

REGISTRATION NO. 333-33838

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

AMENDMENT NO. 1

TO

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

CYTOCLONAL PHARMACEUTICS INC.
(Name of Small Business Issuer in its Charter)

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DELAWARE	75-2402409
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

</TABLE>

9000 HARRY HINES BLVD., SUITE 621, DALLAS, TEXAS 75235 (214) 353-2922
(Address, including zip code, and telephone number, including area code,
of registrants's principal executive offices)

ARTHUR P. BOLLON, Ph.D.
CHAIRMAN & CHIEF EXECUTIVE OFFICER
CYTOCLONAL PHARMACEUTICS INC.
9000 HARRY HINES BLVD., SUITE 621, DALLAS TEXAS 75235
(214) 353-2922
(Name, address, including zip code, and telephone number, including area code,
of agent for service)

Copies to:
ROBERT H. COHEN, ESQ.
MORRISON COHEN SINGER & WEINSTEIN, LLP
750 LEXINGTON AVENUE
NEW YORK, NEW YORK 10022
(212) 735-8600

Approximate date of commencement of proposed sale to the public:
AS SOON AS PRACTICABLE AFTER THIS REGISTRATION STATEMENT BECOMES EFFECTIVE.

If the only securities being registered on this form are being offered
pursuant to dividend or interest, reinvestment plans please check the following
box. []

If any of the securities being registered on this form are to be offered on
a delayed or continuous basis pursuant to Rule 415 under the Securities Act of
1933, other than securities offered only in connection with dividend or interest
reinvestment plans, check the following box. [X]

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

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

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. []

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

CALCULATION OF REGISTRATION FEE

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TITLE OF SECURITIES TO BE REGISTERED		PROPOSED MAXIMUM AMOUNT TO BE REGISTERED(1)	PROPOSED MAXIMUM OFFERING PRICE PER SHARE(2)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(2)	AMOUNT OF REGISTRATION FEE
<S>	<C>	<C>	<C>	<C>	
Common Stock(3).....		194,909	\$8.48	\$1,652,828.32	\$ 436.35
Common Stock(4).....		194,909	\$8.48	\$1,652,828.32	\$ 436.35
Common Stock(5).....		194,909	\$8.48	\$1,652,828.32	\$ 436.35
Common Stock(6).....		194,909	\$8.48	\$1,652,828.32	\$ 436.35
Common Stock(7).....		891,116	\$8.48	\$7,556,663.68	\$1,994.96
Common Stock(8).....		62,500	\$8.48	\$ 530,000	\$ 139.92
Common Stock(9).....		146,988	\$8.48	\$1,246,458.24	\$ 329.06
TOTAL.....	1,880,240			\$4,209.34	
Amount previously paid.....				\$4,054.31	
Amount owed.....				\$ 155.03	

</TABLE>

(Footnotes on next page)

(1) Includes an indeterminate number of additional shares of common stock as may from time to time become issuable upon exercise of the options and warrants by reason of stock splits, stock dividends and similar transactions, which shares are registered hereunder pursuant to Rule 416 under the Securities Act of 1933, as amended.

(2) Estimated solely for the purpose of calculating the amount of the registration fee, pursuant to Rule 457 of the Securities Act of 1933, as amended, based on the average of the high and low prices for the shares of common stock of Cytoconal Pharmaceuticals Inc. as reported by the Nasdaq SmallCap Market on May 9, 2000.

- (3) Issuable upon exercise of the Unit Purchase Option.
- (4) Issuable upon exercise of the Class C Warrant.
- (5) Issuable upon exercise of the Class D Warrants included in the Class C Warrants.
- (6) Issuable upon exercise of the Class D Warrant included in the Unit Purchase Option.
- (7) Issuable upon exercise of options and warrants issued by the Registrant.
- (8) Issuable upon exercise of Class A Warrants.
- (9) Issuable upon exercise of Class B Warrants.

SUBJECT TO COMPLETION DATED MAY 11, 2000

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is declared effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

CYTOCLONAL PHARMACEUTICS INC.

1,880,240 SHARES OF COMMON STOCK

The securityholders listed on p. 12 of this prospectus are offering and selling a total of 1,880,240 shares of Common Stock for their accounts.

Our Common Stock is currently quoted on the Nasdaq SmallCap Market System under the symbol "CYPH."

INVESTING IN THESE SECURITIES INVOLVES A HIGH DEGREE OF RISK.
SEE "RISK FACTORS" BEGINNING ON PAGE 4 OF THIS PROSPECTUS AND "DILUTION."

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this Prospectus is May , 2000.

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WHERE YOU CAN FIND MORE INFORMATION

We are a public company. We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the SEC's public reference rooms in Washington, D.C., New York, New York and Chicago, Illinois. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. Our SEC filings are also available to the public at the SEC's web site at <http://www.sec.gov>.

The SEC allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings made with the SEC under Section 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934 until the Selling Securityholders sell all of their shares of Common Stock. This prospectus is part of a registration statement we filed with the SEC.

1. Current Report on Form 8-K filed with the SEC on February 9, 2000;
2. Annual Report on Form 10-K for the fiscal year ended December 31, 1999;
3. Proxy statement filed with the SEC on July 15, 1999 pursuant to Regulation 14A under the Exchange Act of 1934 ("the Exchange Act"); and
4. The description of our Common Stock set forth in our Registration Statement filed under Section 12 of the Exchange Act on Form 8-A on October 2, 1995, and any amendment or report filed for the purpose of updating any such description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address:

Cytoclonal Pharmaceuticals Inc.
9000 Harry Hines Boulevard
Suite 621
Dallas, Texas 75235
Attention: Daniel Shusterman, Esq.
Telephone: (214) 353-2922

You should rely only on the information incorporated by reference or provided in this prospectus or any supplement. We have not authorized anyone else to provide you with different information. The Selling Securityholders will not make an offer of these shares of Common Stock in any state where the offer is not permitted. You should not assume that the information in this prospectus or any supplement is accurate as of any date other than the date on the front of those documents.

PROSPECTUS SUMMARY

This summary is not complete and may not contain all of the information that you should consider before investing in the securities. You should read the entire prospectus carefully. Unless we otherwise say so, when we discuss our outstanding securities, we exclude all of our shares of common stock issuable upon the exercise of currently outstanding warrants and options and the conversion of our convertible securities.

We are a biopharmaceutical company located in Dallas, Texas. Our goal is to develop products to identify, treat and prevent cancer and other diseases. To date, our strategy has been to license technologies in their early development stages from research and educational institutions and further develop such technologies to the point where we can then sublicense them to commercial entities. Through our research and development efforts and agreements with other research institutions and biotechnology companies, we have acquired and developed rights to certain proprietary technology.

At the present time, we are focusing our attention and resources on a collaboration agreement we have with Bristol-Myers Squibb Company, Inc. for the production of Paclitaxel using fermentation and genetic engineering. Paclitaxel is a drug which has proven to be effective in treating refractory ovarian, breast and non-small cell lung cancer and other cancer indications in preliminary clinical trials. Presently, however, Paclitaxel is made from the inner bark and needles of the slow-growing Pacific yew tree. Our scientists are working in cooperation with Bristol-Myers Squibb to develop a system for manufacturing Paclitaxel in commercial qualities and at lower costs. Other areas of focus include the treatment of polycystic kidney disease with Paclitaxel or Paclitaxel Alternative, a proprietary drug design program using Quantum Core Technology(TM), our Human Gene Discovery Program and OASIS(TM), our optimized antisense library for regulating genes. "Anti-sense therapeutics" are drugs designed to essentially "turn off" genes involved in different diseases and to prevent such genes from growing or duplicating. Other programs, which involve the production of Telomerase, the so called "immortality enzyme," the use of an anti-estrogen peptide for breast cancer as a potential alternative to Tamoxifen and our vaccine program are being pursued at modest levels. Such therapeutics may help us develop future products or alternatives to our main programs if unforeseen problems develop. However, there can be no assurance that we will be able to develop such products or alternatives.

ORGANIZATIONAL HISTORY

We were originally incorporated in the state of Texas in September 1991 under the name Bio Pharmaceuticals, Inc. In November 1991, we changed our name to Cytoclonal Pharmaceuticals Inc. We were then reincorporated in the state of Delaware by merger into a wholly-owned Delaware subsidiary in January 1992. Our executive offices are located at 9000 Harry Hines Boulevard, Suite 621, Dallas, Texas 75235 and our telephone number is (214) 353-2922.

THE OFFERING

The Selling Securityholders are using this prospectus to offer Common Stock issuable upon exercise of options and warrants, Common Stock issuable upon exercise of Class A Warrants and Class B Warrants issued in a private placement in 1995 and Common Stock underlying Unit Purchase Options issued to the underwriter in our initial public offering in November 1995. Each unit consisted of one share of our Common Stock, one Class C Warrant, and one Class D Warrant. Each Class C Warrant is exercisable until November 2, 2000 for one share of Common Stock and one Class D Warrant for \$6.50, subject to adjustment in certain circumstances. Each Class D Warrant is exercisable until November 2, 2000 for one share of Common Stock for \$8.75, subject to adjustment in certain circumstances. Each Class A Warrant is exercisable until November 7, 2000 for

.40 shares of Common Stock at \$3.75 per share. Each Class B Warrant is exercisable until November 7, 2000 for .40 shares of Common Stock at \$4.375 per share. Of the 1,880,240 shares of Common Stock included in this prospectus, 891,116 are issuable upon the exercise of options and warrants, 62,500 are issuable upon exercise of the Class A Warrants, 146,988 are issuable upon exercise of the Class B Warrants, 194,909 are issuable upon exercise of the Unit Purchase Options, 194,909 are issuable upon the exercise of Class C Warrants, 194,909 are issuable upon the exercise of Class D Warrants underlying such Class C Warrants and 194,909 are issuable upon the exercise of the Class D Warrants included in the units.

Securities Being Offered:

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Warrants Common Stock
and Options -- included in this
including the prospectus
Class A Warrants
and Class B
Warrants

Unit Common Stock
 -- included in this
 prospectus

Class C Warrant Common Stock
 -- included in this
 prospectus

Class D Warrant Common Stock
 -- included in this
 prospectus

Class D Warrant Common Stock
 -- included in this
 prospectus

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Before this offering as of May 5, 2000:

COMMON STOCK outstanding, excluding shares of Common Stock which are issuable upon the exercise of existing warrants and options.....	15,648,494
Series A Preferred Stock.....	734,797

Upon the completion of this offering:

COMMON STOCK outstanding, assuming (i) all of the Class C Warrants and Class D Warrants are exercised, including 389,818 Class D Warrants issuable upon the exercise of the 194,909 Class C Warrants and 194,909 Unit Purchase Options and (ii) all of the Options and Warrants included in this prospectus are exercised.....	17,528,734
Series A Preferred Stock.....	734,797

RISK FACTORS:..... See page 4.

USE OF PROCEEDS:

We will receive the proceeds when, and if the Options, Warrants, Unit Purchase Options, Class C Warrants, and Class D Warrants are exercised, however, there can be no assurance that such options and warrants will be exercised. We intend to utilize the proceeds from the exercise of the Options, Warrants, Unit Purchase Options, the Class C Warrants and the Class D Warrants to fund our research and development and general corporate purposes including paying royalties and licensing fees, and working capital and operating expenses..... See "Use of Proceeds."

DIVIDEND POLICY:

We currently intend to retain all future earnings development and growth of our business. We do not anticipate paying cash dividends..... See "Dividend Payment"

NASDAQ SMALLCAP MARKET SYMBOLS:

Common Stock -- CYPH

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SUMMARY FINANCIAL INFORMATION

SELECTED FINANCIAL DATA

The following selected financial data has been derived from our audited financial statements. Our historical financial statements as of December 31, 1999 and 1998 and for each of the years in the three year period December 31, 1999, including the notes thereto, have been audited by Richard A. Eisner & Company, LLP, our independent auditors, and are incorporated in this prospectus by reference to our annual report on Form 10-K. The following data should be read in conjunction with such financial statements.

STATEMENT OF OPERATIONS DATA

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	YEAR ENDED DECEMBER 31,		
	1997	1998	1999
	-----	-----	-----
<S>	<C>	<C>	<C>
Revenue.....		\$ 1,183,000	\$ 1,375,000
Research and development expenses.....	\$ 1,469,000	1,692,000	2,332,000
General and administrative expenses.....	1,888,000	2,500,000	3,194,000
Net interest expense (income).....	(105,000)	(281,000)	(216,000)
Cumulative effect of a change in accounting principle on prior years.....		(422,000)	
	-----	-----	-----
Net (loss).....	(3,252,000)	(2,728,000)	(4,357,000)
	=====	=====	=====
Net (loss) per share of common stock.....	\$ (.42)	\$ (.30)	\$ (.44)
Weighted average number of shares.....	8,268,000	9,742,000	10,333,000
	=====	=====	=====

</TABLE>

The following table provides a summary of our balance sheet at December 31, 1999:

- on a historical basis;
- on an as adjusted basis to reflect:
- the issuance of 891,116 shares of Common Stock upon the exercise of Options and Warrants by the Selling Securityholders;
- the issuance of 194,909 shares of Common Stock, 194,909 Class C Warrants and 194,909 Class D Warrants upon exercise of the Unit Purchase Options;
- the issuance of 62,500 shares of Common Stock upon the exercise of the Class A Warrants and 146,988 shares of Common Stock upon the exercise of the Class B Warrants.

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AT DECEMBER 31,
1999

HISTORICAL AS ADJUSTED

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BALANCE SHEET DATA:

Working capital.....	\$ 2,324,000	\$16,917,000
Total assets.....	4,491,000	19,084,000
Total liabilities.....	1,899,000	1,899,000
Accumulated deficits.....	22,189,000	22,189,000
Total stockholders' equity.....	2,592,000	17,185,000

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RISK FACTORS

You should carefully consider the following factors and other information in this prospectus before deciding to invest in shares of the Company's Common Stock, Class C Warrants and Class D Warrants being offered by the Selling Securityholders.

INVESTORS WILL EXPERIENCE A LOSS IN THE BOOK VALUE OF THEIR COMMON STOCK DUE TO OUR ACCUMULATED DEFICIT.

We had an accumulated deficit of \$22,189,000 as of the fiscal year ended December 31, 1999. Our statement of operations for the fiscal year ended December 31, 1999 shows net losses of \$4,357,000, which means a loss of \$.44 per share of common stock. Our statement of operations for the fiscal year ended December 31, 1998 shows net losses of \$2,728,000, which means a loss of \$.30 per share of common stock. Investors purchasing shares of our common stock will experience a loss in the book value of their shares due to our net losses.

BECAUSE WE CONTINUE TO EXPERIENCE LOSSES DUE TO OUR RESEARCH AND DEVELOPMENT ACTIVITIES, WE MAY HAVE DIFFICULTY IN RAISING CAPITAL AND OUR STOCKHOLDERS COULD EXPERIENCE A DECREASE IN THE VALUE OF THEIR INVESTMENT.

From our formation in 1991 to the date of this prospectus, we have been experiencing substantial operating losses due to our increasing research and development activities and general and administrative expenditures. We expect to have additional losses in the future. Although we had revenue in 1999 from our research and development and license agreement with Bristol-Myers Squibb, it was and remains our sole source of revenue. We cannot say with any certainty that we will have any future revenue or, if we do have revenue, that it will be profitable. Our failure to become profitable may make it more difficult for us to raise additional capital on favorable terms, if at all. Such failure could have a material adverse effect on our business.

WE WILL NEED SUBSTANTIAL FUNDS IN THE FUTURE, AND WE MAY HAVE TO ISSUE ADDITIONAL SECURITIES TO DO SO, WHICH WILL RESULT IN DILUTION TO THE VALUE OF OUR SECURITYHOLDERS' INVESTMENT.

Since our formation in 1991, we have relied on loans, private financings, and our November 1995 initial public offering to allow us to continue our operations. Our cash requirements in the future may be significantly different from our current estimates because of changes in our research and development programs, increased competition, advances in technology and other factors. We cannot say with any certainty that required financing will be available to us on favorable terms, if at all. If we decide to raise additional money by issuing more of our securities, securityholders will experience a dilution to the value of their securities at the time of issuance.

WE DO NOT HAVE ANY PRODUCTS TO DATE AND RELY HEAVILY ON OUR LICENSE AGREEMENTS -- THE LOSS OF ANY OF WHICH WOULD HAVE A MATERIAL ADVERSE EFFECT ON OUR BUSINESS AND CAUSE A DECREASE IN THE VALUE OF OUR SECURITYHOLDERS' INVESTMENT.

We have key license and collaborative agreements with several pharmaceutical companies and research institutions, including, but not limited to, Bristol-Myers Squibb, Enzon, the Research & Development Institute at Montana State University, the Washington State University Research Foundation, the

University of California at Los Angeles, and the University of Texas at Dallas. We have also entered into a joint venture agreement with Pestka Biomedical Laboratories, Inc. In general, we have annual milestone and royalty fee obligations under these agreements. Although we are currently compliant under these agreements and do not foresee any future noncompliance, our industry is extremely competitive and volatile. Generally, if we fail to satisfy such obligations or cure any other default listed in such agreements, the other parties may terminate them. Also, we cannot give any assurance that the other parties to our agreements will honor their obligations, or that we will be able to extend any of the agreements if they expire. We also cannot give any assurance that we will be able to enter into new collaborative agreements with existing or new partners. If we are unable to make the other parties to our agreements honor their contractual obligations or to extend our current agreements or if we fail to enter into any additional arrangements, we may require additional money to

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continue our current activities. The termination or breach of our agreements or licenses, or our failure to enter into additional agreements and licenses may have a material adverse effect on our business.

ALTHOUGH WE DO NOT HAVE ANY PRODUCTS TO DATE, EVEN IF WE DO HAVE THEM IN THE FUTURE, THEY MIGHT NOT WORK OR THEY MIGHT BE TOXIC, DIFFICULT TO PRODUCE ON A COMMERCIAL SCALE OR DISLIKED BY OUR CUSTOMERS. THIS COULD MATERIALLY ADVERSELY AFFECT OUR BUSINESS AND CAUSE OUR SECURITYHOLDERS TO LOSE THEIR INVESTMENT.

Research and development of anti-cancer drugs is a lengthy and costly process. We cannot say with any certainty that we will be able to develop or produce any products or, if we do, that they will work as intended, be non-toxic, that customers will like them or that they will be capable of being manufactured on a large scale. Furthermore, our products will be in the biotechnology field which has historically had a large number of unsuccessfully developed products, or if developed, such products have been commercially, scientifically or medically unacceptable. Any of these impediments could have a material adverse effect on our business and cause a decrease in the value of our securityholders' investment.

WE MIGHT NOT HAVE ENOUGH RESOURCES TO COMPETE WITH THE BIOTECHNOLOGY LEADERS, AND INVESTORS COULD LOSE THEIR MONEY.

We have less than 20 employees in the heavily regulated, competitive and quickly changing biotechnology industry. Most of our competitors have more personnel, research and development experience, experience in getting governmental approval and money than us. Our business may be materially adversely affected if our competitors develop products before us or produce superior products to ours.

IF COMPETITORS ARE SUCCESSFUL IN THEIR CHALLENGE OF BRISTOL-MYERS SQUIBB'S PATENT, WE COULD BE INDIRECTLY HURT UNDER OUR LICENSE AGREEMENT WITH BRISTOL-MYERS SQUIBB, AND OUR SECURITYHOLDERS COULD EXPERIENCE A DECREASE IN THE VALUE OF THEIR INVESTMENT.

In June 1998, we entered into a license agreement with Bristol-Myers Squibb, an industry leader, for the development of a Paclitaxel production system. To date, this license agreement has been our sole source of revenue. In June 1991, the National Cancer Institute entered into a collaborative research and development agreement with Bristol-Myers Squibb to develop Paclitaxel, and it granted Bristol-Myers Squibb the exclusive use of the Institute's clinical data in Bristol-Myers' search for FDA approval until December 1997. This significantly shortened the approval process and prevented any other party from obtaining the Food & Drug Administration's approval using the Institute's data. Although Bristol-Myers Squibb has since lost its right of exclusivity under the agreement, it has patented its method of delivering Paclitaxel intravenously to a patient. Such patent has in fact kept the Institute's data exclusive and has put other companies at a competitive disadvantage by effectively preventing them from using the data. Other companies are currently contesting the exclusivity of this data in the courts. If such competitors are successful in their challenge, Bristol-Myers Squibb could suffer which in turn would decrease the value of our license agreement with them and our securityholders could experience a decrease in the value of their investment.

WE RELY ON BROAD PATENT PROTECTION FOR OUR TECHNOLOGY BUT WE MAY NOT HAVE ENOUGH

RESOURCES TO CONDUCT OR DEFEND OURSELVES FROM LONG AND EXPENSIVE LITIGATION CLAIMS REGARDING THE BREADTH OF PATENTS, AND OUR SECURITYHOLDERS COULD EXPERIENCE A DECREASE IN THE VALUE OF THEIR INVESTMENT.

Our success will depend on our ability to get patent protection for our products and processes in the United States and elsewhere. We have filed and intend to continue to file patent applications as we need them. We cannot say with any certainty, however, that any additional patents will issue from any of these applications or, if patents do issue, that the claims allowed will be sufficiently broad to protect our technology. Also, we cannot say with any certainty that any patents issued to us, or licensed by us, can withstand challenges made by others or that we will be able to protect our rights. Our business may be materially adversely affected if we are unable to obtain or enforce patent protection.

To date, we have not been sued or threatened by parties claiming that we have infringed their patents. Further, we do not believe that any of our patents have been infringed by other parties, and, accordingly, we

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have not taken any action to date. However, we are aware of patent applications and issued patents belonging to our competitors, and we are uncertain whether any of these, or of any patent applications which we do not know about, will require us to alter or cease our potential products or processes. We cannot say with any certainty that we will be able to obtain any licenses to technology that we will require or, if obtainable, that the cost of them will be reasonable. Our failure to obtain any necessary licenses to any technology could substantially hurt our business. Expensive and drawn-out litigation may also be necessary for us to assert any of our rights or to determine the scope and validity of rights claimed by other parties. Litigation could be too expensive for us to pursue without great cost and uncertainty as to the outcome. Our failure to pursue litigation could result in the loss of our rights which could substantially hurt our business.

WE ARE IN DIRECT COMPETITION WITH OTHER BIOPHARMACEUTICAL COMPANIES TO DEVELOP AND PRODUCE ANTI-CANCER PRODUCTS. OUR BUSINESS WOULD BE MATERIALLY ADVERSELY AFFECTED IF OUR TRADE SECRETS AND CONFIDENTIAL INFORMATION WERE DISCLOSED TO OUR COMPETITORS, AND INVESTORS COULD EXPERIENCE A DECREASE IN THE VALUE OF THEIR INVESTMENTS.

We also rely on trade secrets and confidential information which we try to protect by entering into confidentiality agreements with other parties. We cannot say with any certainty that any of the confidentiality agreements will be honored or, if breached, we would have enough remedies to protect the confidential information, or that our competitors will not independently learn our trade secrets. The loss of our trade secrets would substantially hurt our business.

WE ARE A SMALL COMPANY WITH LITTLE REVENUE, AND WE MAY NOT HAVE THE HUMAN AND FINANCIAL RESOURCES TO WITHSTAND THE REQUIRED LENGTHY FDA TESTING AND APPROVAL PROCESSES.

The Food & Drug Administration and other similar agencies in foreign countries have lengthy and detailed laboratory testing and approval requirements for therapeutic and diagnostic pharmaceutical and biological products. It often takes companies several years and large sums of money to satisfy these requirements, depending on the complexity and novelty of the products. Since we are a small company with limited personnel and financial resources, we might not be able to withstand the rigorous and time consuming FDA approval process as compared to our larger competitors. Furthermore, since we are in the highly competitive biopharmaceutical industry, any failure or delay in obtaining any FDA approvals could substantially hurt our company, and investors could lose their money. We cannot say with any certainty that the FDA or other regulatory agencies will grant us approval for any of our products on a timely basis, if at all.

WE HAVE LITTLE REVENUE AND MAY NOT HAVE THE FINANCIAL RESOURCES TO COMPLY WITH OSHA, EPA AND OTHER AGENCIES' REQUIREMENTS.

We have to comply with the Occupational Safety and Health Administration, Environmental Protection Agency, Toxic Substances Control Act, Resource Conservation and Recovery Act and other regulatory laws. In the future, we could

also be subject to other federal, state or local regulations. OSHA or the EPA may establish regulations which could affect our research and development programs. We are unable to predict whether any agency will adopt any rule which could substantially hurt our business.

OUR PRODUCTS, IF ANY, WILL BE INNOVATIVE AND MAY NOT BE COVERED BY INSURANCE COMPANIES OR OTHER THIRD-PARTY PAYERS WHICH MAY MAKE OUR PRODUCTS LESS MARKETABLE TO OUR CUSTOMERS AND CAUSE A DECREASE IN THE VALUE OF OUR SECURITYHOLDERS' INVESTMENT.

Our success in developing our products may depend, in part, on whether we will be reimbursed by government health administration authorities, private health insurers and other organizations. There is significant uncertainty if costs associated with newly-approved health care products will be reimbursed. If adequate coverage and reimbursement levels are not provided by government and third-party payers for uses of our products, it will make it very difficult for us to market our products to doctors and hospitals because their patients might not be able to pay for the products without any insurance coverage or reimbursement. We cannot say with any certainty whether sufficient insurance coverage will be available for us to establish and maintain price levels sufficient to realize an appropriate return on developing new products. Government and

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other third-party payers are attempting to contain health care costs by limiting both coverage and the level of reimbursement of new therapeutic and diagnostic products approved for marketing by the FDA and by refusing, in some cases, to provide any coverage of uses of approved products for disease indications for which the FDA has not granted marketing approval. Such refusal by insurance companies and third-party payers to reimburse the costs of, expenses associated with, our products might have a material adverse effect on our business.

OUR LICENSE AGREEMENT WITH BRISTOL-MYERS SQUIBB, AN INDUSTRY LEADER, HAS, TO DATE, BEEN OUR SOLE SOURCE OF REVENUE. OUR SECURITYHOLDERS COULD EXPERIENCE A DECREASE IN THE VALUE OF THEIR INVESTMENTS IF SUCH AGREEMENT IS TERMINATED OR CEASES TO GENERATE REVENUE.

In June 1998, we entered into a license agreement and a research and development agreement with Bristol-Myers Squibb. Through December 31, 1999, we have recognized \$2,558,000 in revenue from the agreement. Such agreement has been our sole source of revenues to date. Under the license agreement, we granted to Bristol-Myers Squibb exclusive sublicenses under our agreements with the Research & Development Institute at Montana State University and the Washington State University Research Foundation relating to technologies for the production of Paclitaxel. Our license agreement with Bristol-Myers Squibb requires them to pay us royalty and milestone payments. The term of our license agreement with Bristol-Myers Squibb ends on the later ten (10) years from the first commercial sale of the licensed products or such time as neither the making, use nor sale at the time by Bristol-Myers Squibb, its affiliates or sublicensees does not infringe any U.S. or foreign patents or patent applications, copyrights or trademarks owned and licensed by the Research & Development Institute and the Washington State University Research Foundation. Bristol-Myers Squibb may terminate the license agreement upon 90 days notice. We cannot say with any certainty that Bristol-Myers Squibb will successfully manufacture or market the licensed property, if at all, or that we will be able to maintain our agreements with the Research & Development Institute or the Washington State University Research Foundation. Although we do not have any reason to believe Bristol-Myers Squibb is unwilling to work with us under our license agreement with them, it is a possibility that Bristol-Myers Squibb might, in the future, decide not to utilize our technology, use other technology they find superior or enter into a license agreement or agreements with another party or parties, thereby decreasing their need to utilize our technology under our license agreement with them or even cause them to terminate the license agreement. Our loss of the license agreement with Bristol-Myers Squibb could have a material adverse effect on our business and stockholders could experience a decrease in the value of their investments.

WE LACK MANUFACTURING EXPERIENCE AND FACILITIES, AND IF WE HAVE TO EXPEND RESOURCES TO BUILD FACILITIES OR IF WE FAIL TO HIRE COMPETENT OUTSIDE MANUFACTURERS, OUR SECURITYHOLDERS COULD EXPERIENCE A DECREASE IN THE VALUE OF THEIR INVESTMENT.

We currently do not have facilities or personnel capable of manufacturing

any products in commercial quantities. In the future, we may establish our own manufacturing facilities to manufacture products if it becomes economically attractive to do so. Building and operating production facilities would require substantial additional funds and other resources as well as interrupt our daily operations. We cannot be sure, however, whether sufficient funds to build satisfactory manufacturing facilities would be available on favorable terms to us, if at all. If we cannot obtain sufficient financing, we will most likely have to retain outside manufacturers. We cannot be sure, however, whether we will be able to retain competent manufacturers at affordable rates, or that the manufacturers will be able to produce and deliver our products pursuant to our instructions concerning quality, quantity and time as well as other factors. If we are unable to manufacture our products, if any, or have them manufactured by others, our business would be materially adversely affected and our securityholders would experience a decrease in the value of their investment.

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WE LACK MARKETING EXPERIENCE. IF WE FAIL TO RETAIN COMPETENT MARKETING PERSONNEL OR OUTSIDE MARKETERS, OR IF WE HAVE INSUFFICIENT RESOURCES TO MARKET OUR PRODUCTS, OUR SECURITYHOLDERS COULD EXPERIENCE A DECREASE IN THE VALUE OF THEIR INVESTMENT.

As of December 31, 1999, we had 19 employees, none of whom have any experience in marketing pharmaceutical products. We would have to spend significant funds and dedicate a significant amount of management resources to develop our own sales force. We cannot say with any certainty that any funds or resources for such purposes will be available on favorable terms, if at all. Further, we cannot say with any certainty that, with a sales force, we would successfully penetrate the markets for any of our products. For certain products under development, we may seek to enter into marketing agreements with other entities which would grant them exclusive marketing rights in return for royalties based on sales, if any. Under some of these agreements, the other entity may have the responsibility for all or a significant part of the development and obtaining regulatory approval. In the event that the marketing and development partner fails to develop a marketable product or fails to successfully market a product, our business could be substantially hurt. The sale of certain products outside the United States will also be dependent upon the successful completion of arrangements with future partners, licensees or distributors in each territory. We cannot give any assurance, however, that we will successfully establish any additional collaborative arrangements or that, if established, such future partners will successfully commercialize any products, if at all.

WE ARE A SMALL COMPANY AND HEAVILY DEPEND UPON OUR OFFICERS, DIRECTORS AND SCIENTISTS WHO ARE HIGHLY SKILLED IN BIOPHARMACOLOGY, ESPECIALLY OUR CHIEF EXECUTIVE OFFICER AND PRESIDENT, ARTHUR P. BOLLON, PH.D. OUR BUSINESS WOULD BE MATERIALLY ADVERSELY AFFECTED BY THE LOSS OF ANY SUCH PERSONS, AND SECURITYHOLDERS COULD EXPERIENCE A DECREASE IN THE VALUE OF THEIR INVESTMENT.

Much of our success depends upon the continued contributions of our executive officers, scientific and technical personnel and consultants. We are particularly dependent upon Arthur P. Bollon, Ph.D., the Chairman of our Board of Directors, Chief Executive Officer and President, and Daniel Shusterman, the Vice President of Operations, Treasurer and Chief Financial Officer, Dorit Arad, Ph.D., our Vice President of Drug Design, as well as our senior scientists, Susan L. Berent, Ph.D., Hakim Labidi, Ph.D., Rajinder S. Sidhu, Ph.D. and Richard M. Torczynski, Ph.D. As of December 31, 1999, we had 19 full-time employees, 16 of whom are engaged directly in research and development activities, including 7 Ph.D.s, and 3 of whom are in executive and administrative positions. Our employees are not governed by any collective bargaining agreement, and we believe that our relationship with our employees is good. We currently have an employment agreement with Dr. Bollon which expires on November 6, 2003. Although we maintain "key person" life insurance which provides that upon the death or incapacity of Dr. Bollon, we will receive \$2 million, Dr. Bollon's death or incapacity could substantially hurt our business. The competition for qualified personnel is intense, and the loss of services of certain key personnel could substantially hurt our business.

OUR SCIENTISTS WORK FOR OTHER COMPANIES AND INSTITUTIONS, AND WE MAY NOT HAVE THE RIGHT TO THEIR INVENTIONS AND DISCOVERIES, WHICH MIGHT HAVE A MATERIAL ADVERSE EFFECT ON OUR BUSINESS.

Our scientific collaborators and advisors are employed by companies and

institutions other than us, and some of them have consulting or other advisory arrangements with other entities and institutions which could conflict or compete with their obligations to us. Inventions or processes discovered by such persons will not necessarily become our property but may remain the property of such persons or of such persons' full-time employers. Our failure to successfully assert our rights to any inventions or processes discovered by our scientists might have a material adverse affect on our business.

IF WE CANNOT OBTAIN SATISFACTORY PRODUCT LIABILITY INSURANCE FOR OUR FUTURE PRODUCTS, IF ANY, WE MAY NOT BE ABLE TO ENTER INTO MATERIAL AGREEMENTS WHICH REQUIRE US TO HAVE SUCH INSURANCE, AND INVESTORS COULD, THEREFORE, EXPERIENCE A DECREASE IN THE VALUE OF THEIR INVESTMENT.

To date, we have not had any product liability claims filed or threatened against us. In the future, however, when and if we develop products, our products could expose us to product liability claims. Although we intend to obtain product liability insurance for our ongoing clinical trials, we cannot say with any certainty

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that we will be able to obtain, maintain or increase our insurance coverage in the future on terms favorable to us, if at all, or that any claims against us will not be greater than the amount of such coverage. Distributors of pharmaceutical and biological products often require minimum product liability insurance coverage as a condition before they start purchasing or accepting products for distribution. Our failure to satisfy such insurance requirements could decrease our ability to achieve broad distribution of our proposed products and have a material adverse effect on our business and investors could experience a decrease in the value of their investment.

THE VALUE OF OUR SECURITYHOLDERS' INVESTMENT MAY BE SUPPRESSED BECAUSE OUR COMPANY MAY BE A LESS ATTRACTIVE TAKEOVER CANDIDATE DUE TO THE FACT THAT A MAJORITY OF OUR STOCK IS OWNED BY AFFILIATES.

Our current officers, directors and stockholders who own more than 5% of our securities beneficially own or control approximately 24.3% of our outstanding shares of common stock, which represents approximately 23.2% of our total outstanding voting securities. Such officers, directors and principal stockholders may, therefore, be able to elect all of our directors, to determine the outcome of most corporate actions requiring stockholder approval, and otherwise to control the direction of our business which may cause the price of our common stock to be suppressed.

ALTHOUGH WE DO NOT PAY DIVIDENDS ON OUR COMMON STOCK, WE PAY ANNUAL DIVIDENDS ON OUR SERIES A PREFERRED STOCK BY GIVING THE HOLDERS THEREOF MORE SERIES A PREFERRED STOCK. OUR SERIES A PREFERRED STOCK IS CONVERTIBLE INTO COMMON STOCK, AND SUCH CONVERSION WILL DILUTE THE BOOK VALUE OF THE COMMON STOCK PURCHASED IN THIS OFFERING.

Since 1991, we have not paid any dividends on our common stock. We intend to retain future earnings, if any, to provide funds for the operation of our business and, accordingly, do not anticipate paying any cash dividends on our common stock in the future. Furthermore, the terms of our outstanding series A preferred stock do not allow for the payment of cash dividends on the common stock unless and until all accrued and unpaid dividends on the series A preferred stock shall have been paid or set apart for payment. Historically speaking, we have paid dividends on our series A preferred stock with payment-in-kind. Our series A preferred stock is convertible into an equal number of shares of common stock. As more holders of the series A preferred stock convert their preferred stock into common stock, investors in this offering will experience a decline in the book value of their common stock.

WE ARE OBLIGATED TO INDEMNIFY OUR OFFICERS AND DIRECTORS, ABSENT CERTAIN CIRCUMSTANCES, WHICH MAY REQUIRE US TO SPEND TIME AND MONEY OTHERWISE ALLOCATED, AND CAUSE A DECREASE IN THE VALUE OF OUR SECURITYHOLDERS' INVESTMENT.

We are incorporated under the laws of the state of Delaware. Our certificate of incorporation includes certain provisions permitted under the Delaware General Corporation Law, whereby our officers and directors are indemnified by us against certain liabilities. Our certificate of incorporation also limits, to the fullest extent permitted by Delaware General Corporate Law, a director's liability for monetary damages for breach of fiduciary duty, including gross negligence, except liability for breach of loyalty, acts or

omissions not in good faith or which involve intentional misconduct or a knowing violation of the law, the unlawful payment of a dividend or unlawful stock purchase or redemption and any transaction from which the director derives an improper personal benefit. An insurance policy, which provides for coverage for certain liabilities of its officers and directors has been issued to us. However, although we do not currently know of any conduct of any officer or director which may have a material effect on our business, if such insurance proves to be inadequate, we will have to use funds otherwise allocated to indemnify any director. The use of funds and resources, including management's time and energy, to properly indemnify or otherwise prepare for the defense of any director might have a material adverse effect on our business.

IF WE FAIL TO MEET NASDAQ'S MAINTENANCE REQUIREMENTS AND ARE DELISTED FROM NASDAQ, INVESTORS MAY HAVE DIFFICULTY SELLING THEIR SECURITIES, WHICH WOULD CAUSE A DECREASE IN THE VALUE OF THEIR INVESTMENT.

Our common stock is currently quoted on the Nasdaq SmallCap Market System under the symbol, "CYPH." Nasdaq has certain requirements that every company must meet in order to have their securities quoted on the Nasdaq SmallCap System. Although we currently meet Nasdaq's criteria for continued listing, we cannot say with any certainty that we will continue to meet such criteria.

For continued inclusion on the Nasdaq SmallCap Market System, a company has to maintain the following:

- either:
- net tangible assets of \$2 million,
- market capitalization of \$35 million or
- net income of \$500,000 in the most recently completed fiscal year or in two of the last three most recently completed fiscal years;
- a minimum bid price of \$1.00 per share;
- in the case of a convertible debt security, a principal amount outstanding of at least \$5 million;
- in the case of common stock, at least 300 round lot holders; and
- 500,000 publicly held shares having a market value of at least \$1 million.

If we are unable to meet the continued listing criteria of the Nasdaq SmallCap Market System any time in the future due to our continued operating losses or otherwise, and our securities are delisted, trading of our securities, if any, would be conducted in the over-the-counter market in the so-called "pink sheets" or, if available, the NASD's "Electronic Bulletin Board." As a result, investors could find it more difficult to dispose of, or to obtain accurate quotations as to the value of, our securities.

IF WE ARE DELISTED FROM NASDAQ, BROKER-DEALERS MAY BE UNWILLING TO SELL INVESTORS' STOCK, AND INVESTORS WOULD EXPERIENCE A DECREASE IN THE VALUE OF THEIR INVESTMENT.

If our securities are delisted from the Nasdaq SmallCap Market System, they may become subject to Rule 15c-9 under the Exchange Act of 1934, which imposes additional sales practice requirements on broker-dealers that sell such securities. There are exceptions to Rule 15c-9 and they include transactions meeting the safe-harbor requirements of Rules 505 or 506 under Regulation D of the Securities Act, and transactions in which the purchaser is an institutional accredited investor, as defined in the Securities Act, or an established customer, as defined in the Securities Act, of the broker-dealer. For transactions which have to comply with the requirements of Rule 15c-9 under the Exchange Act of 1934, a broker-dealer must determine whether or not the purchaser meets a special suitability standard, and the broker-dealer must receive the purchaser's written consent to the transaction before the sale. These requirements could make broker-dealers unwilling or even unable to sell

our securities which could make it more difficult for our investors to resell their securities to other parties.

IF OUR STOCK IS DELISTED BY NASDAQ AND BECOMES A "PENNY STOCK," INVESTORS MIGHT EXPERIENCE A DECREASE IN THE VALUE OF THEIR INVESTMENTS DUE TO THE RESTRICTIONS ON BROKER-DEALERS IN SELLING "PENNY STOCK."

The SEC defines a "penny stock" to be any equity security that has a market price under \$5.00 per share or has an exercise price under \$5.00 per share, subject to certain exceptions. Unless exempt, the rules require the delivery, prior to any transaction in a penny stock, of SEC material telling the purchaser certain information about the penny stock. Purchasers must also be told about the commissions that the broker-dealers and the registered representatives will get and they must be told about the securities current prices. Finally, purchasers must also be given statements every month which have to tell the purchaser about his or her securities' recent prices and about the limitations of the penny stock market. These penny stock

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restrictions will not apply to our securities if they stay quoted on the Nasdaq SmallCap Market System, and if they have certain price and volume information provided on a current and continuing basis or if they meet certain minimum net tangible assets or average revenue criteria. We cannot say with any certainty, however, that our securities will continue to meet the Nasdaq SmallCap Market requirements in the future and if we do not, the prices of our securities could decrease and investors could find it difficult to sell their securities. If we were to remain exempt from the penny-stock restrictions, we still have to comply with Section 15(b)(6) under the Exchange Act of 1934, which gives the SEC the authority to stop any person who breaks the law when selling penny stock from selling any more penny stock or from working with any broker-dealer.

WE HAVE GRANTED REGISTRATION RIGHTS TO SEVERAL PARTIES HOLDING OUR COMMON STOCK OR WHO HAVE THE RIGHT TO PURCHASE OUR COMMON STOCK. THE REGISTRATION OF SUCH SECURITIES WILL INCREASE THE NUMBER OF FREELY TRADEABLE SHARES OF OUR COMMON STOCK AND MAY DECREASE THE BOOK VALUE OF OUR SECURITYHOLDERS' SHARES OF OUR COMMON STOCK.

There will be 17,528,734 registered shares of our common stock outstanding upon the completion of this offering. All of these shares will be freely transferrable without restriction if we continue to comply with the SEC and certain states' registration requirements. Certain of our other outstanding securities are not registered with the SEC, and are considered to be "restricted securities" as that term is defined in Rule 144 under the Securities Act and may only be sold in certain circumstances.

We have also granted certain investors demand and piggy-back registration rights to have their common stock registered with the SEC. We will have to pay for the expense of registration if one or more of these groups exercise their demand registration rights or "piggy-back" registration rights. The expense could be high. Also, because there would be a high number of shares outstanding, we could find it more difficult to obtain future financing.

The sale, or availability for sale, of substantial amounts of common stock in the public market pursuant to Rule 144 or registration could cause the market price of the common stock and our other securities to decrease which could hurt our ability to raise additional money through the sale of our securities or through debt financing. Also, to the extent that outstanding options and warrants are exercised, securityholders' ownership interest will drop. Also, if and to the extent that we reduce the exercise price of outstanding warrants or options, our stockholders could experience additional dilution.

THE VALUE OF THE SECURITYHOLDERS' INVESTMENT MAY BE SUPPRESSED BECAUSE OUR COMPANY MAY BE A LESS ATTRACTIVE TAKEOVER CANDIDATE DUE TO THE FACT THAT OUR BOARD OF DIRECTORS HAS THE DISCRETION TO ISSUE 10,000,000 SHARES OF PREFERRED STOCK SUPERIOR TO OUR COMMON STOCK WITHOUT STOCKHOLDER APPROVAL.

Our certificate of incorporation authorizes our board of directors to issue a maximum of 10,000,000 shares of preferred stock on terms which may be determined by them without getting stockholder approval. Of these 10,000,000 shares, 4,000,000 shares have already been designated as Series A Preferred Stock of which 745,031 remain outstanding as of March 28, 2000. The Series A

Preferred Stock may be converted by the holder into an equal number of shares of common stock. Also, the terms of the Series A Preferred Stock include dividend and liquidation preferences which could also hurt the rights of holders of the common stock being offered hereby. Each share of Series A Preferred Stock is entitled to one vote on all matters on which the common stock has the right to vote. Holders of Series A Preferred Stock are entitled to vote as a separate class on any proposed adverse change in their rights, preferences or privileges and any increase in the number of authorized shares of Series A Preferred stock. Further, the terms of any additional series of preferred stock, which may also include priority claims to assets and dividends, as well as special voting rights, could hurt the rights of the holders of the common stock being offered hereby. Other than the Series A Preferred Stock, we have not issued any other preferred stock, and we do not plan to issue any additional preferred stock other than payment-in-kind dividends. Investors should also know that if too much preferred stock is outstanding, it could make it more difficult for a third party to take control of our business or to remove our board of directors and executive officers. Hostile bids for control of a company usually result in the market prices for a company's securities to increase. It would also dilute or subordinate the rights of holders of common stock and cause the market price of the common stock to drop.

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INVESTORS WILL BE PREVENTED FROM RESELLING THEIR SECURITIES IF WE FAIL TO MEET APPLICABLE FEDERAL AND STATE REGISTRATION REQUIREMENTS OR FIND EXEMPTIONS FROM SUCH REQUIREMENTS.

The Common Stock offered in this offering can be resold by the investors only if a current registration statement relating to them is in effect with the SEC under the Securities Act, and if they are registered, qualified, or exempt therefrom, under the applicable state blue sky laws. We cannot say with any certainty that we will be able to meet the SEC and states' registration or exemption requirements. If we cannot meet the requirements, the investors will be unable to resell their common stock.

USE OF PROCEEDS

We will not receive any of the proceeds from the Selling Securityholders' sale of their Common Stock. However, we will receive the proceeds when the Selling Securityholders exercise their Unit Purchase Options and their Class C Warrants and Class D Warrants. We will use the proceeds we receive when the Selling Securityholders exercise their Unit Purchase Options and their Class C Warrants and Class D Warrants for research and development and general corporate purposes.

SELLING SECURITYHOLDERS

The Selling Securityholders are offering and selling a total of up to 1,880,240 shares of our Common Stock.

RMA is a former market-maker in our securities and is a Selling Securityholder that holds an aggregate of 290,856 of the shares of Common Stock included in this offering. 72,714 of which are issuable upon the exercise of the unit purchase option, 72,714 of which are issuable upon the exercise of the Class C Warrants underlying unit purchase option 72,714 of which are issuable upon exercise of the Class D Warrants underlying the Class C Warrants and 72,714 of which are issuable upon exercise of the Class D Warrants underlying the Unit Purchase Price. RMA is also deemed to beneficially own the securities held by Bruce Meyers, a 100% stockholder, executive officer and director of the corporate general partner of RMA. RMA has also acted as private placement agent for our private placement completed in 1995 (the "1995 Private Placement") and 1998 Private Placement and was one of the syndicate managers in our IPO. As of March 28, 2000 there were 12,788,040 shares of Common Stock and 745,031 shares of Series A Preferred Stock outstanding. RMA beneficially owns a total of 2,099,464 shares of Common Stock, which represents 15.7% of the total number of outstanding Common Stock before the completion of this offering. RMA will

beneficially own 1,707,304 shares of Common Stock, which will represent 12.1% of the total number of outstanding shares of Common Stock upon the completion of this offering. RMA also beneficially owns 26,600 shares of our Series A Preferred Stock, which represents 3.6% of the total number of outstanding Series A Preferred Stock. When combining RMA's ownership of Common Stock and Series A Preferred Stock, RMA beneficially owns 15.0% of all of our outstanding voting securities before the completion of this offering and will own 11.7% of all our outstanding voting securities upon the completion of this offering.

Besides RMA if not otherwise indicated below by footnote, we have no material relationships with any of the Selling Securityholders nor have any such material relationships existed within the past three years.

<TABLE>
<CAPTION>

NAME OF SELLING SECURITYHOLDER	COMMON STOCK WHICH MAY				
	COMMON STOCK		BE SOLD	COMMON STOCK	
	BENEFICIALLY		PURSUANT	BENEFICIALLY	
	OWNED BEFORE		TO THIS	OWNED AFTER	
	THIS OFFERING(1)		PROSPECTUS	OFFERING(2)	
	AFTER OFFERING(3)				
<S>	<C>	<C>	<C>	<C>	
Roan/Meyers Associates, L.P.(4).....	2,099,462	290,856	1,808,606	12.9%	
Bruce Meyers(5).....	1,656,278	101,304	1,554,979	10.6	
Peter Janssen(6).....	720,679	217,264	503,415	3.9	
Jacqueline M. Goode(7).....	22,080	22,080	0	0	
Rickel & Associates(8).....	41,668	41,668	0	0	
Gregg Smith(9).....	50,748	50,748	0	0	

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<TABLE>
<CAPTION>

NAME OF SELLING SECURITYHOLDER	COMMON STOCK WHICH MAY				
	COMMON STOCK		BE SOLD	COMMON STOCK	
	BENEFICIALLY		PURSUANT	BENEFICIALLY	
	OWNED BEFORE		TO THIS	OWNED AFTER	
	THIS OFFERING(1)		PROSPECTUS	OFFERING(2)	
	AFTER OFFERING(3)				
<S>	<C>	<C>	<C>	<C>	
Kenneth Rickel(10).....	21,428	21,428	0	0	
Richard Silverman(11).....	7,144	7,144	0	0	
Robert Rickel(12).....	7,144	7,144	0	0	
Victor Kashner(13).....	20,000	20,000	0	0	
Wall Street Consultants, Inc.(14).....	140,449	140,449	0	0	
Dominick & Dominick LLC(15).....	50,000	150,000	0	0	
Washington State University Research Foundation(16).....	36,000	36,000	0	0	
D.H. Blair Investment Banking Corp.(17)...	370,667	239,667	131,000	*	
Lea & Uriel Adar(18)(20).....	14,208	10,000	4,208	*	
Argonaut Partnership L.P.(18).....	6,038	6,038	0	0	
Tom & Noreen Axon(18).....	10,800	10,000	800	*	
Robert Bauers(18).....	29,000	5,000	24,000	*	
Andrew Bressman(19).....	10,000	10,000	0	0	
David F. Burr(18).....	10,000	10,000	0	0	
Robert V. Call, Jr.(18)(19).....	51,000	15,000	36,000	*	
Douglas M. Colbert(18)(19).....	43,500	7,500	36,500	*	
Howard Commander(18).....	38,175	5,000	33,175	*	
Richard H. Davimos TTEE FBO Richard H. Davimos Trust(19)...	10,000	10,000	0	0	
Delaware Charter Guarantee & Trust Co. F/B/O Beverly Levy IRA(18).....	1,588	1,588	0	0	
Kenneth Eitman IRA Rollover(18).....	3,900	3,900	0	0	
Gerstenhaber Investments c/o David Gerstenhaber(18).....	3,962	3,962	0	0	
Ginger Huggins(18).....	2,500	2,500	0	0	
Barry J. Jacobson c/o					

Joseph P. Day Realty(18).....	7,500	7,500	0	0	
Barry J. Jacobson(18).....	20,000	20,000	0	0	
Herbert Lerman(19)(21).....	29,420	5,000	24,420		*
James B. Murphy(18).....	5,000	5,000	0	0	
Denis J. Nayden(18)(19).....	47,500	30,000	17,500		*
Omnitek, Inc(19).....	44,300	5,000	39,300		*
Charles Potter(19).....	5,000	5,000	0	0	
James Rhodes(18)(22).....	45,534	4,000	40,534		*
Michael McNulty Rosner(18).....	9,000	5,000	4,000		*
Barry A. Schatz(18).....	10,000	10,000	0	0	
Mark Shnitkin(19)(23).....	28,126	2,500	25,626		*
Software Marketing Corporation(18).....	5,000	5,000	0	0	
Kathleen and Forrest Vander Vliet(19).....	5,000	5,000	0	0	
Gruntal & Co., L.L.C.(24).....	200,000	300,000	0	0	
Southwest Securities, Inc.(25).....	16,667	25,000	0	0	

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* Less than 1%

- (1) Assumes the exercise of the Unit Purchase Options, Class C Warrants, Class D Warrants, Class A Warrants, Class B Warrants and other options and warrants held by the Selling Securityholders, but does not include shares of common stock that may be acquired by the Selling Securityholders upon

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exercise of options which have not vested within 60 days of this prospectus which shares, if any, will be added to the number of shares listed by one or more supplements to this prospectus. Furthermore, the inclusion in this prospectus of the stated number of shares does not constitute a commitment to sell any or all of such shares. The number of shares of common stock offered shall be determined from time to time by each Selling Securityholder at his or her sole discretion.

- (2) Assume all of the shares of Common Stock offered by this prospectus are sold.
- (3) Based on an aggregate of 17,528,734 common stock that will be issued and outstanding upon the completion of this offering, consisting of 15,648,494 shares of common stock issued and outstanding as of May 5, 2000 and the 1,880,240 to which this prospectus relates.
- (4) Mr. Bruce Meyers is a 100% stockholder and an officer and director of the corporate general partner of RMA. Includes (i) 262,184 shares of Common Stock issuable upon the exercise of 72,714 Unit Purchase Options and underlying Class C and Class D Warrants granted to RMA for underwriting services in connection with the Company's initial public offering in November 1995 (the "IPO"), (ii) 81,530 shares of Common Stock issuable upon the exercise of a Unit Purchase Option and underlying Class E Warrants granted to RMA for placement agent services in connection with the Company's April 1998 private placement (the "April 1998 Private Placement") and (iii) the aggregate amount of shares of Common Stock and Series A Preferred Stock beneficially owned by Mr. Meyers. See (5) below.
- (5) Consists of (i) 1,332,358 shares of Common Stock, (ii) 88,567 shares of Common Stock issuable upon the exercise of Class D Warrants, (iii) 101,304 shares of Common Stock issuable upon the exercise of 25,326 Unit Purchase Options and underlying Class C and Class D Warrants originally granted to RMA for underwriting services in connection with the IPO, (iv) 131,856 shares of Common Stock issuable upon the exercise of a currently exercisable Unit Purchase Option and underlying Class E Warrants granted to RMA for placement agent services in connection with the April 1998 Private Placement, (v) 30,327 shares of Common Stock issuable upon the exercise of currently exercisable Class E Warrants directly held by Mr. Meyers and (vi) 62,000 shares of Common Stock held by The Meyers Foundation of which Mr. Meyers has voting control. See note (4) above. Does not include 26,620

shares of Common Stock issuable upon the conversion of 26,620 shares of Series A Preferred Stock.

(6) Includes (i) 54,316 shares of Common Stock issuable upon exercise of the Unit Purchase Option, (ii) 54,316 shares of Common Stock issuable upon exercise of Class C Warrants, (iii) 108,632 shares of Common Stock issuable upon exercise of Class D Warrants and (iv) 36,819 shares of Common Stock issuable upon exercise of Class E Warrants.

(7) Includes (i) 5,520 shares of Common Stock issuable upon exercise of the Unit Purchase Option, (ii) 5,520 shares of Common Stock issuable upon exercise of Class C Warrants and (iii) 11,040 shares of Common Stock issuable upon exercise of Class D Warrants.

(8) Includes (i) 10,417 shares of Common Stock issuable upon exercise of the Unit Purchase Option, (ii) 10,417 shares of Common Stock issuable upon exercise of Class C Warrants and (iii) 20,834 shares of Common Stock issuable upon exercise of Class D Warrants.

(9) Includes (i) 12,687 shares of Common Stock issuable upon exercise of the Unit Purchase Option, (ii) 12,687 shares of Common Stock issuable upon exercise of Class C Warrants and (iii) 25,274 shares of Common Stock issuable upon exercise of Class D Warrants.

(10) Includes (i) 5,357 shares of Common Stock issuable upon exercise of the Unit Purchase Option, (ii) 5,357 shares of Common Stock issuable upon exercise of Class C Warrants and (iii) 10,719 shares of Common Stock issuable upon exercise of Class D Warrants.

(11) Includes (i) 1,786 shares of Common Stock issuable upon exercise of the Unit Purchase Option, (ii) 1,786 shares of Common Stock issuable upon exercise of Class C Warrants and (iii) 3,572 shares of Common Stock issuable upon exercise of Class D Warrants.

(12) Includes (i) 1,786 shares of Common Stock issuable upon exercise of the Unit Purchase Option, (ii) 1,786 shares of Common Stock issuable upon exercise of Class C Warrants and (iii) 3,572 shares of Common Stock issuable upon exercise of Class D Warrants.

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(13) Includes (i) 5,000 shares of Common Stock issuable upon exercise of the Unit Purchase Option, (ii) 5,000 shares of Common Stock issuable upon exercise of Class C Warrants and (iii) 10,000 shares of Common Stock issuable upon exercise of Class D Warrants.

(14) Includes (i) options to purchase 100,000 shares of Common Stock at \$4.25 per share, (ii) options to purchase 30,769 shares of Common Stock at \$3.25 per share and (iii) options to purchase 9,680 shares of Common Stock at \$7.875 per share.

(15) Includes (i) options to purchase 50,000 shares of Common Stock at \$7.00 per share which are currently exercisable and (ii) options to purchase 100,000 shares of Common Stock which will vest upon the consummation of a transaction.

(16) Includes (i) options to purchase 12,000 shares of Common Stock at \$4.25 per share which are currently exercisable and (ii) options to purchase 24,000 shares of Common Stock at \$4.25 per share which are not currently exercisable.

(17) Includes (i) 37,167 shares issuable upon exercise of Warrants at a price of \$3.75 per share and (ii) 202,500 shares of Common Stock issuable upon exercise of warrants at \$3.75 per share.

(18) Represents shares of Common Stock issuable upon exercise of Class B

Warrants.

(19) Represents shares of Common Stock issuable upon exercise of Class A Warrants.

(20) Includes 4,208 shares of Common Stock issuable upon conversion of 4,208 shares of Series A Preferred Stock.

(21) Includes 420 shares of Common Stock issuable upon conversion of 420 shares of Series A Preferred Stock.

(22) Includes 8,745 shares of Common Stock issuable upon exercise of Class E Warrants.

(23) Includes 2,928 shares of Common Stock issuable upon exercise of Class E Warrants.

(24) Represents warrants to purchase 300,000 shares of Common Stock at \$15.00 per share, of which 100,000 are currently exercisable, 100,000 will vest in May 2000 and 100,000 will vest in August, 2000.

(25) Represents warrants to purchase 25,000 shares of Common Stock at \$12.00 per share, of which 16,667 are currently exercisable and 8,333 will vest in August, 2000.

We will not receive any of the proceeds from the sale of Common Stock by the Selling Securityholders. We will, however, receive proceeds from the exercise of (i) 194,909 Unit Purchase Options, (ii) 194,909 Class C Warrants, (iii) 389,818 Class D Warrants underlying 194,909 Unit Purchase Options and 194,909 Class C Warrants, (v) 891,116 Options and Warrants, (vi) 156,250 Class A Warrants and (vii) 367,470 Class B Warrants.

DESCRIPTION OF SECURITIES

The shares of Common Stock offered hereby are issuable upon exercise of (i) Unit Purchase Options issued to the underwriters of our initial public offering (ii) Class A Warrants and Class B Warrants and (iii) certain options and warrants. Each Unit consisted of one share of Common Stock, one Class C Warrant and one Class D Warrant. See "Risk Factors -- Possible Restriction on "Market Making" Activities in the Company's Securities; Illiquidity; and Selling Securityholders."

PLAN OF DISTRIBUTION

This prospectus may be used from time to time by the Selling Securityholders to sell their shares of Common Stock registered in this prospectus in transactions in which they are or may be deemed to be underwriters within the meaning of the Securities Act. The Selling Securityholders may also sell their shares of Common Stock being registered in this prospectus to or through brokers or dealers who may act solely as agent, or may acquire shares as principal. The distribution of the shares of Common Stock may be effected in one

or more transactions that may take place on the Nasdaq SmallCap Market System, ordinary broker's transactions, privately negotiated transactions or through sales to one or more broker-dealers for resale of such securities as principals, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. Usual and customary or specifically negotiated brokerage fees or commissions may be paid by these holders in connection with such sales. In connection with such sales, the Selling Securityholders and any participating brokers or dealers may be deemed "underwriters" as such term is defined in the Securities Act. See "Risk Factors -- Current Prospectus and State Registration Required to Resell Common Stock."

RMA is a Selling Securityholder and beneficially owns 290,856 of the shares of Common Stock included in this offering. RMA has acted as private placement agent in our 1995 Private Placement and 1998 Private Placement and was one of the syndicate managers in our IPO. In consideration for its services in connection with our 1998 Private Placement, RMA received a commission of 10% of the gross proceeds, as well as 3% non-accountable expense allowance and reimbursement for other costs, including legal expenses relating to the 1998 Private Placement. Also, for its services, we issued RMA five-year warrants to acquire 20% of the number of securities bought in the 1998 Private Placement. See "Risk Factors -- Current Prospectus and State Registration Required to Resell Common Stock."

In addition to any such number of shares of common stock sold hereunder, a Selling Securityholder may, at the same time, sell any shares of common stock, including the shares of common stock to which this prospectus pertains, owned by him or her in compliance with all of the requirements of Rule 144 promulgated under the Securities Act, regardless of whether such shares are covered by this prospectus.

There is no assurance that any of the Selling Securityholders will sell any or all of the shares of common stock offered hereby.

We will pay all expenses in connection with this offering other than commissions and discounts of underwriters, dealers or agents. All selling and other expenses incurred by individual Selling Securityholders will be borne by such Selling Securityholders.

We have notified the Selling Securityholders of the need to deliver a copy of this prospectus in connection with any sale of the shares of common stock.

LEGAL MATTERS

The validity of the Common Stock offered hereby will be passed upon for us by Morrison Cohen Singer & Weinstein, LLP, New York, New York, a partner of which holds options to acquire shares of Common Stock.

EXPERTS

The balance sheets as of December 31, 1999 and 1998 and the statements of operations, changes in stockholders' equity and cash flows for each of the years in the three-year period ended December 31, 1999 included in the Annual Report on Form 10-K which is incorporated by reference in this Prospectus have been audited by, and are incorporated by reference herein in reliance upon the report of Richard A. Eisner & Company, LLP, independent auditors, given on the authority of that firm as experts in accounting and auditing.

PROSPECTUS

May , 2000

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The estimated expenses payable by the Registrant in connection with the issuance and distribution of the securities being registered are as follows:

<TABLE>

<CAPTION>

	AMOUNT
<S>	<C>
Printing Expenses.....	\$ 5,000
Accounting Fees and Expenses.....	10,000
Legal Fees and Expenses.....	50,000
Registration Fee.....	4,004.31
Miscellaneous Expenses.....	1,995.69
Total.....	\$ 71,000

</TABLE>

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

The Certificate of Incorporation and By-Laws of the Registrant provides that the Company shall indemnify any person to the full extent permitted by the Delaware General Corporation Law (the "GCL"). Section 145 of the GCL, relating to indemnification, is hereby incorporated herein by reference.

Insofar as indemnification for liabilities under the Securities Act may be permitted to Directors, officers or controlling persons of the Company pursuant to the Company's By-laws and the Delaware General Corporation Law, the Company has been informed that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

The Company's Certificate of Incorporation includes certain provisions permitted pursuant to Delaware law whereby officers and Directors of the Company are to be indemnified against certain liabilities. The Company's Restated Certificate of Incorporation also limits, to the fullest extent permitted by Delaware law, a director's liability for monetary damages for breach of fiduciary duty, including gross negligence, except liability for (i) breach of the director's duty of loyalty, (ii) acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of the law, (iii) the unlawful payment of a dividend or unlawful stock purchase or redemption and (iv) any transaction from which the director derives an improper personal benefit. Delaware law does not eliminate a director's duty of care and this provision has no effect on the availability of equitable remedies such as injunction or rescission based upon a director's breach of the duty of care. In addition, the Company has obtained an insurance policy providing coverage for certain liabilities of its officers and Directors.

In accordance with Section 102(a)(7) of the GCL, the Certificate of Incorporation of the Registrant eliminates the personal liability of directors to the Company or its stockholders for monetary damages for breach of fiduciary duty as a director with certain limited exceptions set forth in Section 102(a)(7).

ITEM 16. EXHIBITS

<TABLE>	
<C>	
5.1	-- Opinion of Morrison Cohen Singer & Weinstein, LLP
23.1	-- Consent of Morrison Cohen Singer & Weinstein, LLP (included in its opinion filed as Exhibit 5.1 hereto)
23.2	-- Consent of Richard A. Eisner & Company, LLP
</TABLE>	

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ITEM 17. UNDERTAKINGS

Rule 415 Offering -- Undertakings Required by Regulation S-B, Item 512(a).

The undersigned registrant hereby undertakes:

(1) file, during any period in which it offers or sells securities, a post-effective amendment to this registration statement to:

(i) Include any prospectus required by Section 10(a)(3) of the Securities Act of 1933.

(2) That, for determining liability under the Securities Act of 1933, each post-effective amendment shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be an initial bona fide offering.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunder duly authorized, in the city of Dallas, state of Texas, on May 11, 2000.

CYTOCLONAL PHARMACEUTICS INC.

By: /s/ ARTHUR P. BOLLON

 Arthur P. Bollon, Ph.D.,
 Chairman, President and
 Chief Executive Officer

In accordance with the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<TABLE>			
<CAPTION>			
	SIGNATURE	TITLE	DATE
	-----	----	----
<C>	<S>	<C>	
	/s/ ARTHUR P. BOLLON	Chairman, President, Chief	May 11, 2000
	-----	Executive Officer and Director	
	Arthur P. Bollon, Ph.D.	(principal executive officer)	
	/s/ DANIEL SHUSTERMAN	Vice President Operations,	May 11, 2000
	-----	Treasurer and Chief Financial	
	Daniel Shusterman, J.D.	Officer (principal financial	

and accounting officer)

/s/ IRA GELB

Director

May 11, 2000

Ira Gelb, M.D.

/s/ IRWIN C. GERSON

Director

May 11, 2000

Irwin C. Gerson

</TABLE>

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EXHIBIT INDEX

<TABLE>

<CAPTION>

EXHIBIT NUMBER

DESCRIPTION

<C>

<S>

5.1

-- Opinion of Morrison Cohen Singer & Weinstein, LLP

23.2

-- Consent of Richard A. Eisner & Company, LLP

</TABLE>

EXHIBIT 5.1

MORRISON COHEN SINGER & WEINSTEIN, LLP

750 Lexington Avenue

New York, New York 10022

Telephone: (212) 735-8600

Facsimile (212) 735-8708

May 11, 2000

Cytoclonal Pharmaceuticals Inc.

9000 Harry Hines Boulevard

Dallas, Texas 75235

Re: Registration Statement on Form S-3

Dear Sirs:

We refer to Registration Statement on Form S-3 (the "Registration Statement") filed by you, Cytoclonal Pharmaceuticals Inc., a Delaware corporation (the "Company"), pursuant to the Securities Act of 1933, as amended (the "Securities Act"), with the Securities and Exchange Commission thereby registering an aggregate of 1,880,240 shares of common stock, \$.01 par value per share (the "Common Stock").

We have examined and are familiar with originals, or copies certified or otherwise identified to our satisfaction, of such corporate records of the Company, certificates of officers of the Company and of public officials and such other documents as we have deemed appropriate as a basis for the opinions expressed below.

Based upon the foregoing, we are of the opinion that:

1. The Common Stock has been duly and validly authorized and when sold, paid for and issued upon the exercise of (a) the Unit Purchase Options, Class C Warrants and Class D Warrants in accordance with the terms of the Unit Purchase Option, the Class C Warrants and Class D Warrants, respectively, (b) the Class A Warrants and Class B Warrants in accordance with the terms of the Class A Warrants and Class B Warrants, respectively, and (c) such other options and warrants as set forth in the Registration

Statement in accordance with the terms of such options and warrants, the
Common Stock will be duly and validly issued, fully paid and nonassessable.

We hereby consent to the use of this opinion in the above-mentioned
Registration Statement and to the reference to our name under the heading "Legal
Matters" in the Prospectus constituting a part of the Registration Statement.

Very truly yours,

/s/ MORRISON COHEN SINGER & WEINSTEIN,
LLP

Morrison Cohen Singer & Weinstein, LLP

EXHIBIT 23.2

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in this Amendment No. 1 to the Registration Statement on Form S-3 of Cytoclonal Pharmaceuticals Inc. of our report, dated February 5, 2000 (with respect to Note J, March 13, 2000), on our audits of the financial statements of Cytoclonal Pharmaceuticals Inc. as of December 31, 1999 and 1998 and for each of the years in the three-year period ended December 31, 1999, included in the Company's Annual Report on Form 10-K for the year ended December 31, 1999. We also consent to the reference of our firm under the captions "Experts" and "Summary Financial Information" included in the Prospectus.

/s/ RICHARD A. EISNER & COMPANY,
LLP

Richard A. Eisner & Company, LLP

New York, New York
May 10, 2000