As filed with the Securities and Exchange Commission on October 22, 1998

Registration No.

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SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

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

Delaware	75-2402409
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification number)

9000 Harry Hines Boulevard
Suite 330
Dallas, Texas 75235
(214) 353-2922
(Address and Telephone Number of Principal Executive Offices)

9000 Harry Hines Boulevard
Suite 330
Dallas, Texas 75235
(Address of Principal Place of Business or Intended Principal Place of Business)

Arthur P. Bollon, Ph.D.
Chairman and Chief Executive Officer
Cytoclonal Pharmaceutics Inc.
9000 Harry Hines Boulevard
Suite 330
Dallas, Texas 75235
(214) 353-2922
(Name, Address and Telephone Number of Agent for Service)

Copies to:
Robert H. Cohen, Esq.
Philip Magri, Esq.
Morrison Cohen Singer & Weinstein, LLP
750 Lexington Avenue
New York, New York 10022
(212) 735-8600

Approximate date 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 a 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. / /

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CALCULATION OF REGISTRATION FEE

<TABLE>
<CAPTION>

Title of Each Class of Securities to be Registered	Proposed Maximum Amount to be Registered	Maximum Offering Price Per Security	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
<S>	<C>	<C>	<C>	<C>
Shares of Common Stock, par value $.01 per share(1)	671,035	$4.69(6)	$3,147,154	$875
Shares of Common Stock, par value $.01 per share(2)	335,540	$10.08(7)	$3,382,243	$940
Shares of Common Stock, par value $.01 per share(3)	134,199	$8.40(7)	$1,127,272	$313
Shares of Common Stock, par value $.01 per share (4)	67,101	$10.08(7)	$676,378	$188
Shares of Common Stock, par value $.01 per share(5)	37,500	$7.00(7)	$262,500	$73
Shares of Common Stock, par value $.01 per share(5)	12,500	$8.00(7)	$100,000	$28
Shares of Common Stock, par value $.01 per share(5)	25,000	$9.00(7)	$225,000	$63
Total	1,282,875	-	$8,920,547	$2,480

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(1) The Company is registering these shares of Common Stock for resale by the stockholders who are listed in the prospectus (the "Selling Stockholders") who bought the shares of Common Stock in the Company's private placement of Units completed in April 1998 (the "1998 Private Placement").

(2) The Company is registering these shares of Common Stock for resale by the Selling Stockholders issuable upon the exercise of 335,540 Class E Warrants purchased by the Selling Stockholders in the 1998 Private Placement (the "Class E Warrants").

(3) The Company is registering these shares of Common Stock for resale by a certain Selling Stockholder, Janssen- Myers Associates, L.P. ("JMA"), issuable upon the exercise of a unit purchase option granted to JMA for its services as placement agent in the 1998 Private Placement (the "JMA Option").

(4) The Company is registering these shares of Common Stock for resale by JMA issuable upon the exercise of the 67,101 Class E Warrants underlying the JMA Option.

(5) The Company is registering these shares of Common Stock for resale by a certain Selling Stockholder, Synergy Group, L.P. ("Synergy"), issuable upon the exercise of a warrant issued to Synergy pursuant to a financial consultant agreement (the "Synergy Warrant").

(6) Represents the average of the closing bid and asked prices of the Company's Common Stock as quoted on the Nasdaq SmallCap Market System on October 15, 1998 in compliance with Rule 475(c) of the Securities Act of 1933, as amended (the "Securities Act").

(7) Computed in compliance with Rule 475(g) of the Securities Act.

Pursuant to Rule 416 under the Securities Act of 1933, as amended, there are also being registered such additional shares of Common Stock as may become issuable pursuant to anti-dilution provisions of the Class E Warrants, JMA Option and Synergy Warrant.

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.

Subject to completion dated October 22, 1998

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.

1,282,875 Shares of Common Stock

The stockholders listed in this prospectus under the section entitled, "Selling Stockholders" are offering and selling a total of 1,282,875 shares of our company's common stock, $.01 par value per share (the "Common Stock"), which they own or have the right to acquire from time to time. 671,035 of the shares of Common Stock included in this offering were purchased by certain of the Selling Stockholders in our private placement of Units in April 1998 (the "1998 Private Placement"). Each Unit consisted of Common Stock and Class E Warrants to purchase Common Stock. 335,530 of the shares of Common Stock are shares which may be issued to the same certain Selling Stockholders if and when they exercise their Class E Warrants. 134,199 of the shares of Common Stock are shares which may be issued to Janssen-Meyers Associates, L.P. ("JMA") if and when it exercises the unit purchase option we granted to it for its services as placement agent in our 1998 Private Placement (the "JMA Option"). 67,101 of the shares of Common Stock are shares which may be issued to JMA if and when it exercises the 67,101 Class E Warrants underlying the JMA Option. 75,000 of the shares of Common Stock included in this offering are shares which may be issued if and when one of our financial consultants, Synergy Group, L.L.C. ("Synergy"), exercises warrants issuable to it under a financial consulting agreement.

The Selling Stockholders may offer their shares of Common Stock through public or private transactions at current market prices, or at previously

negotiated prices. We will not receive any proceeds from the Selling Stockholders' sale of the shares of Common Stock. We will, however, receive proceeds when certain of the Selling Stockholders exercise their warrants and options to acquire a total of up to 611,840 of the shares of Common Stock included in this offering.

Our Common Stock, Class C Warrants and Class D Warrants are currently quoted on the Nasdaq SmallCap Market System. Our Common Stock is quoted under the symbol, "CYPH." Our Class C Warrants are quoted under the symbol, "CYPHW." Our Class D Warrants are quoted under the symbol, "CYPHZ."

See "Risk Factors" beginning on page 7 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 October _____, 1998.

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 Stockholders sell all of their shares of Common Stock. This prospectus is part of a registration statement we filed with the SEC.

1. Annual Report on Form 10-KSB for the fiscal year ended December 31, 1997;

2. Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 1998;

3. Quarterly Report on Form 10-QSB for the fiscal quarter ended March 31, 1998;

4. Current Report on Form 8-K, dated June 12, 1998, filed with the SEC on September 9, 1998;

5. Proxy statement filed with the SEC on August 5, 1998 pursuant to Regulation 14A under the Exchange Act of 1934 ("the Exchange Act"); and

6. 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 Pharmaceutics Inc.
9000 Harry Hines Boulevard
Suite 330
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 Stockholders 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 highlights information contained elsewhere in this prospectus. This summary is not complete and may not contain all of the information that you should consider before investing in the Common Stock. You should read the entire prospectus carefully. Unless we otherwise say so, when we discuss outstanding securities of the Company, we exclude all of the shares of Common Stock issuable upon the exercise of the Company's currently outstanding warrants and options and the conversion of the Company's convertible securities.

Cytoclonal Pharmaceutics Inc.

We are a biopharmaceutical company located in Dallas, Texas. Our goal is to develop products to identify, treat and prevent cancer and other diseases. We were formed in September 1991 and since that date, we have devoted our resources solely to research and development activities relating to several products which are at various developmental stages. We have several license agreements with various biopharmaceutical companies and research institutions which own approved and pending patents covering certain drugs and therapeutic technologies.

Strategy

Through our research and development efforts and agreements with other research institutions and biotechnology companies, we have acquired and developed rights to certain technology. At the present time, we our focusing our attention and resources on our collaboration agreement with Bristol-Myers Squibb Company, Inc. ("Bristol-Myers Squibb") for Paclitaxel production (the "BMS License Agreement"). Paclitaxel is a drug which has proven to be effective in treating refractory ovarian and breast cancers. In addition, Paclitaxel has shown potential in treating refractory non-small cell lung cancer and certain other cancer indications in preliminary clinical trials. Presently, Paclitaxel is made from the inner bark and needles of the slow-growing Pacific yew tree. Our scientists are working in cooperation with the inventors of the fungal Paclitaxel technology to develop a system for manufacturing Paclitaxel in commercial quantities and at lower costs compared to currently available production methods. We are also focusing on possible Paclitaxel treatment of Polycystic Kidney Disease, our gene discovery program for the early diagnosis and treatment of lung cancer and our vaccine program. Other programs, which involve potential anti-leukemia drugs and drugs called "anti-sense therapeutics," are being pursued at modest levels, and may help us develop future products or alternatives to our main programs if unforeseen problems develop. "Anti-sense therapeutics" are drugs designed to essentially "turn off" genes involved in different diseases and to prevent such genes from growing or duplicating. See "Risk Factors-Our Dependence Upon Agreements and Licenses with Other Companies and Institutions; -Our Obligations to Pay Royalty Fees and the Possibility of Losing Our Patents or Other Rights; -No Assurance of FDA Approval; Government Regulation; and -Our Dependence upon Bristol-Myers Squibb."

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, as we have done with our Paclitaxel production system to Bristol-Myers Squibb. In the event we decide to expand our strategy to include developing acquired technologies to commercial stages, which we have not done to date, we would require significant additional money to complete development of and obtain regulatory approvals for our proposed products which, if ever received, may take several years. See "Risk Factors-Our Need for Substantial Additional Funds; and -No Assurance of FDA Approval;

Government Regulation."

Key License Agreements

In August 1998, we entered into an exclusive world-wide license agreement with the University of California, Los Angeles for domestic and foreign patents and patents pending based upon and including any subject matter claimed in or covered by a U.S. patent pending entitled, "Peptide Antiestrogen Compositions and Methods for Treating Breast Cancer." The agreement grants us the right to (i) make, use, sell, offer for sale, import certain

products and practice any process or method involving the patents and (ii) sublicense these rights to third parties. Under this agreement, we have to pay up-front fees, maintenance fees, royalties and milestone payments. See "Risk Factors-Our Obligations to Pay Royalty Fees and the Possibility of Losing our Patent and Other Rights."

In June 1998, we entered into the BMS License Agreement where we sublicensed to them the technologies we had licensed from RDI and WSURF (see the next two paragraphs for a further description of these two agreements) relating to the production of Paclitaxel, the active ingredient in Bristol-Myers Squibb's largest-selling cancer product, Taxol(TM). Under this agreement, Bristol-Myers Squibb has to pay us fees, milestone payments, research and development support and minimum and sales-based royalties. See "Risk Factors-Our Obligations to Pay Royalty Fees and the Possibility of Losing our Patent and Other Rights; and -Our Dependence upon Bristol-Myers Squibb."

In June 1993, we entered into an exclusive world-wide license agreement with the Research & Development Institute, Inc. at Montana State University ("RDI") to use patented fungal technology to manufacture Paclitaxel. In May 1998, we amended this agreement to require us to pay a percentage of royalties received with respect to the manufacture, use or sale of the inventions by sublicensees and all up-front, milestone and royalty payments we may receive under the BMS License Agreement. See "Risk Factors-Our Obligations to Pay Royalty Fees and the Possibility of Losing our Patent and Other Rights"

In July 1996, we entered into an exclusive, world-wide license agreement with the Washington State University Research Foundation ("WSURF") to use and sublicense patented technology or prospective patented technology related to genes and associated products for the manufacturing of Paclitaxel from the yew tree. In June 1998, we amended this agreement to cover additional patents, patent applications and genes for enzymes which are expected to be the subject of future patent filings and allow us to license any of the technology as it is developed until July 2006. See "Risk Factors-Our Obligations to Pay Royalty Fees and the Possibility of Losing our Patent and Other Rights."

In June 1996, we entered into an exclusive license agreement with the University of Texas System to allow us to manufacture, have manufactured, use, sell and sublicense products related to a U.S. Patent Application entitled, "A Method for Ranking Sequences to Select Target Sequence Zones of Nucleus Acids." The technology has identified specific areas within genes which would be receptive to anti-sense products. A Notice of Allowance of patent claims was received in June 1998. This discovery has potentially broad applications to many human and viral genes involved in human disease. See "Risk Factors-Our Obligations to Pay Royalty Fees and the Possibility of Losing Our Patent and Other Rights."

In February 1996, we obtained exclusive rights to a technology and then pending patent developed at the University of California, Los Angeles for the Paclitaxel treatment of Polycystic Kidney Disease. The Patent and Trademark Office ("PTO") allowed such patent in August 1997. See "Risk Factors-Our Obligations to Pay Royalty Fees and the Possibility of Losing our Patent and Other Rights."

Financial History

Until the fiscal year ended December 31, 1997, we had not generated any sales revenues. For the six month period ended June 30, 1998, we, for the first time, generated $789,000 in revenues from the $1,250,000 we had received from Bristol-Myers Squibb with the remaining $461,000 of the $1,250,000 to be applied

to the third and fourth quarters of 1998. We, however, have experienced operating losses of $2,319,000 for the fiscal year ended December 31, 1995; $3,106,000 for the fiscal year ended December 31, 1996; and $3,357,000 for the fiscal year ended December 31, 1997. We have also experienced operating losses of $1,575,000 for the six month period ended June 30, 1997 and $1,044,000 for the six month period ended June 30, 1998. Since our formation in 1991, we have incurred significant net operating losses, and we cannot predict when, if ever, this trend will end. See "Risk Factors-Our Accumulated Deficit and Loss per Share of Common Stock; Our History of Significant Losses and Expected Future of Significant Losses."

Organizational History

We were originally incorporated in the state of Texas in September 1991. Our name was Bio Pharmaceutics, Inc. In November 1991, we changed our name to Cytoclonal Pharmaceutics 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 330, Dallas, Texas 75235 and our telephone number is (214) 353-2922.

The Offering

<TABLE>

<S>	<C>
Common Stock outstanding before this offering as of October 21, 1998(1)	10,208,441 shares
Common Stock offered:	1,282,875 shares
Common Stock that will be outstanding after this offering is completed (1):	11,491,316
Selling Stockholders:	See the section entitled, "Selling Stockholders," included in this prospectus.
Risk Factors:	Investment in these securities is uncertain and risky. See "Risk Factors."
Use of Proceeds:	We will not receive any proceeds from the sale of the Common Stock being sold in this offering. Some of the Common Stock, however, will be received by the Selling Stockholders only when they exercise warrants. We will receive the proceeds when the warrants are exercised. We intend to utilize the net proceeds from the exercise of the warrants to fund our research and development activities (including paying royalties and licensing fees), and for general working capital purposes and operating expenses. See "Use of Proceeds."
Dividend Policy:	We currently intend to retain all future earnings to fund the development and growth of our business. We do not anticipate paying cash dividends. See "Dividend Policy."
Nasdaq SmallCap Market ticker symbols (3):	Common Stock - CYPH Class C Warrants - CYPHW Class D Warrants - CYPHZ

</TABLE>

(1) Does not include as of the date hereof the possible issuance of (i) 1,593,700 shares of Common Stock reserved for issuance upon exercise of options granted or available for grant under our 1992 Stock Option Plan and 1996 Stock Option Plan; (ii) 746,864 shares of Common Stock issuable upon the conversion of our currently outstanding Series A Convertible Preferred Stock; (iii) 800,000 shares of Common Stock reserved for issuance upon exercise of an option granted to the underwriter of our initial public offering completed in November 1995; (iv) 205,000 shares of Common Stock issuable upon exercise of options granted as compensation for professional services; (v) 36,000 shares of Common Stock issuable upon the exercise of warrants granted for research and development; (vi) 2,006,073 shares of

Common Stock issuable upon the exercise of the outstanding Class C Warrants issued in our initial public offering in November 1995 (the "IPO"); (vii) 2,510,927 shares of Common Stock issuable upon the exercise of the outstanding Class D Warrants issued in the IPO; (viii) 2,006,073 shares of Common Stock issuable upon the exercise of the Class D Warrants underlying the outstanding Class C Warrants issued in the IPO; (ix) 125,000 shares of Common Stock issuable upon the exercise of currently outstanding Class A Warrants; (x) 193,088 shares of Common Stock issuable upon the exercise of currently outstanding Class B Warrants; and (xi) 202,500 shares of Common Stock issuable upon the exercise of warrants issued as compensation for professional services.

SUMMARY FINANCIAL INFORMATION

Statement of Operations Data:

<TABLE>
<CAPTION>

	Year Ended December 31,		Six Months Ended June 30,	
	1997	1996	1998	1997
<S>	<C>	<C>	<C>	<C>
Licensing and Research Collaborative Agreement Revenue	--	--	$ 789,000	--
Research and development expenses	$ 1,469,000	$ 1,576,000	822,000	$ 688,000
General and administrative expenses	1,888,000	1,530,000	1,011,000	887,000
Net interest expense (income)	(105,000)	(216,000)	(85,000)	(58,000)
Net loss	(3,252,000)	(2,890,000)	(959,000)	(1,517,000)
Basic and diluted loss per share of common stock	$ (.42)	$ (.42)	$ (.11)	$ (.21)
Weighted average number of shares outstanding-Basic and diluted loss per share	8,268,000	7,640,000	9,286,000	8,073,000

</TABLE>

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 being offered by the Selling Stockholders.

Our Accumulated Deficit and Loss per Share of Common Stock.

We had an accumulated deficit of $15,104,000 as of the fiscal year ended December 31, 1997 and $16,063,000 as of the quarter ended June 30, 1998 (which has not been audited by our auditors). Our statement of operations for the fiscal year ended December 31, 1997 shows net losses of $3,252,000, which means a loss of $.42 per share of Common Stock. Our statement of operations for the six month period ended June 30, 1998 (which has not been audited by our auditors) shows net losses of $959,000, which means a loss of $.11 per share of Common Stock. See "-Our History of Significant Losses and Expected Future of Significant Losses."

Our History of Significant Losses and Expected Future of Significant Losses.

From our formation in 1991 until the six month period ended June 30, 1998,

we were considered to be a "development stage" company, which is what they call companies which have not yet generated any sales revenues. However, because we had revenues of $789,000 in the six month period ended June 30, 1998 from the BMS License Agreement, we are no longer considered to be a "developmental stage" company. However, from our formation in 1991 to the date of this prospectus, we have had substantial operating losses and expect to have them for the next several years, if not more, due to our research and development activities and general and administrative expenditures. Although we had revenue in the third quarter of 1998, we cannot say with any certainty that we will any have future revenue, or that even if we do have revenue, that we will be profitable. See "-Our Accumulated Deficit and Loss per Share of Common Stock."

Our Need for Substantial Additional Funds.

Since our formation in 1991, we have experienced negative cash flows from our operations which means we are spending more money than we are receiving. We also expect to experience negative cash flows in the foreseeable future. Since our formation in 1991, we have relied on loans, private financings, and our IPO completed in November 1995 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 do not have any commitments or arrangements to obtain any additional funding besides the BMS License Agreement and our agreement with RDI. We cannot say with any certainty that required financing will be available to us on terms favorable, if at all. Although we plan to seek funding for some of our product development efforts by entering into research and development partnerships and obtaining government grants and research contracts, we cannot say with any amount of certainty that we will be able to enter into any additional agreements on favorable terms, if at all. If we decide to raise additional money by issuing more of our securities, stockholders at the time of the issuance will experience a dilution to the value of their securities.

Our Dependence upon Agreements and Licenses with Other Companies and Institutions.

Our strategy is to develop, test, manufacture and eventually commercialize our products. This will require us to enter into agreements with other companies and institutions. If we enter into additional agreements, we will rely upon the other parties to honor their responsibilities and perform their obligations under the agreements. In March 1992, we entered into a collaborative research, development and license agreement (the "Enzon Agreement") with Enzon, Inc., a research, development and manufacturing company which had developed certain pharmaceutical products and technology relating to polypeptides and antigen binding protein products ("Enzon"). Pursuant to the Enzon Agreement, we granted Enzon a license to develop certain protein strains using certain of our

technology until March 2005. Besides the Enzon Agreement and our agreement with RDI, we have entered into several other research and license agreements, and we are continually seeking to enter into additional arrangements with other companies and institutions. However, we cannot say with any certainty that our current agreements or any future agreements will allow us to develop products with commercial potential or to obtain proprietary rights or licenses for proprietary rights with respect to any technology developed in connection with these arrangements or that we will be able to guarantee the confidentiality of any proprietary rights and information developed under such collaborative arrangements or prevent their public disclosure. See "-Our Competition; and -Our Uncertain Ability to Protect Our Technology."

In general, our collaborative agreements with other companies and research institutions provide that the agreements may be terminated under certain circumstances. We cannot give any assurance that we will be able to extend any of our collaborative agreements upon their termination or expiration, or that we will be able to enter into new collaborative agreements with existing or new partners in the future. To the extent we decline or are unable to enter into any additional collaborative arrangements, we would require substantially greater funding to continue our current activities. In addition, if we are unable to enter into additional collaborative agreements, we might be significantly

delayed in introducing our proposed products into certain commercial markets, or we may even find that our development, manufacture or sale of our proposed products is greatly hurt.

We Might Experience Problems in Developing Our Products.

We cannot say with any certainty that our research and development activities will enable us to produce any products able to withstand competition. Our development of each product is subject to the risks of failure commonly experienced in the development of products based upon innovative technologies and the expense and difficulty of obtaining approvals from regulatory agencies. All of our potential products currently under development will require significant additional funding and development and pre-clinical and clinical testing before we are able to submit them to any of the regulatory agencies for approval for commercial use. We cannot say with any certainty that we will be able to license any technologies or proposed products or to complete successfully any of our research and development activities. Even if we do complete them, we cannot say with any certainty that we will be able to market successfully any of the products or that we will be able to obtain the necessary regulatory approval or that customers will like our products. We also face the risk that any or all of our products will not work as intended or that they will be toxic, or that, even if they do work and are safe, that our products will be difficult to manufacture or market on a large scale. We also face the risk that the rights of other persons or entities will stop us from marketing any of our products or that other persons or entities might market their products as well as we market our products or even better. See "-Our Competition; -No Assurance of FDA Approval; Government Regulation; -Our Dependence upon Others for Manufacturing; Our Lack of Manufacturing Experience; and -Our Dependence upon Others for Marketing; Our Lack of Marketing Experience."

Our Obligations to Pay Royalty Fees and the Possibility of Losing Our Patents or Other Rights.

RDI.

Under our license agreement with RDI (the "RDI Agreement") relating to the production of Paclitaxel, we have to pay RDI a minimum royalty fee of $100,000 no later than June 10th of every year as long as the RDI Agreement is in effect. We have paid RDI royalty payments of $100,000 on June 10, 1997 and $100,000 on June 10, 1998. Also, under the RDI Agreement, we have to pay RDI royalties on sales of products which use the technology we have licensed under the RDI Agreement. The royalty percentage is higher if a patent for the technology has been issued by the PTO. In May 1998, we amended the RDI Agreement to require us to pay RDI (i) a percentage of royalties received by us from sublicensees who manufacture, use or sell products using the technology licensed to us under the RDI Agreement, which royalty rate will be reduced if we are required to pay royalties to other parties, and (ii) payments we might receive under the BMS License Agreement. Our business would be significantly hurt if we lost the RDI Agreement. See "-Our Dependence upon Bristol-Myers Squibb."

WadTech.

Under our agreement with WadTech where we purchased certain of their technology (the "Wadley Technology"), we are required to pay WadTech a royalty fee of 6.25% of the gross selling prices of products which use any of the Wadley Technology until we have paid to WadTech a total of $1,250,000. After that, the royalty rate will drop to 3.75%. We have paid WadTech royalty fees of $31,250 for the year beginning October 1, 1996 and $62,500 for the year beginning October 1, 1997. We have to pay WadTech $125,000 for each year after that. WadTech has a perfected security interest in the Wadley Technology to secure the payment of the first $1,250,000 of royalties. WadTech still has the right to license the WadTech Technology to other parties or sell it if we do not satisfy obligations. We have to pay a royalty fee of 3% on sales of products produced through a system involving technology concerning yeast which was assigned to us when we purchased the Wadley Technology. Our business would be significantly hurt if we lost the WadTech Technology.

WSURF.

Under our license agreement with WSURF, we are required to pay WSURF an annual license fee every year, beginning July 1, 1997, as well as royalty and sublicensing fees. We have paid last year's annual license fee. Our business would be significantly hurt if we lost the technology under this license agreement with WSURF. See "-Our Dependence upon Bristol-Myers Squibb."

Enzon.

Under the Enzon Agreement, if we and Enzon decide to develop any products together, the costs and profits of the development will be split equally. The agreement also says that if we are unable to pay our share of the costs, we will lose our rights to any of the products which are developed and we will not have the right to split the profits from any of the products which are developed. We will only be entitled to a royalty fee. Our business would be significantly hurt if we lost the Enzon Agreement. See "-Our Dependence upon Agreements and Licenses with Other Companies and Institutions."

University of Texas.

Under our agreement with the University of Texas, we have paid the University $231,563 of the $285,240 which we owe them as of June 30, 1998 when we and the university amended the agreement to grant us the right to develop and commercialize any intellectual property under the original agreement and which requires that we and the University negotiate a royalty fee which is less than 8% of the net sales of any commercialized products. We also entered into a Patent License Agreement with the Board of Regents of the University of Texas which requires us to pay Regents licensing and sublicensing fees. Our business would be significantly hurt if we lost any of our agreements with the University of Texas.

University of California, Los Angeles.

We have three separate license agreements with the University of California, Los Angeles ("UCLA"). Under our first license agreement with UCLA, we have paid them $5,000, and have agreed to pay an additional $10,000 upon issuance of a patent. Under our second license agreement with UCLA, we have paid them a $5,000 license issuance fee, and we have agreed to pay an additional $5,000 upon the issuance of a patent. Under our third license agreement with UCLA, we have agreed to pay them a $20,000 license issuance fee, an additional $25,000 fee upon the issuance of a patent, annual maintenance fees which increase every year and minimum annual royalty payments. Our business would be substantially hurt if we lose any of our agreements with UCLA.

Our Competition.

We are in the rapidly changing, competitive and heavily regulated biotechnology industry which makes it difficult for us to predict our risks and expenses with any amount of certainty. Many of our competitors have more

financial, technical, human and other resources than us. Also, many of our competitors have significantly more experience than us in performing pre-clinical testing and human clinical trials of new products and obtaining approvals from the United States Food and Drug Administration ("FDA"), PTO and other regulatory agencies. It is a possibility that our competitors may receive FDA or PTO approval before us and at less cost. Also, our employees and management have little or no experience producing and selling any pharmaceutical or biological products. Investors should be aware that in June 1991, the National Cancer Institute ("NCI") entered into a Collaborative Research and Development Agreement ("CRADA") with Bristol-Myers Squibb to develop Paclitaxel and granted Bristol-Myers Squibb the exclusive use of NCI's clinical data relating to Paclitaxel in seeking approval from the FDA until December 1997, which significantly shortened the approval process and prevented any other party from obtaining FDA approval using the NCI data. Although Bristol-Myers Squibb has since lost its right of exclusivity under the CRADA, it has patented its method of delivering Paclitaxel intravenously to a patient. Such patent has in fact kept Bristol-Myers Squibb's use of the NCI data exclusive. Other companies are currently contesting the exclusivity in the courts. Bristol-Myers Squibb also received FDA approval for commercial sale of its Paclitaxel for refractory ovarian cancer in December 1992, refractory breast cancer in August 1994,

Kaposi's Sarcoma in August 1997 and lung cancer in 1998. Since December 1992, Bristol-Myers Squibb has been the sole source of Paclitaxel for commercial purposes. We think that Bristol-Myers Squibb is currently conducting clinical trials in order to get FDA approval for treating other types of cancer. See "-No Assurance of FDA Approval, Government Regulation; -Our Dependence upon Bristol-Myers Squibb; -Our Dependence upon Others for Manufacturing; Our Lack of Manufacturing Experience; -Our Dependence upon Other for Marketing; Our Lack of Marketing Experience; and -Our Dependence upon Key Personnel and Collaborators; Our Limited Management Team."

Our Uncertain Ability to Protect Our Technology.

Our success will depend, in part, 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 able to protect our rights. See "-Our Competition; and -Our Dependence upon Key Personnel and Collaborators; Our Limited Management Team."

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. See "-Our Competition; and -Our Dependence upon Key Personnel and Collaborators; Our Limited Management Team."

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 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. See "-Our Competition; and -Our Dependence upon Key Personnel and Collaborators; Our Limited Management Team."

No Assurance of FDA Approval; Government Regulation.

The FDA and other similar agencies in foreign countries have substantial requirements for therapeutic and diagnostic pharmaceutical and biological products. Such requirements often involve lengthy and detailed laboratory

and clinical testing procedures, sampling activities and other costly and time-consuming procedures. It often takes companies several years to satisfy these requirements, depending on the complexity and novelty of the product. The review process is also extensive which may delay the approval process even more. These regulatory requirements could substantially hurt our ability to clinically test and manufacture our potential products. Government regulation could also delay our marketing of new products for a considerable period of time, impose costly procedures upon our activities and give our competitors an advantage. We cannot say with any certainty that the FDA or other regulatory agency will grant us approval for any of our products on a timely basis, if at all. Any delay in obtaining, or failure to obtain, such approvals could substantially hurt our marketing of any proposed products and our ability to earn product revenue. Further, regulation is subject to change. Any additional regulation could limit or restrict our ability to use any of our technologies which could substantially hurt our operations. See "-Our Competition."

We also have to comply with the Occupational Safety and Health Administration ("OSHA"), Environmental Protection Agency ("EPA"), 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. See "-Our Competition."

Uncertainty Related to Health Care Reimbursement and Reform Measures.

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. 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 other third-party payers are attempting to contain health care costs more every day 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. 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. See "-Our Competition; and -No Assurance of FDA Approval, Government Regulation."

Our Dependence upon Bristol-Myers Squibb.

In June 1998, we entered into the BMS License Agreement and a Sponsored Research Agreement (the "R&D Agreement") with Bristol-Myers Squibb. Under the BMS License Agreement, we granted Bristol-Myers Squibb an exclusive sublicense under the RDI Agreement (the "BMS License Agreement-RDI Sublicense Agreement") and the WSURF Agreement. Under the RDI Agreement, we acquired a license to certain patents and technology relating to the use of microorganisms to produce Paclitaxel and other taxanes and components. Under the WSURF Agreement, we acquired a license to certain patents and technology relating to genes receptive to enzymes involved in the production of Paclitaxel and other taxanes. The BMS License Agreement requires Bristol-Myers Squibb to pay royalties based on the amount of sales and lump sum payments when certain events occur. Under the BMS License Agreement, Bristol-Myers Squibb has the right to negotiate with us before anyone else does, an exclusive, world-wide right to license or sublicense any of the technology licensed to us under the RDI Agreement and WSURF Agreement and potentially new anti-cancer drugs from microorganisms supplied by us. The term of the BMS License Agreement shall end until the occurrence of later of (i) ten (10) years from the first commercial sale of the licensed products or (ii) such time as neither the making, use nor sale at the time by Bristol-Myers Squibb, its affiliates or sublicensees in such country of the licensed product does not infringe (a) any U.S. or foreign patents or patent applications, including reissues, renewals, extensions, continuations or continuations-in-part, copyrights or trademarks owned and licensed by RDI to us under the RDI Agreement, (b) certain U.S. and foreign patents or patent applications owned by WSURF and licensed by WSURF to us under the WSURF

Agreement and (c) other licensed property together with all patent rights pertaining thereto, to the extent that such patent rights are not already part of the RDI Agreement and WSURF Agreement. Bristol-Myers Squibb can terminate the BMS License Agreement after December 12, 1998, after they have given us ninety (90) days notice, in which event the Bristol-Myers Squibb sublicense under the RDI Agreement and WSURF Agreement will terminate, although any payment obligations would survive termination. We cannot say with any certainty that Bristol-Myers Squibb will successfully manufacture or market the licensed property, if it does at all, or that we will be able to maintain the RDI Agreement or the WSURF Agreement. See "-Our Dependence upon Agreements and Licenses with Other Companies and Institutions."

Bristol-Myers Squibb can renew the R&D Agreement for continuous one-year

periods only if the BMS License Agreement is still in effect. The R&D Agreement contemplates, without assurance, a program to develop microbial fermentation and genetic engineering technologies for the production of Paclitaxel and other taxanes. See "-Our Dependence upon Agreements and Licenses with Other Companies and Institutions."

Our Dependence upon Others for Manufacturing; Our Lack of Manufacturing Experience.

We currently do not have facilities or personnel capable of manufacturing any products in commercial quantities. If we develop fungal Paclitaxel and obtain regulatory approval of it, we intend to contract outside parties to manufacture it for us. We cannot say with any certainty whether we will be able to enter into any arrangements with outside manufacturers on terms favorable to us, if at all. In the future, we may, if it becomes economically attractive to do so, establish our own manufacturing facilities to produce other products that we may develop. Building and operating production facilities would require substantial additional funds and other resources. We cannot say with any certainty, however, whether such funds would be available on favorable terms to us, if at all. Also, we cannot say with any certainty whether we will be able to shift successfully our operations to commercial development. See "-Our Dependence upon Agreements and Licenses with Other Companies and Institutions."

Our Dependence upon Others for Marketing; Our Lack of Marketing Experience.

We currently have no marketing and sales personnel and no 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 to develop our own sales force will be available. 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.

Our Dependence upon Key Personnel and Collaborators; Our Limited Management Team.

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., our Chairman of our Board of Directors, Chief Executive Officer and President, and Daniel Shusterman, our Vice President of Operations, Treasurer and Chief Financial Officer, 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 October 6, 1998, we had 16 full-time employees, 13 of whom are engaged directly in research and development activities 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. During our limited operating history, many important responsibilities within the Company have been assigned to a relatively small number of individuals. The competition for qualified personnel is intense, and the loss of services of certain key personnel could substantially hurt the Company.

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 the property of us but may remain the property of such persons or of such persons' full-time employers.

Product Liability Insurance.

Our products, either when using them in clinical trials or when marketing them, 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 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. Furthermore, certain distributors of pharmaceutical and biological products 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, which could substantially hurt our business.

Control of the Company; Ability to Direct Management.

Our current officers, directors and stockholders who own more than 5% of our securities beneficially own or control approximately 49.5% of our outstanding shares of Common Stock, which represents approximately 46.7% 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. Such control could prevent another party from trying to acquire a majority position in our business which could potentially otherwise cause the price of our securities to increase. In addition, our Board of Directors is authorized to issue from time to time shares of preferred stock, without stockholder authorization, in one or more designated series or classes. See "-Possible Restriction on 'Market Making' Activities in the Company's Securities; Illiquidity; -Description of Securities; and "Selling Stockholders."

Our Dividend Policy.

Since our formation in 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.

Indemnification of Officers and Directors.

We are currently a Delaware corporation. Our Certificate of Incorporation includes certain provisions permitted under the Delaware General Corporation Law ("DGCL") whereby our officers and directors are indemnified against certain liabilities. Our Certificate of Incorporation also limits, to the fullest extent permitted by the DGCL, 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. The DGCL 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, an insurance policy, which provides for coverage for certain liabilities of its officers and Directors has been issued to us.

Possible Restriction on "Market Making" Activities in the Company's Securities;

Illiquidity.

Upon the completion of this offering, Bruce Meyers and Peter Janssen will beneficially own approximately 11.6% and 10.2%, respectively, of the outstanding shares of Common Stock, which represents approximately 10.9% and 9.6%, respectively, of the total outstanding voting securities. Messrs. Meyers and Janssen are the principals of the corporate general partner of JMA. If JMA or its affiliates are deemed to have control of our business, regulatory requirements of the SEC, Nasdaq and the New York Stock Exchange, Inc. could prevent JMA from engaging in market-making activities relating to our securities. If JMA is unable to make a market in our securities because it is deemed to have effective voting control or if, for any other reason, it chooses not to or is unable to make a market in our securities, there can be no assurance that any other broker-dealers would make a market in our securities. Without market-makers, it would be very difficult for holders of our securities to sell their securities in the secondary market, and the market prices for such securities would be substantially harmed. Also, we cannot give any assurances that an active trading market for our securities be maintained whether or not JMA makes a market in our securities. In the absence of such a market, investors may be unable to liquidate their investment. See "-Absence of Public Market; Possible Volatility of Common Stock and Warrant Prices; and -Selling Stockholders."

Possible Delisting of Our Securities from the Nasdaq SmallCap Market System.

Our Common Stock, Class C Warrants and Class D Warrants are currently quoted on the Nasdaq SmallCap Market System. Our Common Stock is quoted under the symbol, "CYPH." Our Class C Warrants are quoted under the symbol, "CYPHW." Our Class D Warrants are quoted under the symbol, "CYPHZ." Nasdaq has certain requirements that every company must meet in order to have their securities first quoted on the Nasdaq SmallCap Market System, and has another set of requirements that a company must meet to continue 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 (i) either (A) net tangible assets of $2 million, (B) market capitalization of $35 million or (C) net income of $500,000 in the most recently completed fiscal year or in two of the last three most recently completed fiscal years; (ii) a minimum bid price of $1.00 per share; (iii) in the case of a convertible debt security, a principal amount outstanding of at least $5 million; (iv) in the case of common stock, at least 300 round lot holders and (v) 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, if at all, 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. See "-Our Accumulated Deficit and Loss per Share of Common Stock; Our History of Significant Losses and Expected Future of Significant Losses; and -Our Need for Substantial Additional Funds."

Risk of Low-Priced Stocks; "Penny Stock" Regulations.

If our securities are delisted from the Nasdaq SmallCap Market System, they may become subject to Rule 15g-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 15g-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 15g-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. See "-Possible Delisting of Our Securities from the Nasdaq SmallCap Market System."

Also, the SEC defines a "penny stock" to be any equity security that has a market price (as therein defined) 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 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. Anyway, even if we 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. See "-Possible Delisting of Our Securities from the Nasdaq SmallCap Market System; and -Risk of Low-Priced Stocks; 'Penny Stock' Regulations."

Shares Eligible for Future Sale; Registration Rights and Dilution.

The market price of our Common Stock, Class C Warrants and Class D Warrants could drop as a result of a large number of shares of Common Stock in the market after the offering, or the perceptions that such sales could occur. These factors also could make it more difficult for us to raise funds through future offerings of our securities. See "-Possible Delisting of Our Securities from the Nasdaq SmallCap Market System; and -Risk of Low-Priced Stocks; 'Penny Stock' Regulations."

There will be 11,491,316 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. See "-Possible Delisting of Our Securities from the Nasdaq SmallCap Market System; and -Risk of Low-Priced Stocks; 'Penny Stock' Regulations."

We have also granted certain of our investors who are holding restricted stock, certain rights to have their Common Stock registered with the SEC which would lift the selling restrictions of Rule 144 under the Securities Act. The rights are known as either "demand registration rights" and "piggy-back registration rights." "Demand registration rights" are rights given to investors to require us to register their Common Stock at our expense. We have usually limited how many times investors can exercise these demand registration rights and have asked for a minimum number of shares of Common Stock before we incur the expense of registration. "Piggy-back registration rights" are rights given to investors to ask that we include their Common Stock in any registration statement we are preparing to file with the SEC. These piggy-back registration rights can be exercised only if the registration statement is on an appropriate form; and if it is an underwritten offering, the underwriter of the offering does not object. The holders of the option granted during our initial public offering have certain demand registration rights beginning November 2, 1998 for the shares of Common Stock issuable upon the exercise of such option Holders of (i) 2,000,000 shares of Common Stock outstanding, (ii) options to purchase 200,000 shares of Common Stock, (iii)

764,003 shares of Series A Preferred Stock convertible into the same number of

shares of Common Stock and (iv) options to purchase 100,000 shares of Series A Preferred Stock convertible into the same number of shares of Common Stock (we will refer to the Common Stock mentioned in (i) through (iv) as the "Registrable Securities") have demand registration rights and piggy-back registration rights for Registrable Securities from now until November 7, 2000. The holders of more than 50% of the Registrable Securities may request that we file a registration statement under the Securities Act, and, subject to certain conditions, we generally will be required to use our best efforts to have the SEC declare the registration statement to be effective. In addition, if we propose to register any of our securities, either for sale by us or by other investors, we are required, with certain exceptions, to notify the holders described above and, subject to certain limitations, to include in the first two such registration statements filed after December 7, 1996 and before November 7, 2000, all of the Registrable Securities requested to be included by such holders. In addition, we have (i) registered our Class A Warrants and the 520,588 shares of Common Stock issuable upon the exercise of such warrants; (ii) registered 150,000 shares of Common Stock issuable upon the exercise of warrants we had issued to the placement agent for its services rendered to the us during our private placement completed in 1992; (iii) registered 873,700 shares of Common Stock issuable upon the exercise of options granted and which we have the right to grant under our 1992 Stock Option Plan and 1996 Stock Option Plan; (iv) granted certain "piggy-back" registration rights to the holders of 20,000 shares of Common Stock issued by us in connection with our formation of a joint venture with Pestka Biomedical Laboratories, Inc.; and (v) granted the holders of options and warrants to purchase a total of 175,000 shares of Common Stock certain "piggyback" registration rights for providing us with financial advisory and public relations services rendered to us and pursuant to a license agreement. 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. See "-Possible Delisting of Our Securities from the Nasdaq SmallCap Market System; - -Risk of Low-Priced Stocks; 'Penny Stock' Regulations; and Description of Securities."

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, investors' 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. See "-Possible Delisting of Our Securities from the Nasdaq SmallCap Market System; and -Risk of Low-Priced Stocks; 'Penny Stock' Regulations."

Absence of Public Market; Possible Volatility of Common Stock and Warrant Prices.

Our Common Stock, Class C Warrants and Class D Warrants are currently quoted on the Nasdaq SmallCap Market System. We cannot say with any certainty that the market for our securities will continue to be active. We are in the biopharmaceutical industry and the market prices of securities of newly-formed health care companies have been very unpredictable. Announcements of biological or medical discoveries or technological innovations by us or our competitors, developments concerning proprietary rights, including patents and litigation matters, regulatory developments in both the United States and foreign countries, public concern as to the safety of new technologies, general market conditions, quarterly fluctuations in our financial condition and other factors could cause the market price of our securities to drop.

Potential Anti-takeover Effects.

Certain provisions of our Certificate of Incorporation could make it more difficult for a third party to acquire control of our business, even if such change in control would be beneficial to stockholders. Our Certificate of Incorporation allows our Board of Directors to issue preferred stock without stockholder approval. Such issuance could make it more difficult for a third party to acquire our business. In addition, certain provisions contained in

each of the employment agreements with each of Dr. Arthur P. Bollon, our Chairman, President and Chief Executive Officer, and Mr. Daniel Shusterman, our Vice President of Operations, Treasurer and Chief Financial Officer, obligate us to make certain salary payments if their employment is terminated without just cause or due to a Disability (as defined therein). See "-Possible Adverse and Anti-Takeover Effect of Preferred Stock; and Description of Securities."

Possible Adverse and Anti-takeover Effects of Preferred Stock.

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. The Series A Preferred Stock are not registered with the SEC or quoted on the Nasdaq SmallCap Market System or any other exchange. They can, however, 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. In addition, 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 also 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 1,663,143 shares of Series A Preferred Stock, of which 916,279 have been converted into Common Stock as of October 21, 1998, 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. Payment-in-kind dividends are when you give the stockholder who is entitled to receive a dividend of more stock instead of cash. Since we want to use all of our funds to continue our various projects but have to pay the holders of the Series A Preferred Stock a dividend at the end of every fiscal year, we typically choose to pay them by giving them more shares of Series A Preferred Stock instead of money.

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. See "Description of Securities."

Current Prospectus and State Registration Required to Resell Common Stock.

The Common Stock in this offering can be resold by the Selling Stockholders only if a current registration statement relating to them in effect under the Securities Act and if the Common Stock is qualified for resale or exempt from qualification under the applicable securities or "blue sky" laws of the states in which the Selling Stockholders reside. We cannot say with any certainty that we will be able to meet the SEC and states' registration requirements. If we cannot meet the requirements, the Selling Stockholders will be unable to resell their Common Stock. See "Selling Stockholders; Description of Securities; and Plan of Distribution."

USE OF PROCEEDS

We will not receive any of the proceeds from the Selling Stockholders' sale of their Common Stock. However, certain of the Selling Stockholders hold warrants exercisable for Common Stock. We will receive the proceeds when those Selling Stockholders exercise their warrants. We will use the proceeds we receive when the Selling Stockholders exercise their warrants for research and development and general corporate purposes.

SELLING STOCKHOLDERS

The Selling Stockholders are offering and selling a total of up to 1,282,875 shares of our Common Stock. 671,035 of the shares of Common Stock included in this offering were purchased by certain Selling Stockholders in the 1998 Private Placement and 335,530 of the shares of Common Stock included in this offering are shares which may be issued to the same Selling Stockholders if and when they exercise their Class E Warrants which they also purchased in the 1998 Private Placement. 75,000 of the shares of Common Stock included in this offering are shares which may be issued if and when Synergy exercises its warrants granted to it under its financial consulting agreement with us.

JMA is a market-maker in our securities and is a Selling Stockholder who holds an aggregate of 201, 300 of the shares of Common Stock included in this offering. 134,199 of which are issuable upon the exercise of the JMA Option and 67,101 of which are issuable upon the exercise of the Class E Warrants underlying the JMA Option. JMA is also deemed to beneficially own the securities held by Bruce Meyers and Peter Janssen, each a 50% stockholder, executive officer and director of the corporate general partner of JMA. JMA 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 October 21, 1998, there were 10,208,441 shares of Common Stock and 746,864 shares of Series A Preferred Stock outstanding. JMA beneficially owns a total of 2,312,397 shares of Common Stock, which represents 21.1% of the total number of outstanding Common Stock before the completion of this offering. JMA will beneficially own 2,062,237 shares of Common Stock, which will represent 17.2% of the total number of outstanding shares of Common Stock upon the completion of this offering. JMA also beneficially owns 22,000 shares of our Series A Preferred Stock, which represents 2.9% of the total number of outstanding Series A Preferred Stock. When combining JMA's ownership of Common Stock and Series A Preferred Stock, JMA beneficially owns 19.8% of all of our outstanding voting securities before the completion of this offering and will own 16.2% of all our outstanding voting securities upon the completion of this offering.

Synergy is a Selling Stockholder and beneficially owns 75,000 shares of the Common Stock included in this offering. We entered into a financial advisory contract with Synergy in August 1998. Under the agreement, we are obligated to pay fees. Also under the agreement, we issued to Synergy five-year warrants to purchase an aggregate of 75,000 shares of our Common Stock (the "Synergy Warrants"). Synergy Warrants to acquire 50,000 of the shares of Common Stock vest no later than December 31, 1998 and 25,000 vest upon our retention of an investment banking firm introduced to us by Synergy. 37,500 of the Synergy Warrants are exercisable at $7.00 per share of Common Stock. 12,500 of the Synergy Warrants are exercisable at $8.00 per share of Common Stock. 25,000 of the Synergy Warrants are exercisable at $9.00 per share of Common Stock. Synergy beneficially owns less than 1% of our outstanding shares of Common Stock.

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

<TABLE>
<CAPTION>

Selling Stockholder	Common Stock owned prior to this offering(1)	Common Stock being offered pursuant to this Prospectus	Common Stock owned upon completion of this offering(2)	Percentage (%) of Common Stock upon completion of this offering if greater than 1%(3)
<S>	<C>	<C>	<C>	
Alloy, Mark	13,175	13,175	0	--
Arace, Mario F	4,413	4,413	0	--
Argonaut Capital Mgmt c/o David Gerstenhaber	36,675	36,675	0	--
Berg, Kenneth	17,565	17,565	0	--
Berger, Robert	2,987	2,987	0	--
Binns, James J	4,586	4,586	0	--
Brout, Joan	8,825	8,825	0	--
Burdette, John N	1,733	1,733	0	--

Burgay, Matthew	3,365	3,365	0	--
Buzi, Gloria M.	1,733	1,733	0	--
Cali, Brant	4,586	4,586	0	--
Caruso, John	2,184	2,184	0	--
Caruso, Joseph	4,392	4,392	0	--
Clements, Robert E.	45,845	45,845	0	--
Colbert, Douglas M. Profit Sharing Plan c/o Douglas M. Colbert, TTEE	5,295	5,295	0	--
Davimos, John L.	10,707	9,170	1,537	--
Davimos, Marilyn	4,307	4,307	0	--
Davimos, Richard Jr.	18,390	9,170	9,220	--
Davimos, Richard H. Trust c/o Richard H. Davimos TTEE	73,564	36,675	36,889	--
Davimos, Robert S.	61,364	36,675	24,689	--

</TABLE>

<TABLE>
<CAPTION>

Selling Stockholder	Common Stock owned prior to this offering(1)	Common Stock being offered pursuant to this Prospectus	Common Stock owned upon completion of this offering(2)	Percentage (%) of Common Stock upon completion of this offering if greater than 1%(3)
<S>	<C>	<C>	<C>	
Davis, Philip R.	8,661	8,661	0	--
Dietl, Richard	9,170	9,170	0	--
F & MWL Enterprises, L.L.C. c/o Walter Levine	14,670	14,670	0	--
FCS FBO Ulene, Arthur IRA	11,259	11,259	0	--
FCS FBO Ulene, Priscilla IRA	11,259	11,259	0	--
Feurring, Douglas R. and Beverly S. Feurring, JTE	8,825	8,825	0	--
First Financal Trust as Agent for Phoenix Capital c/o Joseph Giovino	18,338	18,338	0	--
Gabrielli, Erminio	4,331	4,331	0	--
Geensburg, Cary	3,446	3,446	0	--
Goddard, Collin and Anna Marie S. Goddard, JTE	4,392	4,392	0	--
Goodman, James	9,170	9,170	0	--
Gordon, Joel I.	8,612	8,612	0	--
Harpel Partners, L.P.	45,845	45,845	0	--
Howe, Osmond C.	4,586	4,586	0	--
Huntley, Daniel L. and Christine Huntley, JTE	6,177	6,177	0	--
Janssen, Peter(4)	1,250,746	45,845	1,204,901	10.2%(5)
Jaroslawicz, David	17,565	17,565	0	--
Karpf, Douglas B.	8,783	8,783	0	--

</TABLE>

<TABLE>
<CAPTION>

Selling Stockholder	Common Stock owned prior to this offering(1)	Common Stock being offered pursuant to this Prospectus	Common Stock owned upon completion of this offering	Percentage (%) of Common Stock upon completion of this offering if greater than 1%(3)
<S>	<C>	<C>	<C>	<C>
Khutorsky, Leonid	8,783	8,783	0	--
Koral, Richard	8,783	8,783	0	--
Lehman, Joseph L.	8,917	8,917	0	--
Lundeen, David	13,236	13,236	0	--
Lutz, William	2,859	2,859	0	--
Majnemer, Jacob	6,177	6,177	0	--
Meyers, Bruce(6)	1,459,589	91,688	1,367,901	11.6%(7)
Miller, Carol	6,500	6,500	0	--
Miller, Wade N.	4,413	4,413	0	--
Millstein, Gerald Jay	5,544	5,544	0	--
Millward, Thomas	8,825	8,825	0	--
Nachlas, Nathan	8,825	8,825	0	--
Noden, Warren A. Trust c/o Warren A. Noden, TTEE	1,733	1,733	0	--
Novof, Ilya I.	8,748	8,748	0	--
Pensenstadler, Travis	1,587	1,587	0	--
Pensenstadler, Wayne J. IRA	10,894	10,894	0	--
Perkins, James N. and Judith W. Perkins, JTROS	4,413	4,413	0	--
Pharaon Commercial Investment Group, LTD.	88,236	88,236	0	--
Pictet Bank & Trust for Oil Agent, Inc. c/o Eric Messmer	17,565	17,565	0	--

</TABLE>

<TABLE>
<CAPTION>

Selling Stockholder	Common Stock owned prior to this offering(1)	Common Stock being offered pursuant to this Prospectus	Common Stock owned upon completion of this offering	Percentage (%) of Common Stock upon completion of this offering if greater than 1%(3)
<S>	<C>	<C>	<C>	<C>
Pinhasi, Haim	3,513	3,513	0	--
Rhodes, James R.	26,234	26,234	0	--
Satre, Wendell J.	5,198	5,198	0	--
Shnitkin, Mark	8,783	8,783	0	--
Smith, Colon H.	5,295	5,295	0	--
Smith, Malcolm E., Jr.	8,825	8,825	0	--
Spanier, Jonathan	8,783	8,783	0	--
Stone, Michael	4,586	4,586	0	--
Stringer, Joe D. and Wanda L. Stringer, JTE	4,413	4,413	0	--
Strougo, Robert I.	4,413	4,413	0	--
Title/Greenspan Revocable Trust c/o Deana Title	18,338	18,338	0	--
The Tail Wind Fund Ltd. Attention: Sherrill Peltscher	69,285	69,285	0	--
Wechsler & Co. c/o Jay Mittentau	4,586	4,586	0	--
Werner, Harvey L.				

Revocable Trust c/o Harvey L. Werner, TTEE	6,728	6,728	0	--
Witkoff, Steven C. c/o The Witkoff Group	18,338	18,338	0	--
Zendell, David	2,910	2,910	0	--
Zorella, William A.	4,331	4,331	0	--

</TABLE>

<TABLE>
<CAPTION>

Selling Stockholder	Common Stock owned prior to this offering(1)	Common Stock being offered pursuant to this Prospectus	Common Stock owned upon completion of this offering(2)	Percentage (%) of Common Stock owned upon completion of this offering if greater than 1%(3)
<S>	<C>	<C>	<C>	<C>
Total.....	3,651,712	1,006,575	2,645,137	--

</TABLE>

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(1) Assumes the exercise of the Class E Warrants held by the Selling Stockholders.

(2) Assumes all of the shares of Common Stock offered by this prospectus are sold.

(3) Upon the completion of this offering, there will be 11,491,316 shares of Common Stock outstanding.

(4) Peter Janssen's address is c/o Janssen-Meyers Associates, L.P., 17 State Street, New York, New York 10004. Peter Janssen is a 50% stockholder, an executive officer and director of the corporate general partner of JMA. Mr. Janssen is considered to beneficially own the shares held by JMA. Includes (i) 718,063 shares of Common Stock, (ii) 15,282 shares of Common Stock issuable upon the exercise of currently exercisable Class E Warrants, (iii) 134,199 shares of Common Stock issuable upon the exercise of currently exercisable JMA Option (iv) 67,101 shares of Common Stock issuable upon the exercise of the Class E Warrants underlying the JMA Option, (v) 119,463 shares of Common Stock issuable upon the exercise of the IPO Unit Purchase Option held by Mr. Janssen exercisable within 60 days hereof and (vi) 196,638 shares of Common Stock issuable upon the exercise of the IPO Unit Purchase Option held by JMA exercisable within 60 days hereof.

(5) Assumes JMA's sale of the 134,199 shares of Common Stock issuable upon the exercise of the JMA Option and 67,101 shares of Common Stock issuable upon the exercise of the Class E Warrants underlying the JMA Option. Mr. Janssen is deemed to be the beneficial owner of the JMA Option and the securities issuable upon the exercise thereof.

(6) Bruce Meyers' address is c/o Janssen-Meyers Associates, L.P., 17 State Street, New York, New York 10004. Bruce Meyers is a 50% stockholder, an executive officer and director of the corporate general partner of JMA. Mr. Meyers is considered to own the shares owned by JMA. Includes (i) 851,625 shares of Common Stock, (ii) 38,000 shares of Common Stock held by The Joseph, Rita & Bruce Meyers Family Foundation for Life, Inc., (iii) 30,563 shares of Common Stock issuable upon the exercise of currently exercisable Class E Warrants, (iv) 134,199 shares of Common Stock issuable upon the exercise of the JMA Option, (v) 67,101 shares of Common Stock issuable upon the exercise of Class E Warrants underlying the JMA Option, (vi) 22,000 shares of Common Stock issuable upon the conversion of currently convertible Series A Preferred Stock, (vii) 119,463 shares of Common Stock issuable upon the exercise of the IPO Unit Purchase Option held by Mr. Meyers and (viii) 196,638 shares of Common Stock issuable upon the exercise of the IPO Unit Purchase Option held by JMA exercisable within 60 days hereof.

(7) Assumes JMA's sale of the 134,199 shares of Common Stock issuable upon the exercise of the JMA Option and 67,101 shares of Common Stock issuable upon the exercise of the Class E Warrants underlying the JMA Option. Mr. Meyers is deemed to be the beneficial owner of the JMA Option and the securities issuable upon the exercise thereof.

We will not receive any of the proceeds from the sale of Common Stock by the Selling Stockholders. We will, however, receive proceeds from the exercise of (i) a total of 335,540 Class E Warrants purchased by the above-listed Selling Stockholders in our 1998 Private Placement, (ii) the JMA Option to acquire 134,199 shares of Common Stock, (iii) the Class E Warrants underlying the JMA Option to acquire 67,101 shares of Common Stock and (iv) the Synergy Warrant to acquire 75,000 shares of Common Stock.

DESCRIPTION OF SECURITIES

Besides the shares held by JMA and Synergy, the shares of Common Stock being offered pursuant to this prospectus were purchased by the Selling Stockholders in a private placement of 56.3 Units we completed in April 1998 under Rule 506 of Regulation D and Section 4(2) of the Securities Act (the "1998 Private Placement"). Each Unit consisted of Common Stock and Class E Warrants. The number of shares of Common Stock each Selling Stockholder purchased was determined by dividing the price of a Unit, $100,000, by the 30-day average closing bid price of the Common Stock as reported by the Nasdaq SmallCap Market. The average closing bid price ranged from $8.18 to $9.46 during the eight separate closings of the 1998 Private Placement. The number of Class E Warrants each Selling Stockholder purchased was equal to one-half the number of shares of Common Stock each stockholder purchased in the same closing having an exercise price equal to 120% of the purchase price of the Common Stock. Each Class E Warrant entitles the holder to purchase one share of Common Stock at any time until April 2, 2003, 5:00 p.m. (EST). See "Risk Factors--Possible Restriction on 'Market Making' Activities in the Company's Securities; Illiquidity; and Selling Stockholders."

The 201,300 shares of Common Stock being offered by this prospectus by JMA are issuable pursuant to a unit purchase option we granted to JMA for its services as placement agent in the 1998 Private Placement. JMA has the right to purchase 20% of the Units sold in the 1998 Private Placement until April 2, 2003, 5:00 p.m. (EST) at a purchase price equal to purchase price of the Units.

The 75,000 shares of Common Stock being offered by this prospectus by Synergy are issuable pursuant to warrants we issued to Synergy for its financial and advisory services under a consulting agreement, dated August 7, 1998, we have with Synergy. Of the warrants issuable for 75,000 shares of Common Stock, (i) 50,000 shall vest on December 31, 1998 or upon our retention of an investment banking firm introduced to us by Synergy (an "Introduced Firm"), whichever is sooner, and (ii) 25,000 shall vest only upon our retention of an Introduced Firm. 37,500 of the warrants have an exercise price equal to $7.00 per share of Common Stock. 12,500 of the warrants have an exercise price equal to $8.00 per share; and the remaining 25,000 warrants have an exercise price equal to $9.00 per share.

PLAN OF DISTRIBUTION

This prospectus may be used from time to time by the Selling Stockholders 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 Stockholders 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 Stockholders 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."

JMA is a Selling Stockholder and beneficially owns 201,300 of the shares of Common Stock included in this offering. JMA is also a market-maker in our securities. JMA 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, JMA 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 JMA five-year warrants to acquire 20% of the number of securities bought in the 1998 Private Placement which equals 201,300 of the shares of Common Stock being registered in this Prospectus. See "Risk Factors--Current Prospectus and State Registration Required to Resell Common Stock.

LEGAL MATTERS

The validity of the securities 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. Certain legal matters with respect to information contained in this Prospectus under the headings "Risk Factors-Our

Obligations to Pay Royalty Fees and the Possibility of Losing Our Patents or Other Rights; and -Uncertain Ability to Protect Our Technology" will be passed upon for us by Gardere & Wynne, LLP, Dallas, Texas.

EXPERTS

The balance sheet as of December 31, 1997 and the statements of operations, changes in stockholders' equity (capital deficiency) and cash flows for each of the years in the two-year period ended December 31, 1997 and for the period from inception (September 11, 1991) through December 31, 1997 included in the Annual Report on Form 10-KSB 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.

No dealer, salesperson or any other individual has been authorized to give any information or to make any representations not contained in this prospectus and, if given or made, such information or representations must not be relied upon as having been authorized by us or the Selling Stockholders. This prospectus does not constitute an offer to sell, or a solicitation to buy, any security by any person in any jurisdiction which such offer or solicitation is unlawful. Neither the delivery of this prospectus nor any sale made hereunder shall, under any circumstances imply that the information in this prospectus is correct as of any time subsequent to the date of this prospectus.

TABLE OF CONTENTS

<TABLE>
<CAPTION>

</TABLE>

CYTOCLONAL PHARMACEUTICS INC.

1,282,875

Shares
of

Common Stock

PROSPECTUS

October _____,1998

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	$3,000
Accounting Fees and Expenses	3,500
Legal Fees and Expenses	30,000
Miscellaneous Expenses	1,000
Total	$37,500

</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>

<S> <C>

1.1 Amended Form of Underwriting Agreement between Registrant and the Underwriters (1)

1.2 Agreement Among Underwriters (1)

3.1 Certificate of Incorporation, as amended (1)

3.2 By-laws (1)

4.1 Specimen certificates representing Class C Warrants, Class D Warrants and Common Stock (1)

4.2 Form of Warrant Agreement with warrant certificates between Registrant, the Underwriters and Warrant Agent (1)

4.3 Form of Unit Purchase Option (1)

4.4 Warrant Certificate issued to The Washington State University Research Foundation (1)

4.5 Form of Class E Warrant

5.1 Opinion of Morrison Cohen Singer & Weinstein, LLP

5.2 Consent of Gardere & Wynne, LLP

10.1 Form of Consulting Agreement between the Registrant and JMA(1)

10.2 Employment Agreement dated March 1, 1992 between the Registrant and Arthur P. Bollon, Ph.D. (1)

10.3 Employment Agreement dated March 1, 1992 between the Registrant and Bruce Meyers, as amended(1)

10.4 Employment Agreement effective November 2, 1995 between the Registrant and Daniel Shusterman (1)

10.5 1992 Stock Option Plan, as amended (1)

10.6 Form of Stock Option Agreement (1)

10.7 Lease Agreement dated August 22, 1997 between the Registrant and Andrews-Dillingham Properties (8)

10.8 Lease Agreement dated October 1, 1991 between the Registrant and J.K. and Susie Wadley Research Institute and Blood Bank, as amended (1)

10.9 Purchase Agreement dated October 10, 1991 between the Registrant and Wadley Technologies, Inc. ("Wadley") (1)

10.10 Security Agreement dated October 10, 1991 between the Registrant and Wadley (1)

10.11 License Agreement dated March 15, 1989 between the Registrant and Phillips Petroleum Company, as amended (1)

10.12 License Agreement dated June 10, 1993 between Registrant and Research & Development Institute, Inc. ("RDI"), as amended, relating to the Fungal Paclitaxel Production System (1)

10.13 Amendment, dated May 27, 1998, to that certain License Agreement, dated

June 10, 1993, between the RDI and the Company (6)*

10.14 Research and Development Agreement effective June 10, 1993 between Registrant and RDI, as amended (1)

10.15 License Agreement dated February 22, 1995 between Registrant and RDI, as amended, relating to FTS-2 (1)

10.16 Research, Development and License Agreement dated March 26, 1992 between Registrant and Enzon, Inc. ("Enzon"), as amended (1)

10.17 Research, Development and License Agreement dated July 13, 1992 between Registrant and Enzon relating to the Registrant's tumor necrosis factor technology (1)

10.18 Agreement effective June 30, 1992 between Registrant and University of Texas at Dallas ("UTD"), as amended (1)

10.19 Research Agreement effective April 8, 1994 between Registrant and Sloan-Kettering Institute for Cancer Research (1)

10.20 Joint Venture Agreement dated September 17, 1992 between Registrant and Pestka Biomedical Laboratories, Inc. ("Pestka") (1)

10.21 Stock Purchase Agreement dated September 17, 1992 between Registrant and Pestka (1)

10.22 License Agreement dated September 17, 1992 between Cytomune, Inc. and Pestka (1)

10.23 Research and Development Agreement dated September 17, 1992 between Cytomune, Inc. and Pestka (1)

</TABLE>

<TABLE>

<S> <C>

10.24 Marketing Agreement dated as of November 1, 1994 between Helm AG and the Registrant (1)

10.25 Extension Agreement with RDI dated June 5, 1995 (1)

10.26 Third Amendment to Lease Agreement dated April 30, 1995 (1) 10.27 Form of Subordinated Note Extension (1) 10.28 Form of Note Extension (1) 10.29 September 25, 1995 RDI Extension (1) 10.30 October 25, 1995 RDI Extension (1) 10.31 Amendment to License Agreement dated June 10, 1993, as amended, and Research and Development Agreement effective June 10, 1993, as amended, both agreements between the Company and RDI (1) 10.32 License Agreement No. W960206 effective February 27, 1996 between the Company and The Regents of the University of California (2)

10.33 License Agreement No. W960207 effective February 27, 1996 between the Company and The Regents of the University of California (2)

10.34 Amended and Restated License Agreement between the Washington State University Research Foundation and the Company, dated June 3, 1998 (6)*

10.35 Amendment to Agreement, effective June 30, 1992, as amended, between Registrant and the University of Texas at Dallas (3)

10.36 1996 Stock Option Plan (4)

10.37 Patent License Agreement between the Registrant and The University of Texas System (1)

10.38 Master License Agreement, dated as of June 12, 1998, between the Company

and Bristol-Myers Squibb Company, Inc. (6)*

10.39 Sublicense Agreement, dated May 27, 1998, between the Company and Bristol-Myers Squibb Company, Inc. under the Research & Development Institute, Inc. License Agreement, as amended, dated June 10, 1993 (6)*

10.40 Sublicense Agreement, dated May 19, 1998, between the Company and Bristol-Myers Squibb Company, Inc. under the Washington State University Research Foundation License Agreement, dated July 8, 1996 (6)*

10.41 Exclusive License Agreement between The Regents of the University of California and the Company for Peptide Antiestrogen for Breast Cancer Therapy Case No. LA97-103(8)*

11.1 Statement re: Computation of per share earnings (5)

24.1 Consent of Morrison Cohen Singer & Weinstein, LLP (included in its opinion filed as Exhibit 5.1 hereto)

24.2 Consent of Richard A. Eisner & Company, LLP

</TABLE>

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* Confidential Portions omitted and filed separately with the Commission pursuant to Rule 24b-2 promulgated under the Securities Act.

(1) Filed as an exhibit to the Company's Registration Statement on Form SB-2 (File No. 33-91802) and is incorporated by reference herein.

(2) Filed as an exhibit to the Company's Annual Report on Form 10-KSB for the fiscal year ended December 31, 1995 and is incorporated by reference herein.

(3) Filed as an exhibit to the Company's Post-Effective Amendment No.1 to its Registration Statement on Form SB-2 (File No. 33-91802) and is incorporated by reference herein.

(4) Filed as an exhibit to the Company's Registration Statement on Form S-8 (File No. 333-11691) and is incorporated by reference herein.

(5) Filed as an exhibit to the Company's Annual Report on Form 10-KSB for the fiscal year ended December 31, 1996 and is incorporated by reference herein.

(6) Filed as an exhibit to the Company's Current Events on Form 8-K (File No. 000-26078) and is incorporated by reference herein.

(7) Filed as an exhibit to the Company' Post Effective Amendment No. 1 to Registration Statement on Form SB-2 (File No. 333-13409)

and is incorporated by reference herein.

(8) Filed as an exhibit to the Company's Post Effective Amendment No. 2 to Registration Statement on Form SB-2 (File No. 333-13409) and is incorporated by reference herein.

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.

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 October 22, 1998.

CYTOCLONAL PHARMACEUTICS INC.

By: 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
<S>	<C>	
Arthur P. Bollon --- Arthur P. Bollon, Ph.D.	Chairman, President, Chief Executive Officer and Director (principal executive officer)	October 22, 1998
Daniel Shusterman --- Daniel Shusterman, J.D.	Vice President Operations, Treasurer and Chief Financial Officer (principal financial and accounting officer)	October 22, 1998
Ira Gelb --- Ira Gelb, M.D.	Director	October 22, 1998
Irwin Gerson --- Irwin C. Gerson	Director	October 22, 1998

</TABLE>

EXHIBIT INDEX

Page No.

- ----------

* Confidential Portions omitted and filed separately with the Commission pursuant to Rule 24b-2 promulgated under the Securities Act.

Exhibit 4.5

THE WARRANT REPRESENTED BY THIS CERTIFICATE AND THE SHARES ISSUABLE UPON EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY STATE SECURITIES LAWS AND NEITHER SUCH SECURITIES NOR ANY INTEREST THEREIN MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR OTHERWISE TRANSFERRED UNLESS (1) A REGISTRATION STATEMENT WITH RESPECT THERETO IS EFFECTIVE UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR (2) THE COMPANY RECEIVES AN OPINION OF COUNSEL TO THE HOLDER OF SUCH SECURITIES, WHICH COUNSEL AND OPINION ARE REASONABLY SATISFACTORY TO THE COMPANY, THAT SUCH SECURITIES MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR TRANSFERRED IN THE MANNER CONTEMPLATED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT OR APPLICABLE STATE SECURITIES LAWS.

THE TRANSFER OF THIS CLASS E WARRANT IS RESTRICTED AS DESCRIBED HEREIN.

CYTOCLONAL PHARMACEUTICS INC.

Class E Warrant for the Purchase of Shares of Common Stock, par value $0.01 per share

THIS CLASS E WARRANT EXPIRES ON APRIL 2, 2003

No. _____ _____ Shares

THIS CERTIFIES that, for value received, _____, with an address at _____ (including any transferee, the "Holder"), is entitled to subscribe for and purchase from Cytoclonal Pharmaceutics Inc., a Delaware corporation (the "Company"), upon the terms and conditions set forth herein, at any time or from time to time before 5:00 P.M. on April 2, 2003, New York time (the "Exercise Period"), _____ shares of the Company's Common Stock, par value $0.01 per share ("Common Stock"), at a price (the "Exercise Price") equal to $10.20, 120% of the average closing bid price for the Common Stock for the 30 consecutive trading days immediately preceding the closing of the Offering (the "Average Closing Bid Price"). This Class E Warrant ("Warrant") is the warrant or one of the warrants (collectively, including any warrants issued upon the exercise or transfer of any such warrants in whole or in part, the "Warrants") issued pursuant to an offering (the "Offering") by the Company of units, each consisting of a number of shares of Common Stock and a Warrant to purchase one half of such number of shares of Common Stock, determined by dividing the purchase price per Unit of $100,000 by the Average Closing Bid Price for the Common Stock, pursuant to a Confidential Private Placement Memorandum, dated March 31, 1998, as it may be amended or supplemented (the "Memorandum"). As used herein the term "this Warrant" shall mean and include this Warrant and

any Warrant or Warrants hereafter issued as a consequence of the exercise or transfer of this Warrant in whole or in part.

The number of shares of Common Stock issuable upon exercise of the Warrants (the "Warrant Shares") and the Exercise Price may be adjusted from time to time as hereinafter set forth.

1. This Warrant may be exercised during the Exercise Period, as to the whole or any lesser number of whole Warrant Shares, by the surrender of this Warrant (with the "Election to Exercise" attached hereto, duly executed) to the Company at its office at 9000 Harry Hines Boulevard, Dallas, Texas 75235, or at such other place as is designated in writing by the Company, together with cash or a certified or bank cashiers check payable to the order of the Company in an amount equal to the Exercise Price multiplied by the number of Warrant Shares for which this Warrant is being exercised. Each Warrant not exercised prior to 5:00 p.m. on April 2, 2003 New York time shall become null and void and all rights thereunder shall cease as of such time.

2. Upon receipt by the Company of the Warrant, the "Election to Exercise" and the aggregate Exercise Price for the Warrant Shares, the Holder shall be deemed to be the holder of record of the Warrant Shares issuable upon such exercise; provided, however, that if the date of such receipt is a date

upon which the transfer books of the Company are closed, the Holder shall be deemed to be the record holder on the next succeeding business day on which such books are open. As soon as practicable after each such exercise of this Warrant, the Company shall issue and cause to be delivered to the Holder a certificate or certificates for the Warrant Shares issuable upon such exercise, registered in the name of the Holder or its designee. If this Warrant should be exercised in part only, the Company shall, upon surrender of this Warrant for cancellation, execute and deliver a new Warrant evidencing the right of the Holder to purchase the remaining unexercised balance of the Warrant Shares (or portions thereof) subject to purchase hereunder.

3. (a) Any Warrants issued upon the transfer or exercise in part of this Warrant shall be numbered and shall be registered in a Warrant Register as they are issued. The Company shall be entitled to treat the registered holder of any Warrant on the Warrant Register as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or interest in such warrant on the part of any other person, and shall not be liable for any registration or transfer of Warrants which are registered or to be registered in the name of a fiduciary or the nominee of a fiduciary unless made with the actual knowledge that a fiduciary or nominee is committing a breach of trust in requesting such registration or transfer, or with the knowledge of such facts that its participation therein amounts to bad faith. This Warrant shall be transferable only on the books of the Company upon delivery thereof duly endorsed by the Holder or by his duly authorized attorney or representative, or accompanied by proper evidence of succession, assignment, or authority to transfer. In all cases of transfer by an attorney, executor, administrator, guardian, or other legal representative, duly authenticated evidence of his or its authority shall be produced. Upon any registration of transfer, the Company shall cause to be delivered a new Warrant or Warrants to the person entitled thereto. This Warrant may be exchanged, at the option of the Holder thereof, for another Warrant, or other Warrants of different denominations, of like tenor and representing in the

aggregate the right to purchase a like number of Warrant Shares (or portions thereof), upon surrender to the Company or its duly authorized agent. Notwithstanding the foregoing, the Company shall have no obligation to cause Warrants to be transferred on its books to any person if, in the opinion of counsel to the Company, such transfer does not comply with the provisions of the Securities Act of 1933, as amended (the "Act"), and the rules and regulations thereunder.

(1) The Holder acknowledges that he has been advised by the Company that neither this Warrant nor the Warrant Shares have been registered under the Act, that this Warrant is being or has been issued and the Warrant Shares may be issued on the basis of the statutory exemption provided by Section 4(2) of the Act or Regulation D promulgated thereunder, or both, relating to transactions by an issuer not involving any public offering, and that the Company's reliance thereon is based in part upon the representations made by the original Holder in the original Holder's Subscription Agreement executed and delivered in accordance with the terms of the Offering (the "Subscription Agreement") . The Holder acknowledges that he is familiar with the nature of the limitations imposed by the Act and the rules and regulations thereunder on the transfer of securities. In particular, the Holder agrees that no sale, assignment or transfer of this Warrant or the Warrant Shares issuable upon exercise hereof shall be valid or effective, and the Company shall not be required to give any effect to any such sale, assignment or transfer, unless (i) the sale, assignment or transfer of this Warrant or such Warrant Shares is registered under the Act, it being understood that neither this Warrant nor such Warrant Shares are currently registered for sale and that the Company has no obligation or intention to so register this Warrant or such Warrant Shares except as specifically provided herein, or (ii) this Warrant or such Warrant Shares are sold, assigned or transferred in accordance with all the requirements and limitations of Rule 144 under the Act, it being understood that Rule 144 is not available at the time of the original issuance of this Warrant for the sale of this Warrant or such Warrant Shares and that there can be no assurance that Rule 144 sales will be available at any subsequent time, or (iii) such sale, assignment, or transfer is otherwise exempt from registration under the Act.

4. The Company shall at all times reserve and keep available out of

its authorized and unissued Common Stock, solely for the purpose of providing for the exercise of the rights to purchase Warrant Shares granted pursuant to the outstanding Warrants, such number of shares of Common Stock as shall, from time to time, be sufficient therefor. The Company covenants that the Warrant Shares, upon receipt by the Company of the full Exercise Price therefor, shall be validly issued, fully paid, nonassessable, and free of preemptive rights.

5. (a) In case the Company shall at any time after the date this Warrant is first issued (i) declare a dividend on any class of the outstanding capital stock of the Company (the Capital Stock") payable in shares of its Capital Stock, (ii) subdivide any class of the outstanding Capital Stock, or (iii) combine any class of the outstanding Capital Stock into a smaller number of shares, but only if such combination is effective after such time as, were an exercise of the Warrant to take place, in whole or in part, then, in each case, the Exercise Price, and the number of Warrant Shares issuable upon exercise of this Warrant, in effect at the time of the record date for such dividend or of the effective date of such subdivision, or combination, shall be proportionately

adjusted so that the Holder after such time shall be entitled to receive the aggregate number and kind of shares for such consideration which, if such Warrant had been exercised immediately prior to such time at the then-current exercise price, he would have owned upon such exercise and been entitled to receive by virtue of such dividend, subdivision, or combination. Such adjustment shall be made successively whenever any event listed above shall occur.

(1) No adjustment in the Exercise Price shall be required if such adjustment is less than $.05; provided, however, that any adjustments which by reason of this Section 5(b) are not required to be made shall be carried forward and taken into account in any subsequent adjustment. All calculations under this Section 5 shall be made to the nearest cent or to the nearest one-thousandth of a share, as the case may be.

(2) In any case in which this Section 5 shall require that an adjustment in the Exercise Price be made effective as of a record date for a specified event, the Company may elect to defer, until the occurrence of such event, issuing to the Holder, if the Holder exercised this Warrant after such record date, the shares of Common Stock, if any, issuable upon such exercise over and above the shares of Common Stock, if any, issuable upon such exercise on the basis of the Exercise Price in effect prior to such adjustment; provided, however, that the Company shall deliver to the Holder a due bill or other appropriate instrument evidencing the Holder's right to receive such additional shares upon the occurrence of the event requiring such adjustment.

(3) Whenever there shall be an adjustment as provided in this Section 5, the Company shall promptly cause written notice thereof to be sent by Certified mail, postage prepaid, to the Holder, at its address as it shall appear in the Warrant Register, which notice shall be accompanied by an officer's certificate setting forth the number of Warrant Shares purchasable upon the exercise of this Warrant and the Exercise Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment and the computation thereof, which officer's certificate shall be conclusive evidence of the correctness of any such adjustment absent manifest error.

(4) The Company shall not be required to issue fractions of shares of Common Stock of the Company upon the exercise of this Warrant. If any fraction of a share would be issuable on the exercise of this Warrant (or specified portions thereof), the Company shall purchase such fraction for an amount in cash equal to the same fraction of the Current Market Price o such share of Common Stock on the date of exercise of this Warrant.

6. (a) In case of any consolidation with or merger of the Company With or into another corporation (other than a merger or consolidation in which the Company is the surviving or continuing corporation), or in case of any sale, lease, or conveyance to another corporation of the property and assets of any nature of the Company as an entirety or substantially as an entirety, such successor, leasing, or purchasing corporation,,as the case may be, shall (i) execute with the Holder an agreement providing that the Holder shall have the right thereafter to receive upon exercise of this Warrant solely the kind and amount of shares of stock and other securities, property, cash, or any

combination thereof receivable upon such consolidation, merger, sale, lease, or conveyance by a holder of the number of shares of Common Stock for which this Warrant might have been exercised immediately prior to such consolidation, merger, sale, lease, or conveyance, and (ii) make effective provision in its certificate of incorporation or otherwise, if necessary, to effect such agreement. Such agreement shall provide for adjustments which shall be as nearly equivalent as practicable to the adjustments in Section 5.

(1) In case of any reclassification or change of the shares of Common Stock issuable upon exercise of this Warrant (other than a change in par value or from no par value to a specified par value, or as a result of a subdivision or combination, but including any change in the shares into two or more classes or series of shares) , or in case of any consolidation or merger of another corporation into the Company in which the Company is the continuing corporation and in which there is a reclassification or change (including a change to the right to receive cash or other property) of the shares of Common Stock (other than a change in par value, or f rom no par value to a specified par value, or as a result of a subdivision or combination, but including any change in the shares into two or more classes or series of shares), the Holder shall have the right thereafter to receive upon exercise of this Warrant solely the kind and amount of shares of stock and other securities, property, cash, or any combination thereof receivable upon such reclassification, change, consolidation, or merger by a holder of the number of shares of Common Stock for which this Warrant might have been exercised immediately prior to such reclassification, change, consolidation, or merger. Thereafter, appropriate provision shall be made for adjustments which shall be as nearly equivalent as practicable to the adjustments in Section 5.

(2) The above provisions of this Section 6 shall similarly apply to successive reclassifications and changes of shares of Common Stock and to successive consolidations, mergers, sales, leases, or conveyances.

7. The issuance of any shares or other securities upon the exercise of this Warrant, and the delivery of certificates or other instruments representing such shares or other securities, shall be made without charge to the Holder for any tax or other charge in respect of such issuance. The Company shall not, however, be required to pay any tax which may be payable in respect of any transfer or delivery of this Warrant to a person other than, or the issuance and delivery of any certificate in a name other than that of the registered Holder and the Company shall not be required to issue or deliver any such certificate unless and until the person or persons requesting the issue thereof shall have paid to the Company the amount of such tax or shall have established to the satisfaction of the Company that such tax has been paid.

8. (a) The Company will use its best effort to file a registration statement (the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), therein registering the Warrant Shares (together, the "Registrable Securities") within six (6) months of the final closing of the Offering (the "Filing Date"), and use its best efforts to have the Registration Statement declared effective by the Commission as soon as possible thereafter (the "Effective Date"). In the event the Effective Date is not within eight (8) months of the final

closing of the Offering, the then number of Warrants shall be increased by two percent (2%), effective as of such date and by an additional two percent (2%) on each one month anniversary thereafter, until such time that the number of Warrants should equal 120% of the original number of shares. The Company agrees to keep the Registration Statement effective until the expiration period of the Warrant.

(1) In the event of a registration pursuant to the provisions of this Section 8, the Company shall use its best efforts to cause the Registrable Securities so registered to be registered or qualified for sale under the

securities or blue sky laws of such jurisdictions as the holder or such holders (the "Eligible Holders") may reasonably request; provided, however, that the Company shall not by reason of this Section 8(b) be required to qualify to do business in any state in which it is not otherwise required to qualify to do business or to file a general consent to service of process.

(2) The Company shall keep effective any registration or qualification contemplated by this Section 8 and shall from time to time amend or supplement each applicable registration statement, preliminary prospectus, final prospectus, application, document, and communication for such period of time as shall be required to permit the Eligible Holders to complete the offer and sale of the Registrable Securities covered thereby.

(3) In the event of a registration pursuant to the provisions of this Section 8, the Company shall furnish to each Eligible Holder such reasonable number of copies of the registration statement and of each amendment and supplement thereto (in each case, including all exhibits), such reasonable number of copies of each prospectus contained in such registration statement and each supplement or amendment thereto (including each preliminary prospectus), all of which shall conform to the requirements of the Act and the rules and regulations thereunder, and such other documents, as any Eligible Holder may reasonably request to facilitate the disposition of the Registrable Securities included in such registration.

(4) In the event of a registration pursuant to the provision of this Section 8, the Company and each Eligible Holder shall enter into a cross-indemnity agreement and a contribution agreement, each in customary form, with each underwriter, if any, and, if requested, enter into an underwriting agreement containing customary representations, warranties, allocation of expenses, and customary closing conditions, including, without limitation, opinions of counsel and accountants' cold comfort letters, with any underwriter who acquires any Registrable Securities.

(5) The Company agrees that until all the Registrable Securities have been sold under a registration statement or pursuant to Rule 144 under the Act, it shall keep current in filing all reports, statements and other materials required to be filed with the Commission to permit holders of the Registrable Securities to sell such securities under Rule 144.

9. (a) Subject to the conditions set forth below, the Company agrees to indemnify and hold harmless each Eligible Holder, its officers, directors, partners, employees,

agents, and counsel, and each person, if any, who controls any such person within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act, from and against any and all loss, liability, charge, claim, damage, and expense whatsoever (which shall include, f or all purposes of this Section 9, without limitation, reasonable attorneys, fees and any and all expense whatsoever incurred in investigating, preparing, or defending against any litigation, commenced or threatened, or any claim whatsoever, and any and all amounts paid in settlement of any claim or litigation), as and when incurred, arising out of, based upon, or in connection with, or (i) any breach of any representation, warranty, covenant, or agreement of the Company contained in any of the Warrants, any untrue statement or alleged untrue statement of a material fact contained (A) in any registration statement, preliminary prospectus, or final prospectus (as from time to time amended and supplemented), or any amendment or supplement thereto, relating to the sale of any of the Registrable Securities, or (B) in any application or other document or communication (in this Section 9 collectively called an "application") executed by or on behalf of the Company or based upon written information furnished by or on behalf of the Company filed in any jurisdiction in order to register or qualify any of the Registrable Securities under the securities or blue sky laws thereof or filed with the commission or any securities exchange; or any omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, unless such statement or omission was made in reliance upon and in conformity with written information furnished to the Company with respect to such Eligible Holder by or on behalf of such person expressly for inclusion in any registration statement, preliminary

prospectus, or final prospectus, or any amendment or supplement thereto, or in any application, as the case may be. Notwithstanding the foregoing, the Company shall not be responsible for any failure of JMA to file, on behalf of the Company, Blue Sky applications in jurisdictions where JMA is offering Units and where such application is required by law. The foregoing agreement to indemnify shall be in addition to any liability the company may otherwise have, including liabilities arising under any of the Warrants.

If any action is brought against any Eligible Holder or any of its officers, directors, partners, employees, agents, or counsel, or any controlling persons of such person (an "indemnified party") in respect of which indemnity may be sought against the Company pursuant to the foregoing paragraph, such indemnified party or parties shall promptly notify the Company in writing of the institution of such action (but the failure so to notify shall not relieve the Company from any liability under this Section 9(a) unless the Company shall have been materially prejudiced by such failure or relieve the Company from any liability other than pursuant to this Section 9(a)) and the Company shall promptly assume the defense of such action, including the employment of counsel (reasonably satisfactory to such indemnified party or parties) and payment of expenses. Such indemnified party or parties shall have the right to employ its or their own counsel in any such case, but the fees and expenses of such counsel shall be at the expense of such indemnified party or parties unless the employment of such counsel shall have been authorized in writing by the Company in connection with the defense of such action or the Company shall not have employed counsel reasonably satisfactory to such indemnified party or parties to have charge of the defense of such action or such indemnified party or parties shall have reasonably concluded that there may be one or more legal defenses available to it or them or to other indemnified parties which are different from or additional

to those available to the Company, in any of which events such fees and expenses shall be borne by the Company and the Company shall not have the right to direct the defense of such action on behalf of the indemnified party or parties. Anything in this Section 9 to the contrary notwithstanding, the Company shall not be liable for any settlement of any such claim or action effected without its written consent, which shall not be unreasonably withheld. The Company agrees promptly to notify the Eligible Holders of the commencement of any litigation or proceedings against the Company or any of its officers or directors in connection with the sale of any Registrable Securities or any preliminary prospectus, prospectus, registration statement, or amendment or supplement thereto, or any application relating to any sale of any Registrable Securities.

(1) The Holder agrees to indemnify and hold harmless the Company, each director of the Company, each officer of the Company who shall have signed any registration statement covering Registrable Securities held by the Holder, each other person, if any, who controls the Company within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act, and its or their respective counsel, to the same extent as the foregoing indemnity from the Company to the Eligible Holders in Section 9(a), but only with respect to statements or omissions, if any, made in any registration statement, preliminary prospectus, or final prospectus (as from time to time amended and supplemented), or any amendment or supplement thereto, or in any application, in reliance upon and in conformity with written information furnished to the Company with respect to the Holder by or on behalf of the Holder expressly for inclusion in any such registration statement, preliminary prospectus, or final prospectus, or any amendment or supplement thereto, or in any application, as the case may be. If any action shall be brought against the Company or any other person so indemnified based on any such registration statement, preliminary prospectus, or final prospectus, or any amendment or supplement thereto, or in any application, and in respect of which indemnity may be sought against the Holder pursuant to this Section 9(b), the Holder shall have the rights and duties given to the Company, and the Company and each other person so indemnified shall have the rights and duties given to the indemnified parties, by the provisions of Section 9 (a).

(2) To provide for just and equitable contribution, if (i) an indemnified party makes a claim for indemnification pursuant to Section 9(a) or 9(b) (subject to the limitations thereof) but it is found in a final judicial

determination, not subject to further appeal, that such indemnification may not be enforced in such case, even though this Warrant expressly provides for indemnification in such case, or (ii) any indemnified or indemnifying party seeks contribution under the Act, the Exchange Act or otherwise, then the Company (including for this purpose any contribution made by or on behalf of any director of the Company, any officer of the Company who signed any such registration statement, any controlling person of the Company, and its or their respective counsel), as one entity, and the Eligible Holders of the Registrable Securities included in such registration in the aggregate (including for this purpose any contribution by or on behalf of an indemnified party), as a second entity, shall contribute to the losses, liabilities, claims, damages, and expenses whatsoever to which any of them may be subject, on the basis of relevant equitable considerations such as the relative fault of the Company and such Eligible Holders in connection with the facts which resulted in such losses, liabilities, claims, damages, and expenses. The relative fault, in the case of an untrue statement, alleged untrue statement, omission, or alleged omission,

shall be determined by, among other things, whether such statement, alleged statement, omission, or alleged omission relates to information supplied by the Company or by such Eligible Holders, and the parties, relative intent, knowledge, access to information, and opportunity to correct or prevent such statement, alleged statement, omission, or alleged omission. The Company and the Holder agree that it would be unjust and inequitable if the respective obligations of the Company and the Eligible Holders for contribution were determined by pro rata or per capita allocation of the aggregate losses, liabilities, claims, damages, and expenses (even if the Eligible Holders and the other indemnified parties were treated as one entity for such purpose) or by any other method of allocation that does not reflect the equitable considerations referred to in this Section 9(c). In no case shall any Eligible Holder be responsible for a portion of the contribution obligation imposed on all Eligible Holders in excess of its pro rata share based on the number of shares of Common Stock owned (or which would be owned upon exercise of all Registrable Securities) by it and included in such registration as compared to the number of shares of Common Stock owned (or which would be owned upon exercise of all Registrable Securities) by all Eligible Holders and included in such registration. No person guilty of a fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who is not guilty of such fraudulent representation. For purposes of this Section 9(c), each person, if any, who controls any Eligible Holder within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act and each officer, director, partner, employee, agent, and counsel of each such Eligible Holder or control person shall have the same rights to contribution as each Eligible Holder or control person and each person, if any, who controls the Company within the meaning of Section 15 of the Act or Section 20(a) of the Exchange Act, each officer of the Company who shall have signed any such registration statement, each director of the Company, and its or their respective counsel shall have the same rights to contribution as the company, subject in each case to the provisions of this Section 9(c). Anything in this Section 9(c) to the contrary notwithstanding, no party shall be liable for contribution with respect to the settlement of any claim or action effected without its written consent. This Section 9(c) is intended to supersede any right to contribution under the Act, the Exchange Act or otherwise.

10. Unless registered pursuant to the provisions of Section 8 hereof, the Warrant Shares issued upon exercise of the, Warrants shall be subject to a stop transfer order and the certificate or certificates evidencing such warrant Shares shall bear the following legend:

> "THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY STATE SECURITIES LAWS AND NEITHER SUCH SECURITIES NOR ANY INTEREST THEREIN MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR OTHERWISE TRANSFERRED UNLESS (1) A REGISTRATION STATEMENT WITH RESPECT THERETO IS EFFECTIVE

UNDER THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS, OR (2) THE COMPANY RECEIVES AN OPINION OF COUNSEL TO THE HOLDER OF SUCH SECURITIES, WHICH COUNSEL AND PINION ARE REASONABLY SATISFACTORY TO THE COMPANY, THAT SUCH SECURITIES MAY BE OFFERED, SOLD, PLEDGED, ASSIGNED OR TRANSFERRED IN THE MANNER CONTEMPLATED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT OR APPLICABLE STATE SECURITIES LAWS."

In addition, any Warrants issued upon transfer or any new Warrants issued shall bear a similar legend.

11. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction, or mutilation of any Warrant (and upon surrender of any Warrant if mutilated) , including an affidavit of the Holder thereof that this Warrant has been lost, stolen, destroyed or mutilated, together with an indemnity against any claim that may be made against the Company on account of such lost, stolen, destroyed or mutilated Warrant, and upon reimbursement of the Company's reasonable incidental expenses, the Company shall execute and deliver to the Holder thereof a new Warrant of like date, tenor, and denomination.

12. The Holder of any Warrant shall not have solely on account of such status, any rights of a stockholder of the Company, either at law or in equity, or to any notice of meetings of stockholders or of any other proceedings of the Company, except as provided in this warrant.

13. This Warrant shall be construed in accordance with the laws of the State of Delaware applicable to contracts made and performed within such State, without regard to principles governing conflicts of law.

14. The Company irrevocably consents to the jurisdiction of the courts of the State of New York and of any federal court located in such State in connection with any action or proceeding arising out of or relating to this Warrant, any document or instrument delivered pursuant to, in connection with or simultaneously with this Warrant, or a breach of this Warrant or any such document or instrument. In any such action or proceeding, the Company waives personal service of any summons, complaint or other process and agrees that service thereof may be made in accordance with Section 8(b) of the Subscription Agreement. Within 30 days after such service, or such other time as may be mutually agreed upon in writing by the attorneys for the parties to such action or proceeding, the Company shall appear to answer such summons, complaint or other process.

15. Any notice or other communication required or permitted to be given hereunder shall be in writing and shall be mailed by certified mail, return receipt requested, or by Federal Express, Express Mail or similar overnight delivery or courier service or delivered (in person or by telecopy, telex or similar telecommunications equipment) against receipt to the party to whom it is to be given, (i) if to the Company, at 9000 Harry Hines Boulevard, Dallas, Texas 75235, Attention: President, (ii) if to the Holder, at its address set forth on the first page hereof, or (iii) in either case, to such other address as the party shall have furnished in writing in accordance with the provisions of this Section 15. Notice to the estate of any party shall be sufficient if addressed to the party as provided in this Section 15. Any notice or other communication given by certified mail shall be deemed given at the time of certification thereof, except for a notice changing a party's address which shall be deemed given at the time of receipt thereof. Any notice given by other means permitted by this Section 15 shall be deemed given at the time of receipt thereof.

16. No course of dealing and no delay or omission on the part of the Holder in exercising any right or remedy shall operate as a waiver thereof or otherwise prejudice the Holder's rights, powers or remedies. No right, power or remedy conferred by this Warrant upon the Holder shall be exclusive of any other right, power or remedy referred to herein or now or hereafter available at law, in equity, by statute or otherwise, and all such remedies may be exercised singly or concurrently.

17. This Warrant may be amended only by a written instrument executed by the Company and the Holder hereof. Any amendment shall be endorsed upon this Warrant, and all future Holders shall be bound thereby.

Dated: _____, 1998

Cytoclonal Pharmaceutics Inc.

By:_____

Name: Arthur P. Bollon, Ph.D.
Title: President

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Daniel Shusterman, Secretary

FORM OF ASSIGNMENT

(To be executed by the registered holder if such holder desires to transfer the attached Warrant.)

FOR VALUE RECEIVED, _____ hereby sells, assigns, and transfers unto_____ a Class E Warrant to purchase _____ shares of Common Stock, par value $0.01 per share, of Cytoclonal Pharmaceutics Inc. (the "Company"), together with all right, title, and interest therein, and does hereby irrevocably constitute and appoint _____ attorney to transfer such Warrant on the books of the Company, with full power of substitution.

Dated:

Signature

- ----------

Signature Guarantee

NOTICE

The signature on the foregoing Assignment must correspond to the name as written upon the face of this Warrant in every particular, without alteration or enlargement or any change whatsoever.

To: Cytoclonal Pharmaceutics Inc.
9000 Harry Hines Boulevard
Dallas, Texas 75235

ELECTION TO EXERCISE

The undersigned hereby exercises his or its rights to purchase_____ Warrant Shares covered by the within Class E Warrant and tenders payment herewith in the amount of $_____ in accordance with the terms thereof, and requests that certificates for such securities be issued in the name of, and delivered to:

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(Print Name, Address and Social Security or Tax Identification Number)

and, if such number of Warrant shares shall not be all the Warrant Shares covered by the within Warrant, that a new Warrant for the balance of the Warrant Shares covered by the within Warrant be registered in the name of, and delivered to, the undersigned at the address stated below.

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(Print Name, Address and Social Security or Tax Identification Number)

and, if such number of Warrant Shares shall not be all the Warrant Shares covered by the within Warrant, that a new Warrant for the balance of the Warrant Shares covered by the within Warrant be registered in the name of, and delivered to, the undersigned at the address stated below.

Dated:_____

Name:_____
(Print)

Address:

- ----------

(Signature)

(Signature Guarantee)

(Signature Guarantee)

EXHIBIT 5.1

MORRISON COHEN SINGER & WEINSTEIN, LLP
750 Lexington Avenue
New York, New York 10022

Telephone: (212) 735-8600

Facsimile (212) 735-8708

October 21, 1998

Cytoclonal Pharmaceutics 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 Pharmaceutics 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 1,282,875 shares of common stock, $.01 par value per share (the "Common Stock"), of the Company consisting of: (i) 671,035 shares of Common Stock for resale by the Selling Stockholders (as defined in the Registration Statement) who purchased such shares in the Company's private placement completed in April 1998 (the "1998 Private Placement") pursuant to Section 4(2) and Regulation D promulgated under the Securities Act (the "Private Placement Shares"); (ii) 335,540 shares of Common Stock for resale by the Selling Stockholders issuable upon the exercise of Class E Warrants (the "Class E Warrants") purchased by such stockholders in the 1998 Private Placement (the "Class E Warrant Shares"); (iii) 134,199 shares of Common Stock for resale by a certain Selling Stockholder, Janssen-Meyers Associates, L.P. ("JMA"), issuable upon the exercise of the unit purchase option (the "JMA Unit Purchase Option") granted to JMA by the Company in consideration for its services as placement agent in the 1998 Private Placement (the "JMA Unit Purchase Option Shares"), (iv) 67,101 shares of Common Stock for resale by JMA issuable upon the exercise of the Class E Warrants underlying the JMA Unit Purchase Option (the "JMA Unit Purchase Option Warrant Shares"), and (v) 75,000 shares of Common Stock for resale by a certain Selling Stockholder, Synergy Group, L.P. ("Synergy"), issuable upon the exercise of a warrant (the "Synergy Warrant") issued to Synergy by the Company pursuant to a financial consulting agreement, dated August 7, 1998, between the Company and Synergy (the "Synergy Warrant Shares").

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 Private Placement Shares have been duly and validly authorized, issued, fully paid and nonassessable.

2. The Class E Warrant Shares have been duly and validly authorized and when sold, paid for and issued upon the exercise of the Class E Warrants in accordance with the terms of the Class E Warrants, will be duly and validly issued, fully paid and nonassessable.

3. The JMA Unit Purchase Option Shares have been duly and validly authorized and when sold, paid for and issued upon the exercise of the JMA Unit Purchase Option in accordance with the terms of the JMA Unit Purchase Option, will be duly and validly issued, fully paid and nonassessable.

4. The JMA Unit Purchase Option Warrant Shares have been duly and validly authorized and when sold, paid for and issued upon the exercise of the Class E Warrants issuable upon the exercise of the JMA Unit Purchase Option in accordance with the Class E Warrants and JMA Unit Purchase Option, will be duly and validly issued, fully paid and nonassessable.

5. The Synergy Warrant Shares have been duly and validly authorized and when sold, paid for and issued upon the exercise of the Synergy Warrant, 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,

MORRISON COHEN SINGER & WEINSTEIN, LLP

MORRISON COHEN SINGER & WEINSTEIN, LLP

EXHIBIT 5.2

CONSENT OF COUNSEL

The undersigned hereby consents to the use of our name and the statement with respect to us appearing under the heading "Legal Matters" included in this Form S-3.

GARDERE & WYNNE, L.L.P.

Daniel F. Perez	October 22, 1998
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Daniel F. Perez	Date:

EXHIBIT 24.2

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in this Registration Statement on Form S-3 of Cytoclonal Pharmaceutics Inc. of our report, dated February 6, 1998 (with respect to Note K[2], April 13, 1998) on our audits of the financial statements of Cytoclonal Pharmaceutics Inc. as of December 31, 1997 and for each of the years in the two-year period ended December 31, 1997 and for the period from September 11, 1991 (inception) through December 31, 1997, included in the Company's Annual Report on Form 10-KSB for the year ended December 31, 1997. We also consent to the reference of our firm under the caption "Experts" included in the Prospectus.

Richard A. Eisner & Company, LLP
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Richard A. Eisner & Company, LLP

New York, New York
October 20, 1998