--
Other long-term obligations	(22,491)	(22,489)
Net cash used for operating activities	(1,243,390)	(4,568,003)
CASH FLOW FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(4,408)	(43,743)
Proceeds from sale of diagnostic technologies and assets	--	1,200,000
Payment of merger-related fees and expenses	--	(423,174)
Net sales short-term securities	97,437	2,126,176
Net cash from investing activities	93,029	2,859,259
CASH FLOW FROM FINANCING ACTIVITIES:		
Proceeds from issuance of Common Stock	500,000	2,712,536
Proceeds from issuance of short-term promissory notes to Shareholders	450,000	--
Proceeds from capital lease financing	25,640	10,284
Proceeds from exercise of Common Stock options	2,103	5,000
Principal payments on capital lease obligations	(3,813)	(16,457)
Principal payments on notes payable	(12,098)	(336,832)
Net cash from financing activities	961,832	2,374,531
Net (decrease) increase in cash and cash equivalents	(188,529)	665,787
Cash and cash equivalents, beginning of period	411,706	90,280
CASH AND CASH EQUIVALENTS, END OF PERIOD	$ 223,177	$ 756,067

</TABLE>

<TABLE>
<S> <C> <C>
Supplemental disclosure of cash flow information:
Cash paid for interest expense $11,060 $25,745
</TABLE>

The accompanying notes are an integral part of these statements.

ZYNAXIS, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(UNAUDITED)

NOTE 1 - BASIS OF PRESENTATION

The accompanying consolidated financial statements have been prepared in accordance with generally accepted accounting principles applicable to interim periods. These financial statements do not include all disclosures required for annual financial statements and should be read in conjunction with the more complete disclosures contained in the audited financial statements of Zynaxis, Inc. ("Zynaxis" or the "Company") incorporated by reference in the Company's Annual Report on Form 10-K, as amended, for the year ended December 31, 1995.

The statements reflect, in the opinion of management, all adjustments of a normal and recurring nature necessary to present fairly the Company's consolidated financial position at September 30, 1996 and December 31, 1995, the consolidated results of operations for the three and nine months ended September 30, 1996 and 1995, and the consolidated cash flows for the nine months ended September 30, 1996 and 1995. The results of operations for the three and nine months ended September 30, 1996, and the cash flows for the nine months ended September 30, 1996, are not necessarily indicative of the results to be expected for the entire year.

Certain prior year amounts have been reclassified to conform to current year classifications.

NOTE 2 - BACKGROUND AND SIGNIFICANT UNCERTAINTIES

Zynaxis, Inc. was incorporated in Pennsylvania on March 5, 1987 and commenced operations in July 1988. The Company initially focused on the development of cell-mediated therapies and cellular diagnostic products including research reagents for cell tracking. Between 1988 and 1991, the Company received funding primarily through venture capital financing involving the issuance of convertible preferred stock and convertible notes, all of which have since been converted into Common Stock. In January 1992, the Company completed an initial public offering of its Common Stock, receiving net proceeds of approximately $23,300,000 through the sale of 2,875,000 shares of Common Stock. Between 1992 and 1994, the Company focused on development of products for site-directed drug delivery using its proprietary Zyn-Linker molecules and on the development of cellular diagnostic products including its Zymmune CD4/CD8 Cell Monitoring Kit.

During 1995 the Company modified its strategic direction, divesting its diagnostic products, acquiring vaccine delivery technologies, and focusing its resources on selected drug and vaccine delivery opportunities, which were anticipated, in the opinion of the Board of Directors and management, to yield an improved long-term return for both the Company and its shareholders compared to the Company's previous strategy of funding both therapeutic and diagnostic operations.

Four key events occurred in 1995 as a result of the Company's modified strategic direction: (i) the sale of the Company's diagnostic operations, accompanied by a significant reduction in work-force, (ii) the acquisition by merger of Secretech, Inc. ("Secretech") and associated technologies for oral and mucosal vaccine delivery, (iii) the completion of a private placement which raised net proceeds of $2,700,000 to fund operations, and (iv) the completion of a significant corporate collaborative agreement for the development of certain technologies acquired through the merger with Secretech. These events are described in detail within the Management's Discussion and Analysis of Financial Condition and Results

of Operations contained in the Company's Report on Form 10-K, as amended, for the year ended December 31, 1995.

During the latter part of 1995, the Company established as its strategic goal to become a profitable organization with positive cash flow from operations by developing varied applications of its drug and vaccine delivery platforms through significant cash-generating collaborations with pharmaceutical and biotechnology firms.

During the first nine months of 1996, the Company attempted to develop its technologies and enter into significant corporate collaborations. Other than the Company's Development and Licensing Agreement with ALK A/S ("ALK"), the Company has had limited success in entering into such significant collaborations. The

Company has sustained significant operating losses and expects such losses to continue in the future. The Company has not received significant revenues from the sale of any of its products. For the period from its inception to September 30, 1996, the Company has an accumulated deficit of $47,515,000.

During the first nine months of 1996, the Company has attempted to raise cash to finance its ongoing operations. The Company's efforts have primarily been focused on attempting to sell the Cauldron Process Chemistry division ("Cauldron") and its related assets for cash. Cauldron was established by the Company to utilize its process chemistry expertise in response to growing demand for contract services. Cauldron provides collaborative consulting services on all aspects of bulk pharmaceutical production and offers process research, development and pilot scale-up facilities for the pharmaceutical, biochemical industries and fine chemical industries. In July 1996, the Company signed a binding letter of intent to sell Cauldron to Seloc AG ("Seloc"), a subsidiary of Schwarz Pharma. In conjunction with the execution of the binding letter of intent, the Company received an exclusive option payment of $100,000, and an up-front payment of $50,000 on a Seloc process development contract.

On August 27, 1996, the Company received notification that Seloc was terminating its agreement in principle to purchase Cauldron (the "Seloc Termination"). The Company immediately revived discussions with previous potential purchasers and initiated discussions with others.

The Seloc Termination precipitated three significant strategic decisions.

Reduction in Operations and Workforce

The Company determined that, in order to conserve its limited cash resources, it must limit its activities to those which were cash positive or were essential to the Company's operations. Accordingly, during September, 1996, the Company reduced its workforce by 40%. As a result, the Company's operations have been reduced to its Cauldron process chemistry operations, the research and development which is funded through Small Business Innovative Research Grants ("SBIRs") and other essential corporate functions.

Sale of Zyn-Linker Technologies

On September 23, 1996, the Company entered into an Exclusive License Agreement and Purchase Option with Phanos Technologies, Inc. ("Phanos") related to intellectual property related to its Zyn-Linker technologies. Under terms of this agreement, Phanos was given a license and purchase option to acquire all of the Company's Zyn-Linker technology. The Company had previously licensed certain diagnostic applications of Zyn-Linkers to Phanos. Upon execution of this agreement, the Company received a $50,000 initial deposit, of which $5,000 is non-refundable. In October, 1996, the Company received an additional deposit, which is fully refundable, of $150,000. If Phanos elects to exercise its purchase option, it will be required to pay an additional $525,000.

Decision to aggressively pursue significant corporate transaction

During the first half of 1996, the Company had determined that, while its ultimate survival is dependent upon its ability to generate significant and sustained revenues from corporate research and development collaborations through up-front, milestone or other funding payments, in order to assure the viability of the technology and to protect shareholder value, it needed to generate significant cash inflows to the Company. Options identified included a significant private placement of its equity securities, merger, acquisitions, joint ventures, technology sales, and technology acquisitions, among others (collectively, "Significant Strategic Transactions"). As a result of the Seloc Termination, the Company began to aggressively pursue a Significant Strategic Transaction.

The Company is currently negotiating such a Significant Strategic Transaction. Given its financial condition and reduced viability, the Company believes that this transaction represents the only option available to optimize the value to its shareholders of its remaining assets, including but not limited to its oral vaccine delivery technologies, its Cauldron operations and the Company's status as a public company.

The Company is critically short of cash to fund its operations and has a severe working capital deficit. Current cash resources, augmented by expected collaborative and other revenues, are only sufficient to fund operations into, but not beyond, the latter part of the fourth quarter of 1996. The ability of the Company to operate as a going concern with its reduced research and development efforts will primarily be determined by its ability to complete a Significant Corporate Transaction. There is no assurance that the Company will ultimately complete this Significant Corporate Transaction. Additionally, the Company believes that certain matters associated with its anticipated Significant Corporate Transaction may require the approval of shareholders. If the Company is unable to complete the contemplated Significant Corporate Transaction, or if the shareholders fail to approve certain conditions precedent to closing of the Significant Corporate Transaction, the Company will not be able to continue operations. Should the Company determine that it is no longer in the best interest of its shareholders to continue operations, the ability of the Company to fund an orderly disposition of assets, pay off its then outstanding liabilities and return any remaining cash to its shareholders will be limited by the amount of working capital then on hand, if any.

NOTE 3 - NOTES PAYABLE TO SHAREHOLDERS

On December 28, 1995, the Company issued a $150,000 Demand Promissory Note (the "December 1995 Note") to one of its principal shareholders. A general partner of the shareholder is a member of the Board of Directors. This December 1995 Note bore interest at the annual rate of 10% and was initially due on the earlier of (i) a closing of a private offering of the Company's Common Stock in an amount of at least $2,000,000 or (ii) March 31, 1996. In connection with this transaction, the Company issued a warrant with a five year term to purchase

15,000 shares of the Company's Common Stock at an exercise price of $1.00 per share. On February 29, 1996, the holder of the December 1995 Note converted the outstanding principal balance and all accrued interest thereon to Common Stock with transfer restrictions, as described in Note 5 to the consolidated interim financial statements.

On May 3, 1996 the Company issued Demand Promissory Notes (the "May 1996 Notes") aggregating $200,000 to two of its principal shareholders. A general partner of one shareholder and the president of another shareholder are members of the Board of Directors. These May 1996 Notes bear interest at the annual rate of 11 1/4% and are due on the earlier of (i) the receipt by the Company of proceeds from the sale of Cauldron aggregating at least $1,000,000 or (ii) upon demand if the closing on the sale of Cauldron does not occur by September 30, 1996. The May 1996 Notes are convertible at the option of the holder into an aggregate of 200,000 shares of the Company's Common Stock at any time prior to repayment. In connection with the issuance of the May 1996 Notes, the Company issued warrants with a five year term to purchase 200,000 shares of the Company's Common Stock at an exercise price of $1.00 per share.

On June 7, 1996 the Company issued a $250,000 Demand Promissory Note to another of its principal shareholders. This note was canceled and reissued on July 17, 1996 due to a revision of the repayment terms (the "July 1996 Note"). This July 1996 Note bears interest at the annual rate of 11 1/4% and is due on the earlier of (i) the receipt by the Company of proceeds from the sale of Cauldron aggregating at least $1,000,000 or (ii) upon demand if the closing on the sale of Cauldron does not occur by October 15, 1996. This July 1996 Note is convertible at the option of the holder into an aggregate of 150,000 shares of the Company's Common Stock at any time prior to repayment. In connection with the issuance, the Company also issued a warrant with a five year term to purchase 25,000 shares of the Company's Common Stock at an exercise price of $1.00 per share.

NOTE 4 - LONG-TERM DEBT

Long-term debt consists of a ten-year note to the then lessor of the Company's office and research facility to finance certain leasehold and other improvements. The note bears interest at 13% and is fully collateralized by a $91,141 certificate of deposit. The amount of the collateral decreases each year. The certificate of deposit is included within restricted cash in the accompanying balance sheets.

NOTE 5 - STOCKHOLDERS' EQUITY

Series A Convertible Preferred Stock

During the nine months ended September 30, 1996, a holder of Series A Convertible Preferred Stock converted a total of 87,500 shares of Series A Convertible Preferred Stock into 175,000 shares of Common Stock.

Common Stock

On February 29, 1996, the Company completed a private placement of Common Stock with transfer restrictions, raising proceeds of $500,000. Additionally, a $150,000 short-term promissory note payable held by a related party, plus accrued interest of $2,582, was converted to Common Stock with transfer restrictions on February 29, 1996.

Under terms of the above agreements, the Company issued an aggregate of 652,582 shares of Common Stock at a price of $1.00 per share. Additionally, the Company issued warrants to purchase 195,775 shares of Common Stock at an exercise price of $1.00 per share.

Stock Warrants

In connection with the issuances of the May 1996 Notes and the July 1996 Note described in Note 3 above, the Company issued warrants to purchase an aggregate of 225,000 shares of the Company's Common Stock. These warrants have a five year term and have an exercise price of $1.00 per share.

NOTE 6 - COLLABORATIVE, CONTRACT AND GRANT REVENUES

Collaboration with ALK A/S

In October 1995, the Company announced a development and licensing agreement with ALK, a leading European pharmaceutical company in the field of allergy immunotherapy. The collaboration involves certain of the technologies acquired in the merger with Secretech relating to bioactive substance delivery technology.

Under the terms of the ALK development and licensing collaboration, the Company has received payments aggregating $1,000,000. The Company received the second installment of $250,000 in January 1996, the third installment of $250,000 in April 1996, and the fourth and final installment payment of $250,000 in August 1996.

The Company also has agreed to provide ALK with research and development support of the licensed technology for which it will receive additional revenues based upon costs incurred. During the nine months ended September 30, 1996, the Company recorded $36,700 of such revenue. As a result of the reduction in force described above, the Company's ability to continue to provide ALK with research and development support is significantly diminished.

The Company will receive a base royalty of 7% on net sales of products using the Company's technology, increasing based upon certain sales criteria established within the agreement. The Company could also receive additional milestone payments of up to $2,000,000 based upon either FDA or certain other regulatory approvals of additional products using the Company's vaccine delivery technologies. There can be no assurance that ALK will ever obtain the appropriate regulatory approvals, or will ever generate any sales using the technology licensed from the Company.

Should the Company receive royalties under this agreement, it will be required to pay approximately 3% of the net sales of the licensed product to the original patent holder of the technology.

Contract Manufacturing

During the three and nine months ended September 30, 1996, the Company, through its Cauldron Process Chemistry division, recognized contract manufacturing revenues of $260,000 and $547,000, respectively, by providing process chemistry and pilot manufacturing services to other biotechnology, pharmaceutical and chemical organizations.

Grant Revenue

For the three and nine months ended September 30, 1996, the Company recognized $83,200 and $250,700, respectively, pursuant to a SBIR grant awarded by the National Heart, Lung and Blood Institute. This grant is funding the preclinical development of Zyn-Linker molecules linked with heparin and the investigation of their ability to inhibit post-angioplasty restenosis and local thrombosis. This grant has been extended for a second year; the Company could recognize up to an additional $258,000 under the terms of this grant extension.

The Company has also received a Phase I SBIR grant for up to $100,000 to develop Zyn-Linker molecules linked with Taxol and the investigation of their ability to inhibit post-angioplasty restenosis and local thrombosis. The Company has recorded $40,000 and $55,000 of revenue related to this grant in the three and nine months ended September 30, 1996, respectively.

NOTE 7 - RESTRUCTURING CHARGE

During the nine months ended September 30, 1995, the Company recorded a restructuring charge as a result of its decision to sell its diagnostic technologies and assets and exit the diagnostic field. This $347,000 charge consisted of severance and severance-related expenses resulting from the termination of diagnostic employees, as well as amounts potentially due to certain distributors of the Company's Zymmune Cell Monitoring System pursuant to

the terms and conditions of certain distribution agreements.

NOTE 8 - GAIN ON SALE OF DIAGNOSTIC TECHNOLOGIES AND ASSETS

During the three and nine months ended September 30, 1995, the Company recorded gains on the sale of diagnostic technologies and assets of $494,000 and $1,595,600, respectively. The gain for the three months represents the cash received under the terms of the Company's agreements with Intracel Corporation, reduced by certain lease termination costs and other technology transfer costs (principally employee costs from the Asset Purchase agreement date of July 18, 1995 through October 31, 1995). The gain on the sale of diagnostic technologies and assets for the nine months ended September 30, 1995 also includes the proceeds from the sale of the Company's research reagent business to Phanos.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

INTRODUCTION, OVERVIEW AND SIGNIFICANT EVENTS OF THE THIRD QUARTER 1996

This discussion should be read in conjunction with the information presented in the Consolidated Financial Statements and the related notes to the consolidated interim financial statements.

The Company commenced operations in July 1988 and initially focused on the development of cell-mediated therapies and cellular diagnostic products including research reagents for cell tracking. Between 1988 and 1991, the Company received funding primarily through venture capital financing involving the issuance of convertible preferred stock and convertible notes, all of which have since been converted into Common Stock. In January 1992, the Company completed an initial public offering of its Common Stock, receiving net proceeds of approximately $23,300,000 through the sale of 2,875,000 shares of Common Stock. Between 1992 and 1994, the Company focused on development of products for site-directed drug delivery using its proprietary Zyn-Linker molecules and on development of cellular diagnostic products including its Zymmune CD4/CD8 Cell Monitoring Kit.

During 1995, the Company modified its strategic direction, divesting its diagnostic products, acquiring vaccine delivery technologies, and focusing its resources on selected drug and vaccine delivery opportunities, which were anticipated, in the opinion of the Board of Directors and management, to yield an improved long-term return for both the Company and its shareholders compared to the Company's previous strategy of funding both therapeutic and diagnostic operations.

Four key events occurred in 1995 as a result of the Company's modified strategic

direction: (i) the sale of the Company's diagnostic operations, accompanied by a significant reduction in work-force, (ii) the acquisition by merger of Secretech, Inc. ("Secretech") and associated technologies for oral and mucosal vaccine delivery, (iii) the completion of a private placement which raised net proceeds of $2,700,000 to fund operations, and (iv) the completion of a significant corporate collaboration agreement for the development of certain technologies acquired through the merger with Secretech. These events are described in detail within Management's Discussion and Analysis of Financial Condition and Results of Operations contained in the Company's Report on Form 10-K, as amended, for the year ended December 31, 1995.

During the latter part of 1995, the Company established as its strategic goal to become a profitable organization with positive cash flow from operations by developing varied applications of its drug and vaccine delivery platforms through significant cash-generating collaborations with pharmaceutical and biotechnology firms.

During the first nine months of 1996, the Company attempted to develop its technologies and enter into significant corporate collaborations. Other than the Company's Development and Licensing Agreement with ALK A/S ("ALK"), the Company has had limited success in entering into such significant collaborations. The Company has sustained significant operating losses and expects such losses to continue in the future. The Company has not received significant revenues from the sale of any of its products. For the period from its inception to September 30, 1996, the Company has an accumulated deficit of $47,515,000.

During the first nine months of 1996, the Company attempted to raise cash to finance its ongoing operations. The Company's efforts have primarily been focused on attempting to sell the Cauldron Process Chemistry division ("Cauldron") and its related assets for cash. Cauldron was established by the Company to utilize its process chemistry expertise in response to growing demand for contract services. Cauldron provides collaborative consulting services on all aspects of bulk pharmaceutical production and offers process research, development and pilot scale-up facilities for the pharmaceutical, biochemical and

fine chemical industries. In July 1996, the Company signed a binding letter of intent to sell Cauldron to Seloc AG ("Seloc"), a subsidiary of Schwarz Pharma. In conjunction with the execution of the binding letter of intent, the Company received an exclusive option payment of $100,000, and an up-front payment of $50,000 on a Seloc process development contract.

On August 27, 1996, the Company received notification that Seloc was terminating its agreement in principle to purchase Cauldron (the "Seloc Termination"). The Company immediately revived discussions with previous potential purchasers and initiated discussions with others.

The Seloc Termination precipitated three significant strategic decisions.

Reduction in Operations and Workforce

The Company determined that, in order to conserve its limited cash resources, it must limit its activities to those which were cash positive or were essential to the Company's operations. Accordingly, during September, 1996, the Company reduced its workforce by 40%. As a result, the Company's operations have been reduced to its Cauldron process chemistry operations, the research and development which is funded through Small Business Innovative Research Grants ("SBIRs") and other essential corporate functions.

Sale of Zyn-Linker Technologies

On September 23, 1996, the Company entered into an Exclusive License Agreement and Purchase Option with Phanos Technologies, Inc. ("Phanos") related to intellectual property related to its Zyn-Linker technologies. Under terms of this agreement, Phanos was given a license and purchase option to acquire all of the Company's Zyn-Linker technology. The Company had previously licensed certain diagnostic applications of Zyn-Linkers to Phanos. Upon execution of this agreement, the Company received a $50,000 initial deposit, of which $5,000 is non-refundable. In October, 1996, the Company received an additional deposit, which is fully refundable, of $150,000. If Phanos elects to exercise its purchase option, it will be required to pay an additional $525,000.

Decision to aggressively pursue significant corporate transaction

During the first half of 1996, the Company had determined that, while its ultimate survival is dependent upon its ability to generate significant and sustained revenues from corporate research and development collaborations through up-front, milestone or other funding payments, in order to assure the viability of the technology and to protect shareholder value it needed to generate significant cash inflows to the Company. Options identified included a significant private placement of its equity securities, merger, acquisitions, joint ventures, technology sales, and technology acquisitions, among others (collectively, "Significant Strategic Transactions"). As a result of the Seloc Termination, the Company began to aggressively pursue a Significant Strategic Transaction.

The Company is currently negotiating such a Significant Strategic Transaction. Given its financial condition and reduced viability, the Company believes that this transaction represents the only option available to optimize the value to its shareholders of its remaining assets, including but not limited to its oral vaccine delivery technologies, its Cauldron operations and the Company's status as a public company.

These strategic decisions, individually and collectively, are subject to significant risks which are exacerbated by the Company's extremely critical financial condition as described below in "Uncertainties and Risks."

LIQUIDITY, CAPITAL RESOURCES AND PLANS TO FUND FUTURE OPERATIONS

At September 30, 1996, the Company had cash and cash equivalents of $223,200 and a working capital deficit of $1,307,700.

The Company's net cash used for operations was $1,243,400 and $4,568,000 for the nine months ended September 30, 1996 and 1995, respectively. The 73% decrease in the use of cash for operations between the periods presented was primarily due to the divestiture of the Company's diagnostic operations and the resulting reduction in operating expenses, offset by the growth in collaborative and grant revenues, combined with sublease revenues described below.

The Company has funded operations since December 31, 1995 primarily through the issuance of short-term promissory notes to certain holders of Series A Preferred Stock (the "Preferred Shareholders"), and the completion of an additional private offering:

Issuance of Short-term Promissory Notes

The Company issued an aggregate of $450,000 of Demand Promissory Notes (the "Notes") to three of its Preferred Shareholders in exchange for cash to fund operations. These Notes bear interest at an annual rate of 11 1/4% and are to be repaid on the earlier of (a) the date the Company receives aggregate proceeds of at least $1,000,000 from the sale of Cauldron Process Chemistry as described below, or (b) upon demand on selected dates in the third or fourth quarters of 1996. As additional consideration the Company issued an aggregate of 225,000 warrants to purchase Common Stock of the Company with an exercise price of $1.00 per share.

Completion of Private Placement

On February 29, 1996, the Company received cash proceeds of $500,000 in a private placement of Common Stock to an institutional investor. Under the terms of the purchase agreement, the Company issued 500,000 shares of unregistered Common Stock at a price of $1.00 per share, and a warrant to purchase 150,000 shares of Common Stock with transfer restrictions at an exercise price of $1.00 per share. Additionally, on February 29, 1996, the Company converted a $150,000 bridge loan from a Preferred Shareholder and accrued interest thereon into 152,582 shares of Common Stock with transfer restrictions and issued a warrant to purchase 45,775 shares of Common Stock at an exercise price of $1.00 per share.

The ability of the Company to survive as a going concern beyond the fourth quarter of 1996 is contingent on the consummation of the Significant Strategic Transaction and receipts of certain cash inflows associated therewith. There can be no assurance, however, that the Company will be able to successfully conclude

negotiations related to the Significant Strategic Transaction on a timely basis, if at all. If the Company is unable to conclude these negotiations, additional funding will be required in order to continue operations. There is no assurance that such additional funding will be available. If no other funding is obtained by the Company, it will be required to cease operations.

UNCERTAINTIES AND RISKS

The Company continues to be subject to significant and increasing uncertainty and risk. The Company's independent public accountants have included an explanatory paragraph in their report covering the Company's financial statements for the fiscal year ended December 31, 1995, expressing substantial doubt about the Company's ability to continue as a going concern. These risks and uncertainties arise from a number of factors, some of which are described below, including those inherent in the biotechnology industry as well as those resulting from the Company's poor financial condition, as previously discussed.

The Company is critically short of cash to fund its operations and has a severe working capital deficit. Current cash resources, augmented by expected collaborative and other revenues, are only sufficient to fund operations into but not beyond the latter part of the fourth quarter of 1996. The ability of the Company to operate as a going concern with its reduced research and development efforts will primarily be determined by its ability to complete a Significant Strategic Transaction. There is no assurance that the Company will ultimately complete this Significant Strategic Transaction. Additionally, the Company believes that certain matters associated with its anticipated Significant Strategic Transaction may require the approval of shareholders. If the Company is unable to complete the contemplated Significant Strategic Transaction, or if the shareholders fail to approve certain conditions precedent to closing of the Significant Strategic Transaction, the Company will not be able to continue operations. Should the Company determine that it is no longer in the best interest of its shareholders to continue operations, the ability of the Company to fund an orderly disposition of assets, pay off its then outstanding liabilities and return any remaining cash to its shareholders will be limited by the amount of working capital then on hand, if any.

Prior to December 20, 1995, the Company's Common Stock traded on the Nasdaq National Market. The NASD By-Laws required the Company to maintain certain quantitative standards for continued listing on the Nasdaq National Market. These standards included, among other things, a minimum bid price of $1.00 per share for the Common Stock, or, in the alternative, market value of public float of $3,000,000 and $4,000,000 of net tangible assets. Additionally, an issuer such as the Company which had sustained losses from continuing operations and/or net losses in three of its last four most recent fiscal years was required to have net tangible assets of at least $4,000,000. Due to the Company's inability to consistently meet these standards, the Company's Common Stock was removed

from the Nasdaq National Market and is now traded on the Nasdaq SmallCap Market. This could limit the Company's ability to raise additional capital and reduce the liquidity of the Company's shareholders. Additionally, unlike the Nasdaq National Market, the Nasdaq SmallCap Market does not entitle listing companies to an automatic exemption from the majority of state securities registration and reporting requirements.

On August 27, 1996, the Company was notified by the National Association of Securities Dealers, Inc. that the Company was in danger of failing to meet the continued listing requirements of the SmallCap Market. Specifically, the Company has failed to maintain a closing bid price greater than or equal to $1.00 per share, or as an alternative, maintain capital and surplus of $2,000,000 and a market value of public float of $1,000,000. The Company continues to be noncompliant regarding these criteria and does not anticipate being in compliance prior to completion of the contemplated Significant Strategic Transaction. If the Company fails to meet the continued listing requirements by November 27, 1996, or fails to deliver an acceptable plan to assure compliance, the Company could be delisted from the SmallCap Market.

On August 27, 1996, the Company was notified by Southern Research Institute ("SRI"), the holder of certain micro encapsulation technology licensed by the Company, that the Company was in default of its obligations under its license agreement. The Company has until November 27, 1996 to cure this default. This technology is central to the Company's oral vaccine research and development efforts. If the default is not cured, the licensed technology could revert to SRI. If this license does revert to SRI, the Company will be unable to develop its oral micro encapsulation of vaccine technologies.

As discussed above, the Company has concluded an agreement with Phanos related to the sale of intellectual property related to its Zyn-Linker technologies. Through November 7, 1996, the Company had received deposits of $200,000, of which $195,000 is refundable should Phanos ultimately decide not to exercise its option to purchase these technologies. Phanos has until January 21, 1997 to make this election. There is no assurance that Phanos will ultimately exercise this option. Should Phanos not exercise its option, the Company will be required to refund $195,000 to Phanos and will need to initiate efforts to sell this technology. There is ultimately no assurance that the Company will ever realize any proceeds from the sale of this technology. With the decision to sell all rights and interest in its Zyn-

Linker technology, the Company has concentrated its product development risk in the research and development of the oral delivery of vaccines.

If the Company is ultimately able to complete the contemplated Significant Strategic Transaction, the Company will continue to be exposed to the significant risks of product development. Product opportunities that the Company is presently pursuing will require substantial additional research, development,

clinical testing and regulatory approvals prior to commercialization. These activities are time-consuming and expensive. The ability of the Company to advance these technologies will be highly dependent upon the Company's available cash resources and the ability of the Company to obtain significant and sustained funding from collaborative partners, investors or other sources. To date, the Company has had limited success in obtaining substantial funding from collaborative partners. There is no assurance that the Company will be successful in the future. Pharmaceutical companies seeking collaborative arrangements in order to avail themselves of products in the development stage have become increasingly selective and have required substantial proof of principle, safety and efficacy before agreeing to provide substantial collaborative funding. Significant cash expenditures are required to obtain such evidence of principle, safety and efficacy.

Even if a product candidate appears promising at an early stage of development, there is no assurance that it can be successfully commercialized due to a number of factors. Such possibilities include that the product will prove to be ineffective or unsafe during clinical trials, will fail to receive necessary domestic or foreign regulatory approvals on a timely basis, will not be accepted by patients or physicians, will be difficult to manufacture on a commercial scale, will be uneconomical to market or will be precluded from commercialization by proprietary rights of others.

The Company's success depends in part on its ability to obtain patents, maintain trade secret protection and operate without infringing on the proprietary rights of others. The Company has filed applications for U.S. and foreign patents and holds several issued U.S. patents and related know-how. The Company also has exclusive licenses to certain oral vaccine delivery technologies from third parties under various U.S. patent applications. There can be no assurance that any of the Company's patent applications will be approved, that the Company will develop additional proprietary technologies that are patented, that any patents issued by the Company or its licensors will provide the Company with any competitive advantages or will not be challenged by third parties, or that the patents of others will not have an adverse effect on the ability of the Company to operate in a particular field. Patent law relating to the scope of claims in the biotechnology field is still evolving and the degree of future protection for the Company's proprietary rights is uncertain. Furthermore, there can be no assurance that others will not independently develop similar technologies, or design around patents issued to the Company. The failure by the Company to obtain appropriate patent protection may make certain of its products commercially unattractive.

The Company's strategy for the research, development, manufacture and marketing of vaccine products using its delivery technologies has been to enter into various arrangements with corporate partners, licensors, licensees and others. The Company has no commercial-scale manufacturing or clinical trial capabilities. Therefore, the successful commercialization of the Company's vaccine technology is dependent upon the Company's ability to enter into such arrangements and the ability of these third parties to perform their agreed-upon responsibilities. Although the Company believes that parties to any such arrangements would have an economic motivation to succeed in performing their

contractual responsibilities, the actual performance under the arrangements is outside of the control of the Company.

Research, preclinical development, clinical trials and manufacturing and marketing of pharmaceutical products are subject to extensive, costly and rigorous regulation by government authorities in the United States and other countries. The process of obtaining required regulatory approval from the FDA and other regulatory authorities often takes many years and can vary substantially based upon the type, complexity, novelty and application of the product. As with any investigational new drug or vaccine, additional government regulations may be promulgated which could impose additional costly and time consuming

testing procedures necessary to obtain regulatory approval. There can be no assurance that any products developed by the Company alone or, more than likely, in collaboration with others will be determined to be safe and efficacious in clinical trials or meet other applicable regulatory standards to receive the necessary approvals for manufacture and marketing. Even if such approvals are obtained, post-market evaluation of the products could result in limitations of the approvals. Delays in obtaining U.S. or foreign approvals could adversely affect the marketing of the Company's or co-developed products of its collaborators and diminish any competitive advantage. Even if FDA and/or foreign regulatory approvals are obtained, there can be no assurance that such products will be accepted and prescribed by physicians, or will be accepted by third party insurers or government health administration authorities as a reimbursable expense. In addition, delays in regulatory approvals that may be encountered by corporate collaborators or other licensees of the Company could adversely affect the Company's ability to receive royalties under such arrangements.

The Company operates in rapidly evolving fields. New developments are expected to continue at a rapid pace in the biotechnology industry, large pharmaceutical companies and academia. These institutions represent significant competition to the Company; this competition is intense and is expected to increase. Most of the competitors have substantially greater capital resources, research and development staffs and facilities, and have substantially greater expertise in conducting clinical trials, obtaining regulatory approvals, and manufacturing and marketing products than the Company. There can be no assurance that developments by others will not render the Company's technologies and products employing that technology obsolete or noncompetitive.

Results of Operations

Revenues totaled $650,500 and $1,689,200 for the three and nine months ended September 30, 1996, respectively, as compared to $133,100 and $305,800 for the corresponding periods of 1995. Revenues by major source in each of these periods were as follows:

<TABLE>
<CAPTION>

	THREE MONTHS ENDED SEPTEMBER 30,		NINE MONTHS ENDED SEPTEMBER 30,	
	1996	1995	1996	1995
<S>	<C>	<C>	<C>	<C>
Collaborative revenue from ALK	$268,000	$ 57,300	$ 786,700	$ 57,400
Contract revenues	259,600	27,900	546,800	27,900
Government grant revenues	122,900	43,100	305,500	43,100
Other collaborative revenues	--	4,800	50,200	36,200
Research reagent sales	--	--	--	76,500
Zymmune-related sales	--	--	--	64,700
	$650,500	$133,100	$1,689,200	$305,800

</TABLE>

Collaborative revenue from ALK is a result of a development and licensing agreement entered into between ALK and the Company in September 1995. The Company recognized $250,000 and $500,000 during the three and nine months ended September 30, 1996, respectively. The Company has also recorded $18,000 and $36,700 of revenue related to research conducted on behalf of ALK during the three and nine months ended September 30, 1996, respectively.

Contract revenues commenced late in 1995 and have been generated by the Company's Cauldron Process Chemistry division.

Government grant revenues represent amounts earned pursuant to two SBIR grants to develop the Company's Zyn-Linker/Heparin and Zyn-Linker/Taxol delivery systems for the treatment of restenosis. At September 30, 1996, $258,400 and $45,200 remains to be billed under the terms of a Phase II SBIR grant to develop Zyn-Linker/Heparin and a Phase I SBIR grant to develop Zyn-Linker/Taxol, respectively.

Included in 1995 revenues are research reagent and Zymmune-related sales generated by the Company's diagnostic operations, which were divested during 1995.

Research and development expenses totaled $910,200 and $2,781,800 in the three and nine months ended September 30, 1996, respectively. For the corresponding periods in 1995, research and development expenses totaled $1,222,400 and $4,192,400, respectively. Included in research and development expenses for the three and nine months ended September 30, 1995 are $222,500 and $754,000,

respectively, of research and development expenses for Secretech, which the Company acquired on July 27, 1995. During 1995, the Company funded virtually all of Secretech's operations prior to the consummation of the merger. The Company also provided subsequent funding of operations in Birmingham prior to cessation of Secretech operations in that location during the fourth quarter of 1995. Also included in research and development expenses in the three and nine months ended September 30, 1995 are diagnostic-related expenses of $43,900 and $516,900, respectively. The Company completed its divestiture of these operations in the fourth quarter of 1995. The savings resulting from the cessation of Secretech operations in Birmingham, and the divestiture of the Company's diagnostic operations have been partially offset by increased Cauldron-related expenditures associated with increasing its third-party contract operations.

Marketing, general and administrative costs were $420,000 and $1,333,000 in the three and nine months ended September 30, 1996, respectively, compared to $569,900 and $1,547,100 in the three and nine months ended September 30, 1995, respectively. Reduced diagnostic marketing, travel and certain other administrative expenses have been partially offset by increased patent-related and consulting costs associated with the Company's expanded technology platforms resulting from the Secretech acquisition in July 1995.

During the nine months ended September 30, 1995, in connection with the decision to divest its diagnostic operations, the Company recorded a restructuring charge of $347,400 representing severance payments, inventory buy-back payments, and certain other costs associated with and directly attributable to the decision to terminate its diagnostic operations.

During the three months ended September 30, 1995, the Company recorded a charge for acquired research and development in the amount of $3,647,000 in connection with the issuance of shares pursuant to the terms of the Secretech merger agreement. This charge represents the purchase of in-process research and development equal to the value of the shares issued, the excess of liabilities assumed over assets acquired, as well as all fees and expenses to effect the transaction.

Other income of $214,600 and $420,300 in the three and nine months ended September 30, 1996, respectively, primarily represents income from the Company's subleasing of certain excess space at its Malvern facility. Included in other income for the three and nine months ended September 30, 1996 was income of $100,000 related to the Company's retention of an option payment received from Seloc in connection with the subsequently terminated sale of Cauldron.

During the three and nine months ended September 30, 1995, the Company recorded gains on the sale of diagnostic technologies and assets of $494,000 and $1,595,600, respectively. The gain for the three months represents the cash received under the terms of the Company's agreements with Intracel Corporation, reduced by certain lease termination costs and other technology transfer costs (principally employee costs from the Asset Purchase agreement date of July 18, 1995 through October 31, 1995). The gain on the sale of diagnostic technologies and assets for the nine months ended September 30, 1995 also includes the proceeds from the sale of the Company's research reagent business to Phanos.

PART II. OTHER INFORMATION
ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

(a) EXHIBITS

The following is a list of exhibits filed as part of this quarterly report on Form 10-Q:

10.1	Registration Rights Agreement dated June 7, 1996 between the Registrant and S.R. One. Ltd.
10.2	Amended and Restated Warrant dated June 7, 1996 issued by the Registrant to S.R. One. Ltd.
10.3	Amended and Restated Warrant dated May 3, 1996 issued by the Registrant to Plexus Ventures, Inc.
10.4	Exclusive License Agreement with Purchase Option dated September 23, 1996 between the Registrant and Phanos Technologies, Inc.
10.5	Amendment No. 1 dated October 17, 1996 to the Exclusive License Agreement with Purchase Option between the Registrant and Phanos Technologies, Inc.

(b) REPORTS ON FORM 8-K

No reports on Form 8-K were filed during the quarter ended September 30, 1996.

SIGNATURES

Pursuant to the requirements 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.

ZYNAXIS, INC.

(Registrant)

Date: November 13, 1996

By: \s\ Martyn D. Greenacre

MARTYN D. GREENACRE
President and Chief Executive Officer (Principal Executive Officer and Principal Financial and Accounting Officer)

EXHIBIT INDEX

The page numbers listed refer to the page number where such exhibits are located in this form 10-Q Report using the Sequential numbering system specified in Rules 0-3 and 403.

EXHIBIT	DESCRIPTION	PAGE
10.1	Registration Rights Agreement dated June 7, 1996 between the Registrant and S.R. One. Ltd.	
10.2	Amended and Restated Warrant dated June 7, 1996 issued by the Registrant to S.R. One. Ltd.	
10.3	Amended and Restated Warrant dated May 3, 1996 issued by the Registrant to Plexus Ventures, Inc.	
10.4	Exclusive License Agreement with Purchase Option dated September 23, 1996 between the Registrant and Phanos Technologies, Inc.	
10.5	Amendment No. 1 dated October 17, 1996 to the Exclusive License Agreement with Purchase Option between the Registrant and Phanos Technologies, Inc.	

REGISTRATION RIGHTS AGREEMENT

This is a REGISTRATION RIGHTS AGREEMENT (the "Agreement") dated as of June 7, 1996 by and among ZYNAXIS, INC., a Pennsylvania corporation with headquarters located at 371 Phoenixville Pike, Malvern, Pennsylvania, 19355 (the "Company"), and S.R. ONE, LTD., a Pennsylvania business trust with headquarters at 565 E. Swedesford Road, Suite 315, Wayne, PA 19087 ("S.R. One").

BACKGROUND

In connection with the issuance by the Company of a PROMISSORY NOTE AND SECURITY AGREEMENT to S.R. One. (the "Note") and a WARRANT (the "Warrant"), on the date hereof to S.R. One, the Company and S.R. One have agreed to enter into this agreement relating to Registration of the shares of the Company's Common Stock (the "Warrant Shares") issuable upon exercise of the Warrant.

NOW THEREFORE, in consideration of the premises and mutual covenants contained herein, and other good and valuable consideration which is specified within the Note and the Warrant, the receipt and sufficiency of which are hereby acknowledged, the Company and S.R. One agree as follows:

SECTION 1:
REGISTRATION ON FORM S-3

1.1 Prior to November 28, 1996, unless not permitted under the then applicable rules and regulations of the Securities and Exchange Commission (the "SEC"), the Company will commence preparation of and will file a registration statement on Form S-3 (the "Registration Statement") with the SEC under the Securities Act of 1933, as amended (the "Securities Act"), to register the Warrant Shares. The Company will use its best efforts to have the Registration Statement declared effective and keep the Registration Statement effective until the earlier of (1) the fifth anniversary of the date of this Agreement, subject to such periods of time when the Company must suspend the use of the prospectus forming a part of the Registration Statement until such time as an amendment is filed and declared effective or an appropriate report is filed by the Company with the SEC, or (2) the date on which the Warrant Shares may be sold without restriction under the Securities Act.

SECTION 2:
ABOUT REGISTRATION

2.1 The Company shall pay all Registration Expenses (as defined below) in connection with any registration, qualification or compliance hereunder, and S.R. One or a permitted transferee under Section 4.1 hereof (the "Holder") shall pay all Selling Expenses (as defined below) and other expenses that are not Registration Expenses relating to the Warrant Shares to be registered on behalf of such Holder in accordance with this Section 2 (the "Registrable Securities"). "Registration Expenses" means all expenses, except for Selling Expenses, incurred by the Company in complying with the registration provisions of this Agreement, including, without limitation, all registration, qualification and filing fees, printing expenses, escrow fees, fees and disbursements of counsel for the Company, blue sky fees and expenses and the expense of any special audits incident to or required by any such registration. "Selling Expenses" means all selling commissions, underwriting fees and stock transfer taxes applicable to the Registrable Securities and all fees and disbursements of counsel for the Holder.

2.2 In the case of any registration effected by the Company pursuant to these registration provisions, the Company will use its best efforts to: (i) prepare and file with the SEC such amendments and supplements to the Registration Statement and the prospectus used in connection with the Registration Statement as may be deemed necessary to comply with the provisions of the Securities Act with respect to the disposition of the Registrable Securities; (ii) furnish such number of prospectuses and other documents incident thereto, including any amendment of or supplement to the prospectus, as the Holder from time to time may reasonably request; (iii) cause all such Registrable Securities registered as described herein to be listed on each securities exchange and quoted on each quotation service on which similar securities issued by the Company are then listed or quoted; (iv) provide a transfer agent and registrar for all Registrable Securities registered pursuant to the Registration Statement and a CUSIP number for all such Registrable Securities; (v) comply with all applicable rules and regulations of the SEC; and (vi) file the documents required of the Company and otherwise use its best efforts to maintain requisite blue sky clearance in all jurisdictions for which the Holder requests in writing such registration or qualification, provided however that the Company shall not be required to qualify to do business or consent to service of process in any state in which it is not now so qualified or has not so consented.

2.3 Each Holder of Registrable Securities shall furnish to the Company such information regarding such Holder and the distribution proposed by such Holder as the Company may reasonably request in writing and as shall be reasonably required in connection with any registration, qualification or compliance described herein. Such Holder shall represent that such information is true and complete.

2.4 If any Holder shall propose to sell any Registrable Securities pursuant to a

Registration Statement, it shall notify the Company of its intent to do so at least three full business days prior to such sale, and the provision of such notice to the Company shall be deemed to establish an agreement by such Holder to comply with the registration

provisions contained herein. Such notice shall be deemed to constitute a representation that any information previously supplied by such Holder is accurate as of the date of such notice. At any time within such three business day period, the Company may refuse to permit the Holder to resell any Registrable Securities pursuant to the Registration Statement; provided that in order to exercise this right, the Company must deliver a certificate in writing to the Holder to the effect that a delay in such sale is necessary because, in the good judgment of the Company, a sale pursuant to a Registration Statement in its then-current form could require the public disclosure of information that would not otherwise be required to be disclosed (which disclosure would be burdensome or could have a material adverse effect on the Company) or that would in other respects constitute a violation of the federal securities law. In such an event, the Company shall use its best efforts to amend the Registration Statement if necessary and take all other actions necessary to allow such sale under the federal securities laws, and shall notify the Holder promptly after it has determined that such circumstances no longer exist. Notwithstanding the foregoing, the Company shall not under any circumstances be entitled to exercise its right to withdraw a Registration Statement more than two times in any twelve (12) month period, and the period during which such Registration Statement may be withdrawn shall not exceed thirty (30) days. Each Holder hereby covenants and agrees that it will not sell any Registrable Securities pursuant to a Registration Statement during the periods a Registration Statement is withdrawn as set forth in this Section 2.4.

2.5 When a Holder is entitled to sell, gives notice of its intent to sell pursuant to a Registration Statement and complies with the provisions of this Section, the Company shall furnish to such Holder a reasonable number of copies of a supplement to or an amendment of such prospectus as may be necessary so that, as thereafter delivered to the purchasers of such shares, such prospectus shall not include an untrue statement of material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading or incomplete in the light of the circumstances then existing.

SECTION 3:
INDEMNIFICATION AND CONTRIBUTION.

3.1 The Company agrees to indemnify and hold harmless each Holder and its directors and officers from and against any losses, claims, damages or

liabilities (or actions or proceedings in respect thereof) to which such Holder may become subject (under the Securities Act or otherwise) insofar as such losses, claims, damages or liabilities (or actions or proceedings in respect thereof) arise out of, or are based upon, any claim by a third party asserting any untrue statement of a material fact in or omission of a material fact from a Registration Statement, on the effective date thereof, or arise out of any failure by the Company to fulfill any undertaking included in such Registration Statement, and the Company will, as incurred, reimburse such Holder for any legal or other expenses reasonably incurred in investigating, defending or preparing to defend any such action, proceeding or claim; provided, however, -------- -------

that the Company shall not be liable in any such case to the extent that such loss, claim, damages or liability arises out of, or is

based upon (i) an untrue statement made in such Registration Statement in reliance upon and in conformity with information furnished to the Company by or on behalf of such Holder for use in preparation of such Registration Statement or (ii) any untrue statement in any prospectus that is corrected in any subsequent prospectus that was delivered to the Holder prior to the pertinent sale or sales by the Holder.

3.2 Each Holder agrees to indemnify and hold harmless the Company and its directors and officers from and against any losses, claims, damages or liabilities (or actions or proceedings in respect thereof) to which the Company may become subject (under the Securities Act or otherwise) insofar as such losses, claims, damages or liabilities (or actions or proceedings in respect thereof) arise out of, or are based upon any claim by a third party asserting (i) an untrue statement of a material fact in or omission of a material fact from a Registration Statement in reliance upon and in conformity with information furnished to the Company by or on behalf of such Holder for use in preparation of such Registration Statement, provided that no Holder shall be liable in any such case for any untrue statement included in any prospectus which statement has been corrected in writing by such Holder and delivered to the Company before the sale from which such loss occurred and each Holder will, as incurred, reimburse the Company for any legal or other expenses reasonably incurred in investigating, defending or preparing to defend any such action, proceeding or claim.

3.3 Promptly after receipt by any indemnified person of a notice of a claim or the beginning of any action in respect of which indemnity is to be sought against an indemnifying person pursuant to this Section 3, such indemnified person shall notify the indemnifying person in writing of such claim or of the commencement of such action, and, subject to the provisions hereinafter stated, in case any such action shall be brought against an indemnified person and the indemnifying person shall have been notified thereof, the indemnifying person shall be entitled to participate therein, and, to the extent that it shall wish,

to assume the defense thereof, with counsel reasonably satisfactory to the indemnified person. After notice from the indemnifying person to such indemnified person of the indemnifying person's election to assume the defense thereof, the indemnifying person shall not be liable to such indemnified person for any legal expenses subsequently incurred by such indemnified person in connection with the defense thereof; provided that if there exists or shall exist a conflict of interest that would make it inappropriate in the reasonable judgment of the indemnified person for the same counsel to represent both the indemnified person and such indemnifying person or any affiliate or associate thereof, the indemnified person shall be entitled to retain its own counsel at the expense of such indemnifying person.

3.4 If the indemnification provided for in this Section 3 is unavailable to or insufficient to hold harmless an indemnified party under Section 3.1 or Section 3.2 above in respect of any losses, claims, damages or liabilities (or actions or proceedings in respect thereof) referred to therein, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (or actions in respect thereof) based upon such party's relative fault, as well as any other

relevant equitable considerations. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company on the one hand or a Holder on the other and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Holder agree that it would not be just and equitable if contribution pursuant to this Section 3.4 were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section 3.4. The amount paid or payable by an indemnified party as a result of the losses, claims, damages or liabilities (or actions in respect thereof) referred to above in this Section 3.4 shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 3.4, no Holder shall be required to contribute any amount in excess of the amount by which the net amount received by the Holder from the sale of the Registrable Securities to which such loss relates exceeds the amount of any damages which such Holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11 (f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

3.5 The obligations of the Company and the Holder under this Section 3 shall be in addition to any liability which the Company and the Holder may otherwise have and shall extend, upon the same terms and conditions, to each person, if any,

who controls the Company or any Holder within the meaning of the Securities Act.

SECTION 4:
TRANSFER OF REGISTRATION RIGHTS.

4.1 The right to sell Registrable Securities pursuant to a Registration Statement described herein may not be assigned or transferred by S.R. One, except to an Affiliate. For the purpose of this Section 4, "Affiliate" shall mean any entity which controls, is controlled by or is under common control with S.R. One. In the event that it is necessary, in order to permit a Holder to sell Registrable Securities pursuant to a Registration Statement, to amend such Registration Statement to name such Holder, such Holder shall, upon written notice to the Company, be entitled to have the Company make such amendments as soon as reasonably practicable. Notwithstanding the above provisions relating to Registration Expenses, in the event that such an amendment is requested, the Holder shall, at the request of the Company, be obligated to reimburse the Company for reasonable Registration Expenses incurred by it in connection with such amendment.

4.2 S.R. One hereby agrees that, if a transfer or assignment is necessary pursuant to Section 4.1, that, assignment of the right to sell Registrable Securities pursuant to a Registration Statement will be contingent upon the Affiliate accepting assignment of this Agreement.

IN WITNESS WHEREOF, the Company and S.R. One have caused this Agreement to be duly executed as of the date first written above.

ZYNAXIS, INC.

By: /s/ Francis M. Conway

Francis M. Conway
Controller, Treasurer and Secretary

S.R. ONE, LTD.

By: /s/ Brenda D. Gavin

Date: October 3, 1996

THE WARRANT REPRESENTED HEREBY HAS BEEN ACQUIRED FOR INVESTMENT AND HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. THE WARRANT MAY NOT BE SOLD OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN EXEMPTION THEREFROM.

THE WARRANT REPRESENTED HEREBY AND THE RIGHTS OF HOLDERS THEREOF ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND OTHER RESTRICTIONS, AS DESCRIBED IN SECTION 4 OF THIS WARRANT.

Void after 5:00 p.m. (Eastern Time), on the last day of the Warrant Term, as provided herein.

Amended and Restate
Warrant to Purchase
25,000 Shares of
Common Stock

Date: June 7, 1996

AMENDED AND RESTATED WARRANT TO PURCHASE COMMON STOCK OF ZYNAXIS, INC.

THIS CERTIFIES THAT, FOR VALUE RECEIVED, S.R. One, Ltd. (herein called "Warrant Holder") or registered assigns, is the holder of a Warrant and is entitled to purchase, subject to the provisions of this Warrant, from Zynaxis, Inc., a Pennsylvania corporation (the "Company"), at any time and from time to time during the Warrant Term, 25,000 fully paid, validly issued and nonassessable shares of Common Stock, par value $.01 per share, of the Company ("Common Stock"), at the Warrant Price. The Warrant Price and number and kind of securities issuable hereunder are subject to adjustments as provided herein.

1. Definition of Principal Terms. For the purpose of this Warrant:

(a) "Promissory Note" means the Promissory Note dated June 7, 1996, issued by the Company to the Warrant Holder.

(b) "Warrant" means the Warrant to purchase Common Stock issued by the Company in connection with and in consideration for the funding received

pursuant to the Promissory Note and any and all Warrants which are issued in exchange or substitution for any outstanding Warrant pursuant to the terms of that Warrant.

(c) "Warrant Price" means the price per share at which shares of Common Stock are purchasable hereunder, as such price may be adjusted from time to time hereunder, and shall initially be equal to $1.00.

(d) "Warrant Shares" means shares of Common Stock purchased upon exercise of the Warrants.

(e) "Warrant Term" means, except as provided in Section 6 hereof, the period commencing on June 7, 1996 and ending at 5:00 p.m. (Eastern Time) on June 6, 2001.

2. Exercise of Warrants. This Warrant may be exercised during the Warrant Term in whole or in part by the surrender of the Warrant, with the purchase agreement attached hereto as Rider A properly completed and executed, at the principal office of the Company at 371 Phoenixville Pike, Malvern, Pennsylvania 19355 or such other location which shall at that time be the principal office of the Company (the "Principal Office"), and upon payment to it by wire transfer, certified check or bank draft to the order of the Company for the purchase price for the Warrant Shares to be purchased upon such exercise. The person entitled to the Warrant Shares so purchased shall be treated for all purposes as the holder of such Warrant Shares as of the close of business on the date of exercise and certificates for the Warrant Shares so purchased shall be delivered to the person so entitled within a reasonable time, not exceeding thirty (30) days, after such exercise. Unless this Warrant has expired, a new Warrant of like tenor and for such number of shares of Common Stock as the holder of this Warrant shall direct, representing in the aggregate the right to purchase a number of shares of Common Stock with respect to which this Warrant shall not have been exercised, shall also be issued to the holder of this Warrant within such time.

3. Exchange. This Warrant is exchangeable from the date hereof until the expiration of the Warrant Term, upon the surrender thereof by the holder thereof at the Principal Office of the Company, for new Warrants of like tenor registered in such holder's name and representing in the aggregate the right to purchase the number of shares of Common Stock purchasable under the Warrant being exchanged, each of such new Warrants to represent the right to subscribe for and purchase such number of shares of Common Stock as shall be designated by said holder at the time of such surrender.

4. Restrictions on Transfer and Registration Rights. The transferability of this Warrant and the Warrant Shares are subject to the restrictions on transfer set forth below:

(a) Notice of Transfer and Opinion of Counsel. The Warrant Holder, and any other holder of the Warrant by acceptance thereof, agrees that, prior to

any transfer of any Warrant, such holder will give written notice to the Company of such holder's intention to effect such transfer and to comply in all other respects with the provisions of this Section 4. Each such notice shall contain (i) a statement setting forth the intention of such holder's prospective transferee with respect to its retention or disposition of such Warrant, and (ii) unless waived by the Company, an opinion of counsel for such holder (who may be the inside or staff counsel employed by such holder), as to the necessity or non-necessity for registration under the Securities Act of 1933, as amended (the "Securities Act"), and applicable state securities laws in connection with such transfer and stating the factual and statutory bases relied upon by counsel. The following provisions shall then apply:

(A) If in the opinion of counsel for the Company the proposed transfer of such Warrant may be effected without registration or qualification under the Securities Act and any applicable state securities laws, then the registered holder of such Warrant shall be entitled to transfer such Warrant in accordance with the intended method of disposition specified in the statement delivered by such holder to the Company.

(B) If in the opinion of counsel for the Company the proposed transfer of such Warrant may not be effected without registration under the Securities Act or registration or qualification under any applicable state securities laws, the registered holder of such Warrant shall not be entitled to transfer such Warrant until the requisite registration or qualification is effective.

(b) Transfer. Subject to the restrictions on transfer set forth above, this Warrant is transferable, in whole, at the Principal Office of the Company by the registered holder thereof, in person or by duly authorized attorney, upon presentation of the Warrant, properly endorsed, for transfer. Each holder of this Warrant, by holding it, agrees that the Warrant, when endorsed in blank, may be deemed negotiable, and that the holder thereof, when the Warrant shall have been so endorsed, may be treated by the Company and all other persons dealing with the Warrant as the absolute owner thereof for any purpose and as the person entitled to exercise the rights represented by the Warrant, or to the transfer on the books of the Company, any notice to the contrary notwithstanding.

(c) Registration Restrictions. This Warrant and the Warrant Shares have not been registered under the Securities Act, by reason of their issuance in a transaction exempt from the registration requirements of the Securities Act pursuant to the exemption provided in Section 4(2) thereof, and have not been registered under state securities laws by reason of their issuance in a

transaction exempt from such registration requirements. This Warrant and the Warrant Shares may not be sold, transferred or otherwise disposed of unless registered under the Securities Act and applicable state securities laws or exempted from registration. Shares of Common Stock issuable upon exercise of this Warrant will bear the following restrictive legend:

> The shares represented by this certificate have been acquired for investment and have not been registered under the Securities Act of 1933, as amended. The shares may not be sold or transferred in the absence of such registration or an exemption therefrom.
>
> The shares represented by this certificate and the rights of holders thereof are subject to certain restrictions on transfer and other restrictions, and the holder of the shares represented by this certificate (including any holders) are bound by the terms of the original Warrant (copies of which may be obtained from the Company).

All restrictions contained herein shall be binding on any transferee of this Warrant and the Company may require any such transferee to execute an instrument agreeing in writing to be so bound by these restrictions as a condition to transfer.

The Company shall be entitled to give stop transfer instructions to the transfer agent with respect to Warrant Shares in order to enforce the forgoing instructions.

5. Certain Covenants of the Company. The Company covenants and agrees that
---
all shares which may be issued upon the exercise of this Warrant will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issue thereof; and without limiting the generality of the foregoing, the Company covenants and agrees that it will from time to time take all such action as may be requisite to assure that the par value per share of the Common Stock is at all times equal to or less than the then effective purchase price per share of the Common Stock issuable pursuant to this Warrant. The Company further covenants and agrees that during the period within which the rights represented by this Warrant may be exercised, the Company will at all times have authorized, and reserved for the purpose of issue upon exercise of the purchase rights evidenced by this Warrant, a sufficient number of shares of its Common Stock to provide for the exercise of the rights represented by the Warrant.

6. Automatic Termination of Warrant Term. The Warrant Term shall terminate
---
automatically sixty (60) days after the Common Stock of the Company has traded at an average closing price per share as reported on the Nasdaq Stock Market or

the Nasdaq SmallCap Market of The Nasdaq Stock Market, Inc. or at an average closing bid price per share as quoted on the OTC Bulletin Board, as the case may be, of three dollars ($3) or greater for any thirty (30) consecutive trading days during the Warrant Term.

7. Adjustments of Warrant Price. In the event that the Company shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by

payment of a dividend in Common Stock or in any right to acquire Common Stock), or in the event the outstanding shares of Common Stock shall be combined or consolidated, by reverse stock split, reclassification or otherwise, into a lesser number of shares of Common Stock, then the Warrant Price shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate, to avoid dilution of the exercise rights hereunder.

8. Adjustments for Reclassification and Reorganization. In case of any reclassification or change of outstanding securities issuable upon exercise of the Warrant (other than a change in par value, or from par value to no par value, or from no par value to par value or as a result of a subdivision or combination) or in case of any consolidation or merger of the Company with or into another corporation (other than a merger with another corporation in which the Company is the surviving corporation and which does not result in any reclassification or change, other than a change in par value, or from par value to no par value, or from no par value to par value, or as a result of a subdivision or combination of outstanding securities issuable upon the exercise of the Warrant), or in case of any sale or transfer to another corporation of the property of the Company as an entirety or substantially as an entirety, the Company, or such successor or purchasing corporation, as the case may be, shall without payment of any additional consideration therefor, execute new warrants providing that the holder of the Warrant shall have the right to exercise such new warrant (upon terms not less favorable to the holders than those then applicable to the Warrant) and to receive upon such exercise, in lieu of each share of Common Stock theretofore issuable upon exercise of the Warrant, the kind and amount of shares of stock, other securities, money or property receivable upon such reclassification, change, consolidation, merger, sale or transfer by the holder of one share of Common Stock issuable upon exercise of the Warrant had the Warrant been exercised immediately prior to such reclassification, change, consolidation, merger, sale or transfer. Such new warrants shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in Section 7 hereof and this Section 8. The provisions of this Section 8 shall similarly apply to successive reclassifications, changes, consolidations, mergers, sales and transfers.

9. Notices. Whenever the Warrant Price shall be adjusted pursuant to Section 7 hereof, or there shall be a reclassification, reorganization or other event specified in Section 8 hereof, the Company shall promptly prepare a certificate signed by its President or a Vice President and by its Treasurer, setting forth in reasonable detail, as the case may be, the event requiring the adjustment, the amount of the adjustment, the method by which such adjustment was calculated, the Warrant Price after giving effect to such adjustment, and information regarding the execution of new warrants, and shall promptly cause copies of such certificate to be mailed (by first class and postage prepaid) to the registered holders of the Warrant.

In the event the Company shall take any action which pursuant to Section 7 may result in an adjustment of the Warrant Price, or pursuant to Section 8 may result in the execution of new warrants, the Company will give to the registered holders

of the Warrant at their last addresses known to the Company written notice of such action ten (10) days in advance of its effective date in order to afford to such holders of the Warrant an opportunity to exercise the Warrant and to purchase shares of Common Stock of the Company prior to such action becoming effective.

10. Fractional Shares. No fractional shares of Common Stock will be issued in connection with any purchase hereunder.

11. Loss, Theft, Destruction or Mutilation. Upon receipt by the Company of reasonable evidence satisfactory to it of the ownership of and the loss, theft, destruction or mutilation of the Warrant and (in the case of loss, theft or destruction) of reasonable indemnity and (in case of mutilation) upon surrender and cancellation thereof, the Company will execute and deliver, in lieu thereof, new warrant of like tenor.

12. Headings. The description headings of the several sections of this Warrant are inserted for convenience only and do not constitute a part of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its duly authorized officer under its corporate seal, attested by its duly authorized officer, on the date of this Warrant.

ZYNAXIS, INC.

By: /s/ Martyn D. Greenacre

Chief Executive Officer

Attest: /s/ Francis M. Conway

RIDER A

PURCHASE AGREEMENT

Date: _____

TO:

The undersigned, pursuant to the provisions set forth in the attached Warrant, hereby agrees to purchase shares of Common Stock covered by such Warrant, and makes payment herewith in full thereof at the price per share provided by this Warrant.

Signature:_____

Address: _____

_____

* * *

For Value Received,
hereby sells, assigns and transfers all of the rights of the undersigned under the within Warrant, with respect to the number of shares of Common Stock covered

by such Warrant to:

NAME OF ASSIGNEE	ADDRESS	NO. OF SHARES

and appoints _____ Attorney to make such transfer of the books of Zynaxis, Inc. maintained for such purpose, with full power of substitution in the premises.

Dated: Signature:_____

Witness: _____

THE WARRANT REPRESENTED HEREBY HAS BEEN ACQUIRED FOR INVESTMENT AND HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. THE WARRANT MAY NOT BE SOLD OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN EXEMPTION THEREFROM.

THE WARRANT REPRESENTED HEREBY AND THE RIGHTS OF HOLDERS THEREOF ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND OTHER RESTRICTIONS, AS DESCRIBED IN SECTION 4 OF THIS WARRANT.

Void after 5:00 p.m. (Eastern Time), on the last day of the Warrant Term, as provided herein.

Amended and restated
Warrant to Purchase
100,000 Shares of
Common Stock

Date: May 3, 1996.

AMENDED AND RESTATED WARRANT TO PURCHASE COMMON STOCK OF ZYNAXIS, INC.

THIS CERTIFIES THAT, FOR VALUE RECEIVED, Plexus Ventures, Inc. (herein called "Warrant Holder") or registered assigns, is the holder of a Warrant and is entitled to purchase, subject to the provisions of this Warrant, from Zynaxis, Inc., a Pennsylvania corporation (the "Company"), at any time and from time to time during the Warrant Term, 100,000 fully paid, validly issued and nonassessable shares of Common Stock, par value $.01 per share, of the Company ("Common Stock"), at the Warrant Price. The Warrant Price and number and kind of securities issuable hereunder are subject to adjustments as provided herein.

1. Definition of Principal Terms. For the purpose of this Warrant:

(a) "Promissory Note" means the Promissory Note dated May 3, 1996, issued by the Company to the Warrant Holder.

(b) "Warrant" means the Warrant to purchase Common Stock issued by the Company in connection with and in consideration for the funding received

pursuant to the Promissory Note and any and all Warrants which are issued in exchange or substitution for any outstanding Warrant pursuant to the terms of that Warrant.

(c) "Warrant Price" means the price per share at which shares of Common Stock are purchasable hereunder, as such price may be adjusted from time to time hereunder, and shall initially be equal to $1.00.

(d) "Warrant Shares" means shares of Common Stock purchased upon exercise of the Warrants.

(e) "Warrant Term" means, except as provided in Section 6 hereof, the period commencing on May 3, 1996 and ending at 5:00 p.m. (Eastern Time) on May 2, 2001.

2. Exercise of Warrants. This Warrant may be exercised during the Warrant
   ---
Term in whole or in part by the surrender of the Warrant, with the purchase agreement attached hereto as Rider A properly completed and executed, at the principal office of the Company at 371 Phoenixville Pike, Malvern, Pennsylvania 19355 or such other location which shall at that time be the principal office of the Company (the "Principal Office"), and upon payment to it by wire transfer, certified check or bank draft to the order of the Company for the purchase price for the Warrant Shares to be purchased upon such exercise. The person entitled to the Warrant Shares so purchased shall be treated for all purposes as the holder of such Warrant Shares as of the close of business on the date of exercise and certificates for the Warrant Shares so purchased shall be delivered to the person so entitled within a reasonable time, not exceeding thirty (30) days, after such exercise. Unless this Warrant has expired, a new Warrant of like tenor and for such number of shares of Common Stock as the holder of this Warrant shall direct, representing in the aggregate the right to purchase a number of shares of Common Stock with respect to which this Warrant shall not have been exercised, shall also be issued to the holder of this Warrant within such time.

3. Exchange. This Warrant is exchangeable from the date hereof until the
   ---
expiration of the Warrant Term, upon the surrender thereof by the holder thereof at the Principal Office of the Company, for new Warrants of like tenor registered in such holder's name and representing in the aggregate the right to purchase the number of shares of Common Stock purchasable under the Warrant being exchanged, each of such new Warrants to represent the right to subscribe for and purchase such number of shares of Common Stock as shall be designated by said holder at the time of such surrender.

4. Restrictions on Transfer and Registration Rights. The transferability
   ---
of this Warrant and the Warrant Shares are subject to the restrictions on transfer set forth below:

(a) Notice of Transfer and Opinion of Counsel. The Warrant Holder, and any other holder of the Warrant by acceptance thereof, agrees that, prior to

any transfer of any Warrant, such holder will give written notice to the Company of such holder's intention to effect such transfer and to comply in all other respects with the provisions of this Section 4. Each such notice shall contain (i) a statement setting forth the intention of such holder's prospective transferee with respect to its retention or disposition of such Warrant, and (ii) unless waived by the Company, an opinion of counsel for such holder (who may be the inside or staff counsel employed by such holder), as to the necessity or non-necessity for registration under the Securities Act of 1933, as amended (the "Securities Act"), and applicable state securities laws in connection with such transfer and stating the factual and statutory bases relied upon by counsel. The following provisions shall then apply:

(A) If in the opinion of counsel for the Company the proposed transfer of such Warrant may be effected without registration or qualification under the Securities Act and any applicable state securities laws, then the registered holder of such Warrant shall be entitled to transfer such Warrant in accordance with the intended method of disposition specified in the statement delivered by such holder to the Company.

(B) If in the opinion of counsel for the Company the proposed transfer of such Warrant may not be effected without registration under the Securities Act or registration or qualification under any applicable state securities laws, the registered holder of such Warrant shall not be entitled to transfer such Warrant until the requisite registration or qualification is effective.

(b) Transfer. Subject to the restrictions on transfer set forth above, this Warrant is transferable, in whole, at the Principal Office of the Company by the registered holder thereof, in person or by duly authorized attorney, upon presentation of the Warrant, properly endorsed, for transfer. Each holder of this Warrant, by holding it, agrees that the Warrant, when endorsed in blank, may be deemed negotiable, and that the holder thereof, when the Warrant shall have been so endorsed, may be treated by the Company and all other persons dealing with the Warrant as the absolute owner thereof for any purpose and as the person entitled to exercise the rights represented by the Warrant, or to the transfer on the books of the Company, any notice to the contrary notwithstanding.

(c) Registration Restrictions. This Warrant and the Warrant Shares have

not been registered under the Securities Act, by reason of their issuance in a transaction exempt from the registration requirements of the Securities Act pursuant to the exemption provided in Section 4(2) thereof, and have not been registered under state securities laws by reason of their issuance in a transaction exempt from such registration requirements. This Warrant and the Warrant Shares may not be sold, transferred or otherwise disposed of unless registered under the Securities Act and applicable state securities laws or exempted from registration. Shares of Common Stock issuable upon exercise of this Warrant will bear the following restrictive legend:

> The shares represented by this certificate have been acquired for investment and have not been registered under the Securities Act of 1933, as amended. The shares may not be sold or transferred in the absence of such registration or an exemption therefrom.
>
> The shares represented by this certificate and the rights of holders thereof are subject to certain restrictions on transfer and other restrictions, and the holder of the shares represented by this certificate (including any holders) are bound by the terms of the original Warrant (copies of which may be obtained from the Company).

All restrictions contained herein shall be binding on any transferee of this Warrant and the Company may require any such transferee to execute an instrument agreeing in writing to be so bound by these restrictions as a condition to transfer.

The Company shall be entitled to give stop transfer instructions to the transfer agent with respect to Warrant Shares in order to enforce the foregoing instructions.

5. Certain Covenants of the Company. The Company covenants and agrees that
   ---

all shares which may be issued upon the exercise of this Warrant will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issue thereof; and without limiting the generality of the foregoing, the Company covenants and agrees that it will from time to time take all such action as may be requisite to assure that the par value per share of the Common Stock is at all times equal to or less than the then effective purchase price per share of the Common Stock issuable pursuant to this Warrant. The Company further covenants and agrees that during the period within which the rights represented by this Warrant may be exercised, the Company will at all times have authorized, and reserved for the purpose of issue upon exercise of the purchase rights evidenced by this Warrant, a sufficient number of shares of its Common Stock to provide for the exercise of the rights represented by the Warrant.

6. Automatic Termination of Warrant Term. The Warrant Term shall terminate automatically sixty (60) days after the Common Stock of the Company has traded at an average closing price per share as reported on the Nasdaq Stock Market or the Nasdaq SmallCap Market of The Nasdaq Stock Market, Inc. or at an average closing bid price per share as quoted on the OTC Bulletin Board, as the case may be, of three dollars ($3) or greater for any thirty (30) consecutive trading days during the Warrant Term.

7. Adjustments of Warrant Price. In the event that the Company shall effect a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock (by stock split, reclassification or otherwise than by

payment of a dividend in Common Stock or in any right to acquire Common Stock), or in the event the outstanding shares of Common Stock shall be combined or consolidated, by reverse stock split, reclassification or otherwise, into a lesser number of shares of Common Stock, then the Warrant Price shall, concurrently with the effectiveness of such event, be proportionately decreased or increased, as appropriate, to avoid dilution of the exercise rights hereunder.

8. Adjustments for Reclassification and Reorganization. In case of any reclassification or change of outstanding securities issuable upon exercise of the Warrant (other than a change in par value, or from par value to no par value, or from no par value to par value or as a result of a subdivision or combination) or in case of any consolidation or merger of the Company with or into another corporation (other than a merger with another corporation in which the Company is the surviving corporation and which does not result in any reclassification or change, other than a change in par value, or from par value to no par value, or from no par value to par value, or as a result of a subdivision or combination of outstanding securities issuable upon the exercise of the Warrant), or in case of any sale or transfer to another corporation of the property of the Company as an entirety or substantially as an entirety, the Company, or such successor or purchasing corporation, as the case may be, shall without payment of any additional consideration therefor, execute new warrants providing that the holder of the Warrant shall have the right to exercise such new warrant (upon terms not less favorable to the holders than those then applicable to the Warrant) and to receive upon such exercise, in lieu of each share of Common Stock theretofore issuable upon exercise of the Warrant, the kind and amount of shares of stock, other securities, money or property receivable upon such reclassification, change, consolidation, merger, sale or transfer by the holder of one share of Common Stock issuable upon exercise of the Warrant had the Warrant been exercised immediately prior to such reclassification, change, consolidation, merger, sale or transfer. Such new

warrants shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in Section 7 hereof and this Section 8. The provisions of this Section 8 shall similarly apply to successive reclassifications, changes, consolidations, mergers, sales and transfers.

9. Notices. Whenever the Warrant Price shall be adjusted pursuant to
---
Section 7 hereof, or there shall be a reclassification, reorganization or other event specified in Section 8 hereof, the Company shall promptly prepare a certificate signed by its President or a Vice President and by its Treasurer, setting forth in reasonable detail, as the case may be, the event requiring the adjustment, the amount of the adjustment, the method by which such adjustment was calculated, the Warrant Price after giving effect to such adjustment, and information regarding the execution of new warrants, and shall promptly cause copies of such certificate to be mailed (by first class and postage prepaid) to the registered holders of the Warrant.

In the event the Company shall take any action which pursuant to Section 7 may result in an adjustment of the Warrant Price, or pursuant to Section 8 may result in the execution of new warrants, the Company will give to the registered holders

of the Warrant at their last addresses known to the Company written notice of such action ten (10) days in advance of its effective date in order to afford to such holders of the Warrant an opportunity to exercise the Warrant and to purchase shares of Common Stock of the Company prior to such action becoming effective.

10. Fractional Shares. No fractional shares of Common Stock will be issued
---
in connection with any purchase hereunder.

11. Loss, Theft, Destruction or Mutilation. Upon receipt by the Company of
---
reasonable evidence satisfactory to it of the ownership of and the loss, theft, destruction or mutilation of the Warrant and (in the case of loss, theft or destruction) of reasonable indemnity and (in case of mutilation) upon surrender and cancellation thereof, the Company will execute and deliver, in lieu thereof, new warrant of like tenor.

12. Headings. The description headings of the several sections of this
---
Warrant are inserted for convenience only and do not constitute a part of this Warrant.

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by

its duly authorized officer under its corporate seal, attested by its duly authorized officer, on the date of this Warrant.

ZYNAXIS, INC.

By: /s/ Martyn D. Greenacre

Chief Executive Officer

Attest: /s/ Francis M. Conway

RIDER A

PURCHASE AGREEMENT

Date:_____

TO:

The undersigned, pursuant to the provisions set forth in the attached Warrant, hereby agrees to purchase shares of Common Stock covered by such Warrant, and makes payment herewith in full thereof at the price per share provided by this Warrant.

Signature:_____

Address: _____

_____

* * *

For Value Received,
hereby sells, assigns and transfers all of the rights of the undersigned under the within Warrant, with respect to the number of shares of Common Stock covered by such Warrant to:

NAME OF ASSIGNEE	ADDRESS	NO. OF SHARES

and appoints _____ Attorney to make such transfer of the books of Zynaxis, Inc. maintained for such purpose, with full power of substitution in the premises.

Dated:

Signature:_____

Witness: _____

EXCLUSIVE LICENSE AGREEMENT WITH PURCHASE OPTION

THIS EXCLUSIVE LICENSE AGREEMENT WITH PURCHASE OPTION ("Agreement") effective the 23rd day of September, 1996, is made between Phanos Technologies, Inc. a California corporation ("Phanos"), with offices at 8559 Higuera Street, Culver City, California 90232, and Zynaxis, Inc., a Pennsylvania corporation ("Zynaxis"), with offices at 371 Phoenixville Pike, Malvern, Pennsylvania 19355.

WHEREAS:

A. Zynaxis is the owner of certain intellectual property rights under various patents, patent applications, trademarks and associated goodwill, grants, research and feasibility agreements ("Zynaxis Intellectual Property", identified in Appendix I attached hereto) and of certain proprietary know-how, technical data, procedures and research results ("Zynaxis Know-How") relating to agents which improve the therapeutic performance of a therapeutically-active compound by inclusion of a variety of structures which include lipophilic hydrocarbon chains that can insert into cell membranes or other hydrophobic regions ("Molecular Delivery Systems"), said Zynaxis Intellectual Property and Zynaxis Know-How relating to Molecular Delivery Systems being referred to herein collectively as "Zynaxis Information";

B. Zynaxis wishes to maintain the Zynaxis Information as secret and confidential and to preserve the value of these assets;

C. Phanos wishes to obtain immediately an exclusive license under the Zynaxis Information, and to obtain immediately an option to acquire full ownership of the Zynaxis Information in order to give Phanos a period of time during which it can further evaluate the Zynaxis Information and make a decision whether to exercise such option;

D. Phanos wishes to maintain access to certain Zynaxis personnel with specialized know-how in the design, synthesis and characterization of Molecular Delivery Systems and to the results of certain projects ongoing under Zynaxis-held Small Business Innovative Research Grants during the term of the exclusive license and option granted herein;

NOW, THEREFORE, in consideration of the promises and mutual covenants and agreements contained herein, the parties agree as follows:

1. Zynaxis shall disclose to Phanos the Zynaxis Information. Phanos shall use the Zynaxis Information solely and exclusively for the purpose of operating under the exclusive license granted herein and for evaluating whether Phanos wishes to exercise the option to purchase the Zynaxis Information granted herein.

2. Exclusive License Grant. Zynaxis grants to Phanos an exclusive worldwide license under the Zynaxis Information subject to any third party rights previously conveyed under existing grants and/or research and feasibility agreements identified in Appendix II attached hereto (the "Exclusive License"). The term of the Exclusive License shall run until the expiration of the last-to-expire Zynaxis Intellectual Property, unless sooner terminated in accordance with the provisions of this Agreement.

3. Option Grant. Zynaxis grants to Phanos an exclusive option to purchase (the "Option") the full right, title and interest in, to and under all or so much of the Zynaxis Information as Phanos, in its sole discretion, may wish to acquire. The Option shall be exercisable by Phanos during the one hundred twenty (120) day period beginning upon the execution date of this Agreement ("Option Period") by providing written notification to Zynaxis. Within five (5) days following receipt of such written notification, or at such later time as the parties may agree, the parties shall execute a mutually agreeable Asset Purchase Agreement and Phanos shall pay to Zynaxis the Purchase Price identified in paragraph 4 below. If Zynaxis delays the execution of a previously agreed-upon Asset Purchase Agreement, and the delay is exclusively the fault of Zynaxis, the Purchase Price identified in paragraph 4 below shall be reduced by three percent (3%), and shall be reduced an additional three percent (3%) for every subsequent thirty day period during which Zynaxis fails to execute an Asset Purchase Agreement.

4. One-Time Payments. Phanos shall pay to Zynaxis upon execution of this agreement a non-refundable Exclusive Option Fee of five thousand dollars ($5,000). Additionally, Phanos shall pay to Zynaxis an Exclusive License Fee of one hundred ninety five thousand dollars ($195,000), of which forty five thousand dollars ($45,000) shall be paid to Zynaxis upon execution of this agreement and one hundred fifty thousand dollars ($150,000) shall be paid to Zynaxis within the thirty (30) day period beginning upon the execution date of this Agreement. Should Phanos desire to exercise the Option granted in paragraph 3 above, Phanos shall pay to Zynaxis the Purchase Price of seven hundred and twenty five thousand dollars ($725,000), against which the Exclusive Option Fee and Exclusive License Fee amounts already paid by Phanos shall be fully credited.

5. Running Royalties on Sales. Phanos shall pay to Zynaxis under the Exclusive License running royalties equal to fifteen percent (15%) of all sums that Phanos receives from worldwide sales of products that embody the Zynaxis Information.

6. Non-Exercise of Option; Cancellation of Exclusive License. If Phanos does not exercise the Option granted in paragraph 3 above during the Option Period, Zynaxis may cancel the Exclusive License by re-paying to Phanos the Exclusive License Fee of one hundred ninety five thousand dollars ($195,000) within thirty days following the expiration of the Option Period.

7. Zynaxis, during the Option Period, shall not license, sell, encumber, or

otherwise dispose of any rights in the Zynaxis Information to any third party without the written consent of Phanos, and shall use all reasonable efforts to preserve the value of the Zynaxis Information.

8. Zynaxis, during the Option Period, will use all reasonable efforts to maintain staff, funding and research progress on projects ongoing under Zynaxis-held Small Business Innovation Research (SBIR) Grants R44 HL1626-03 and R43 H155883-01, subject to the limits of funding provided by NIH therefor.

9. Upon the exercise of the Option by Phanos, Zynaxis will use all reasonable efforts to obtain any consent needed to effect the transfer of third-party agreements from Zynaxis to Phanos, and shall cooperate fully with Phanos in executing and delivering such other documents as may be needed or reasonably desired by Phanos to perfect or evidence its title, including the execution of documents suitable for recordation in the U.S. Patent and Trademark Office and the patent offices of foreign countries.

10. Zynaxis shall not disclose the identity or nationality of Phanos or any individuals associated therewith without the prior written consent of Phanos, except as is required by government regulation.

11. Phanos shall keep confidential and not disclose the Zynaxis Information to any person or business ally not having entered into a Confidentiality Agreement with Zynaxis without the prior written consent of Zynaxis and shall not use the Zynaxis Information for any purpose other than in furtherance of its operations under the exclusive license and Option granted herein.

12. The obligation of confidentiality shall survive termination and/or expiration of this Agreement and shall expire five years following the date of execution of this Agreement. The obligation of confidentiality shall not extend to information which,

    (a) prior to receipt from Zynaxis was known to Phanos;

    (b) subsequent to receipt from Zynaxis is received by Phanos from another entity who has no obligation of confidentiality to Zynaxis with respect to such information; or

    (c) is or becomes available to the public through no fault of Phanos.

13. The standard of care exercised by Phanos to protect the Zynaxis Information shall be no less than the degree of care used by Phanos acting reasonably and prudently to protect its own confidential and proprietary information.

14. In the event that Phanos does not exercise its Option and Zynaxis terminates the exclusive license pursuant to paragraph 3 above by returning the Exclusive License Fee to Phanos, Phanos shall return to Zynaxis any and all materials in relation to the Zynaxis Information delivered to it by Zynaxis

pursuant to this Agreement and Phanos shall not retain copies of such material for any purpose. Nothing in this Agreement shall hinder or be construed so as to hinder Phanos' rights and activities under the Asset Purchase Agreement and Reagent Business Operation Agreement executed by Zynaxis and Phanos on June 21, 1995.

15. Grant of Security Interest. The parties recognize that Phanos has already committed and will continue to commit considerable effort and financial resources to the development of products and markets for products embodying the Zynaxis Information, and that Zynaxis' non-performance of or inability to perform the obligations set forth in this Agreement could cause Phanos to suffer expectancy damages (for example, the amount that Phanos could realize from the sale or license to a third party of the Zynaxis Information, less the Purchase Price) in excess of the Purchase Price. Accordingly, Phanos, as additional security for the complete and timely performance and satisfaction of all Zynaxis' obligations hereunder hereby grants unto Phanos, its successors and assigns, a continuing lien and security interest in the patents, patent applications and trademark registrations (and associated goodwill) identified in Attachment I, together with all renewals, reissues and extensions thereof, and all claims for damages by reason of past infringement with the right to sue for and collect the same, and all license rights, to Phanos. As used herein, the term "obligations" shall mean all duties of payment and performance, whether direct or indirect, both now existing and arising from time to time, owed by Zynaxis to Phanos under this Agreement. Zynaxis shall cooperate fully with Phanos in executing and delivering such other documents as may be needed or reasonably desired by Phanos to perfect or evidence its security interest, including the execution of a document evidencing the Exclusive License and security interests granted herein and which is suitable for recordation in the U.S. Patent and Trademark Office.

16. This Agreement shall be governed by and construed in accordance with the laws of the State of California. This Agreement and any and all rights and obligations of a party hereunder may be assigned, delegated, sold, transferred, sublicensed or otherwise disposed of by either party (except where such would be inconsistent with the obligations of that party hereunder) upon written notification to the other party.

17. In the event that any provision of this Agreement shall be held to be invalid, illegal, or otherwise voidable or unenforceable, such provision shall be deemed to be severed from the Agreement and the balance of the Agreement shall continue in full force and effect.

18. Entire Agreement and Integration. This Agreement integrates all of the terms and conditions herein and constitutes the entire agreement of the parties and supersedes all prior agreements and understandings, both oral and written, between the parties with respect to the subject matter hereof.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date first

above written.

Zynaxis, Inc.	Phanos Technologies, Inc.
By: /s/ Martyn D. Greenacre	By: /s/ Shotaro Kawano
Chief Executive Officer	President

PHANOS TECHNOLOGIES, INC.
C/O CYBERSTUDIOS
8559 HIGUERA ST.
CULVER CITY, CA 90232

October 17, 1996

Martyn Greenacre
Zynaxis, Inc.
371 Phoenixville Pike
Malvern, PA 19355

RE: EXCLUSIVE LICENSE AGREEMENT WITH PURCHASE OPTION

Dear Martyn:

Reference is made to the signed Exclusive License Agreement with Purchase Option dated September 23, 1996 (the "Agreement") between Phanos Technologies, Inc. and Zynaxis, Inc.

Paragraph 4 of the Agreement is hereby amended to provide that the $150,000 portion of the Exclusive License Fee described therein be payable $75,000 on October 18, 1996 and $75,000 on October 23, 1996.

Paragraph 5 is amended to provide that the Running Royalties on Sales will terminate upon the expiration of the last patent included in the Zynaxis Information.

Paragraph 11 is amended to provide that Phanos may disclose the Zynaxis Information to a third party if that third party has entered into a Confidentiality Agreement with Phanos in a form reasonably acceptable to Zynaxis.

The last sentence in Paragraph 14 is amended to include reference to the Marketing Rights Agreement dated July 24, 1996.

Other than those specific changes noted above, the Agreement shall remain unchanged and in full force and effect.

Yours sincerely,

Phanos Technologies, Inc.

by: /s/ Patrick Murray
---

its: Secretary

AGREED AND ACCEPTED:

Zynaxis, Inc.

by: /s/ Martyn D. Greenacre
---

its: Chief Executive Officer

cc: Shotaro Kawano
Bart Newland, Esq.

<TABLE> <S> <C>

<ARTICLE> 5
<LEGEND>
THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM SEC FORM 10-Q AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.
</LEGEND>

<S>	<C>
<PERIOD-TYPE>	9-MOS
<FISCAL-YEAR-END>	DEC-31-1996
<PERIOD-START>	JAN-01-1996
<PERIOD-END>	SEP-30-1996
<CASH>	223,177
<SECURITIES>	0
<RECEIVABLES>	134,111
<ALLOWANCES>	0
<INVENTORY>	0
<CURRENT-ASSETS>	445,005
<PP&E>	5,940,589
<DEPRECIATION>	2,060,383
<TOTAL-ASSETS>	2,933,269
<CURRENT-LIABILITIES>	1,752,665
<BONDS>	0
<PREFERRED-MANDATORY>	0
<PREFERRED>	2,554,305
<COMMON>	102,980
<OTHER-SE>	1,633,768
<TOTAL-LIABILITY-AND-EQUITY>	2,933,269
<SALES>	0
<TOTAL-REVENUES>	1,689,205
<CGS>	0
<TOTAL-COSTS>	0
<OTHER-EXPENSES>	2,781,827
<LOSS-PROVISION>	0
<INTEREST-EXPENSE>	31,731
<INCOME-PRETAX>	(1,994,676)
<INCOME-TAX>	0
<INCOME-CONTINUING>	(1,994,676)
<DISCONTINUED>	0
<EXTRAORDINARY>	0
<CHANGES>	0
<NET-INCOME>	(1,994,676)
<EPS-PRIMARY>	(.20)
<EPS-DILUTED>	(.20)

</TABLE>