# Registration No. 33-

# SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

-----

# FORM SB-2

### REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

# CYTOCLONAL PHARMACEUTICS INC.

(Name of Small Business Issuer in its Charter)

<C>

<TABLE>

<CAPTION>

<S>

Delaware (State or other jurisdiction of incorporation or organization) 2834 75-2402409
Primary standard industrial (I. classification code number)

(I.R.S. employer identification number)

</TABLE>

9000 Harry Hines Boulevard Dallas, Texas 75235 (214) 353-2922

(Address and Telephone Number of Principal Executive Offices)

9000 Harry Hines Boulevard 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
Dallas, Texas 75235
(214) 353-2922

(Name, Address and Telephone Number of Agent for Service)

Copies to:

Robert H. Cohen, Esq. Bryan Cave LLP 245 Park Avenue New York, New York 10167-0034 (212) 692-1800

Approximate date of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

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. []

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

# CALCULATION OF REGISTRATION FEE

	Prop Max	osed imum	Prop	osed
Title of Each Class of Securities to be Registered	Amount to be Registered	Offering Price Per Security	Maximum Aggregate Offering Price	C
<s> <c> Class A Warrants (1)</c></s>	<c> 500,000</c>	<c></c>	<c></c>	<c></c>
Class B Warrants (2)	1,018,750			
Warrants (3)	506,250			
Common Stock, par value \$.01 per share (4)	200,000	\$3.75	\$750,000.00	\$ 227.27

</TABLE>

- These Class A Warrants are being registered for resale by selling security holders, each of whom was on investor in the Registrant's private placement completed in August 1994 (the "1994 Bridge Financing").
- (2) These Class B Warrants are being registered for resale by selling security holders, each of whom was an investor in the Registrant's private placement completed in April 1995 (the "1995 Bridge Financing").
- (3) The Warrants (the "Blair Warrants") are being registered for resale by D.H. Blair Investment Banking Corp. ("Blair"), who served as placement agent in the 1994 Bridge Financing and who rendered advice and assistance in structuring the 1995 Bridge Financing.
- (4) Issuable upon the exercise of the Class A Warrants being registered for resale by selling security holders.
- (5) Issuable upon the exercise of the Class B Warrants being registered for resale by selling security holders.
- (6) Issuable upon the exercise of the Blair Warrants being registered for resale by Blair.

\_

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 A Warrants, the Class B Warrants and the Blair Warrants (as defined herein).

- -----

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.

3

# CYTOCLONAL PHARMACEUTICS INC.

Cross-Reference Sheet Showing Location in Prospectus of Information Required by Part I of Form SB-2

<TABLE> <CAPTION>

Item and Caption

Location in Prospectus

<C>

Forepart of Registration
 Statement and Outside Front

Outside Front Cover Page

Cover of Prospectus

2. Inside Front and Outside Back
Cover Pages of Prospectus

Inside Front and Outside Back Cover

3. Summary Information and Risk Factors

Prospectus Summary; Risk Factors

4. Use of Proceeds

Prospectus Summary; Use of Proceeds

5. Determination of Offering Price

Outside Front Cover Page; Risk

Factors

Risk Factors; Dilution

7. Selling Security Holders

Selling Security Holders

8. Plan of Distribution

6. Dilution

Outside Front Cover Page; Prospectus Summary; Plan of

Distribution

9. Legal Proceedings

10. Directors, Executive Officers, Promoters and Control Persons

Management; Principal Stockholders; Certain Transactions

Security Ownership of Certain
 Beneficial Owners and Management

Management; Principal Stockholders

12. Description of Securities

Outside Front Cover Page; Description of Securities

13. Interests of Named Experts and Counsel

\*

Business

14. Disclosure of Commission Position on Indemnification for Securities Act Liabilities Management

15. Organization within the Last Five Years

Certain Transactions

16. Description of Business

Prospectus Summary; Capitalization; Selected Financial Data; Plan of

Operation; Business; Management; Certain Transactions; Principal Stockholders; Financial Statements

17. Management's Discussion and Analysis or Plan of Operation

Plan of Operation

18. Description of Property

Business

 Certain Relationships and Related Transactions Certain Transactions

20. Market for Common Equity and Related Stockholders Matters

Inside Front Cover Page; Risk Factors: Description of Securities

21. Executive Compensation

Management

22. Financial Statements

Financial Statements

23. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

</TABLE>

4

Subject to Completion -- Dated October 3, 1996

CYTOCLONAL PHARMACEUTICS INC.

[LOGO]

500,000 Class A Warrants 1,018,750 Class B Warrants 506,250 Warrants 810,000 Shares of Common Stock

This Prospectus relates to 500,000 Class A Warrants of Cytoclonal Pharmaceutics Inc. (the "Company") issued to certain investors in connection with the Company's bridge financing completed in August 1994 (the "1994 Bridge Financing"), 1,018,750 Class B Warrants ("Class B Warrants") of the Company issued to certain investors in connection with the Company's bridge financing completed in April 1995 (the "1995 Bridge Financing"; the 1994 Bridge Financing and the 1995 Bridge Financing are collectively herein referred to as the "Bridge Financings") and 506,250 warrants (the "Blair Warrants") issued to D.H. Blair Investment Banking Corp. ("Blair") as part of its compensation for services as placement agent in the 1994 Bridge Financing and for rendering advice and assistance in structuring the 1995 Bridge Financing. Each Class A Warrant entitles the registered holder thereof to purchase, at any time until November 7, 2000 (the "Expiration Date"), 0.4 share of common stock (the "Common Stock") of the Company at an exercise price of \$3.75 per share, subject to adjustment. Each Class B Warrant entitles the registered holder thereof to purchase, at any time until the Expiration Date, 0.4 share of Common Stock at an exercise price of \$4.375 per share, subject to adjustment. Each Blair Warrant entitles the registered holder to purchase, at any time until the Expiration Date, 0.4 share of Common Stock at an exercise price of \$3.75 per share, subject to adjustment. The Class A Warrants, the Class B Warrants and the Blair Warrants are collectively referred to herein as the "Warrants." See "Description of Securities -- Class A Warrants, Class B Warrants and Blair Warrants.'

The Company will not receive any of the proceeds from the sale of securities by the Selling Security Holders (as defined herein). In the event the Warrants are fully exercised, the Company will receive gross proceeds of

<sup>\*</sup> Not applicable.

\$3,292,187.50 and will pay a Solicitation Fee (as defined herein) of \$89,140.63. See "Selling Security Holders" and "Plan of Distribution."

The Company agreed, in connection with the 1995 Bridge Financing, to pay a solicitation fee (the "Solicitation Fee") to Janssen-Meyers Associates, L.P. ("JMA") equal to 5% of the aggregate exercise price of all the Class B Warrants exercised. The exercise prices and other terms of the Warrants were arbitrarily determined by negotiation between the Company and JMA and between the Company and Blair and are not necessarily related to the Company's assets, book value or financial condition, or to any other recognized criteria of value. See "Risk Factors -- Arbitrary Determination of Offering Price." The Common Stock is traded on the Nasdaq SmallCap Market, however, there can be no assurance that an active trading market in the Company's securities will be sustained. See "Risk Factors -- Possible Delisting of Securities from the Nasdaq Stock Market."

\_\_\_\_\_

<table></table>	
<caption< td=""><td>J&gt;</td></caption<>	J>

	Warrant Exercise Price per Share of Common Stock Underlying the Warrants	Warrant Solicitation Fee (1)	Proceeds to Company (2)(3)	
<s></s>	<c></c>	<c></c>	<c></c>	
Class A Warrant	\$3.75		\$3.75	
Total	\$750,000.00		\$750,000.00	
Class B Warrant	\$4.375	\$.2187	\$4.15625	
Total	\$1,782,812.50	\$89,140.63	\$1,693,671.87	
Blair Warrant	\$3.75		\$3.75	
Total	\$759,375.00		\$759,375.00	
∠/T ∧ D I E \				

</TABLE>

- Represents Solicitation Fees payable to JMA equal to 5% of the aggregate exercise price of all Class B Warrants exercised.
- (2) Assumes the exercise of all the Warrants and that the Solicitation Fee is paid on all the Class B Warrants that are exercised. There can be no assurance that any of the Warrants will be exercised.
- (3) Before deducting expenses of this offering, payable by the Company, estimated at \$50,000.

-----

INVESTMENT IN THESE SECURITIES IS SPECULATIVE AND INVOLVES A HIGH DEGREE OF RISK AND SUBSTANTIAL DILUTION. SEE "RISK FACTORS" BEGINNING ON PAGE 10 OF THIS PROSPECTUS AND "DILUTION."

-----

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS ANY SUCH COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this Prospectus is	, 1996.

2

# AVAILABLE INFORMATION

The Company has filed a Registration Statement on Form SB-2 (the "Registration Statement") under the Securities Act with the Securities and Exchange Commission (the "Commission") in Washington, D.C. with respect to the Warrants and the underlying shares of Common Stock offered hereby. This Prospectus, which is part of the Registration Statement, does not contain all of the information set forth in the Registration Statement and the exhibits and schedules thereto. For further information with respect to the Company, the Common Stock and the Warrants offered hereby, reference is hereby made to the Registration Statement and such exhibits and schedules, which may be inspected without charge at the office of the Commission at 450 Fifth Street, N.W.,

Washington, D.C. 20549 and at its regional offices at 7 World Trade Center, New York, New York 10048. Copies of such material may also be obtained at prescribed rates from the Public Reference Section of the Commission. The Commission maintains a World Wide Web site on the Internet at http://www.sec.gov that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Commission. Statements contained in this Prospectus as to the contents of any contract or other document referred to are not necessarily complete and in each instance reference is made to the copy of such contract or document filed as an exhibit to the Registration Statement, each such statement being qualified in all respects by such reference.

The Company intends to furnish annual reports to its stockholders and holders of its warrants, which will include financial statements audited by its independent certified public accountants, and such other periodic reports as it may determine to furnish or as may be required by law, including Sections 13(a) and 15(d) of the Securities Exchange Act of 1934.

3

### PROSPECTUS SUMMARY

The following summary is qualified in its entirety by reference to the more detailed information and financial statements and notes thereto appearing elsewhere in this Prospectus. Unless otherwise indicated, the information in this Prospectus does not give effect to the exercise or conversion of: (i) the unit purchase option (the "Unit Purchase Option") granted to the underwriters, in connection with the Company's initial public offering completed in November 1995 (the "IPO") to purchase up to an aggregate of 200,000 Units (as defined herein); (ii) outstanding options, rights and warrants and other securities convertible or exercisable into Common Stock; (iii) options or shares of Common Stock available for grant or issuance under the Company's 1992 Stock Option Plan (the "1992 Plan"); or (iv) options or shares of Common Stock available for grant or issuance under the Company's 1996 Stock Option Plan (the "1996 Plan"). Each prospective investor is urged to read this Prospectus in its entirety.

### THE COMPANY

Cytoclonal Pharmaceutics Inc. ("CPI" or the "Company") is a development stage biopharmaceutical company focusing on the development of diagnostic and therapeutic products for the identification, treatment and prevention of cancer and infectious diseases. To date, the Company has been involved solely in research and development activities relating to several products that are at various stages of development. The Company's research and development activities relate principally to its proprietary fungal paclitaxel (commonly referred to as "Taxol") production system and its diagnostic and imaging lung cancer products and Human Gene Discovery Program.

The Company's strategy is to focus on its (i) Fungal Taxol Production System Program since Taxol has been approved by the FDA as a treatment for refractory (treatment resistant) breast and ovarian cancer; and (ii) Human Gene Discovery Program, including a proprietary cancer related gene ("LCG gene") and related monoclonal antibody ("MAb") addressing the need for diagnosis and treatment of lung cancer. Other programs, which involve tumor necrosis factor-polyethylene glycol ("TNF-PEG"), cancer and infectious disease vaccines, a fusion protein ("IL-T"), a potential anti-leukemia drug ("IL-P") and anti-sense therapeutics, are being pursued at modest levels. These other programs may serve as platforms for future products and/or alternatives to the two primary programs if unforeseen problems develop. In addition, several of the technologies under development are complementary and could possibly potentiate each other. Hence, the Company currently intends to pursue the development of (1) cancer therapeutic products, such as Taxol and potentially TNF-PEG and IL-P, (2) the LCG gene as a diagnostic cancer probe and MAbs for lung, breast, colon and skin cancer as diagnostic and imaging products, (3) vaccines for the prevention and treatment of cancer and infectious diseases, including possibly lung cancer using the LCG gene, and (4) IL-T, which has the potential to protect against the detrimental effects of radiation therapy and chemotherapy. See "Business."

The Company was created in 1991 to acquire from Wadley Technologies, Inc. ("WadTech") rights to certain proprietary cancer and viral therapeutic technology ("Wadley Technology") developed over a period of nine years at the Wadley Institutes in Dallas, Texas ("Wadley") and Lymphokine Partners Limited, a partnership between affiliates of Wadley and Phillips Petroleum Company. See "Business -- Collaborative Agreements -- WadTech." Through its own research efforts and agreements with other research institutions and biotechnology companies, the Company has acquired and/or developed additional proprietary technology and rights. The Company has not developed any commercial products, will require significant additional financing to complete development and obtain regulatory approvals for its proposed products which can take several years.

4

Institute, Inc. ("RDI") at Montana State University. Taxol has proven to be effective in treating refractory ovarian and breast cancers and, in preliminary clinical trials, has shown potential in treating refractory non-small cell lung cancer ("NSCLC") and certain other cancer indications. Presently, Taxol is made from the inner bark and needles of the slow-growing Pacific yew tree. Scientists at the Company, in cooperation with the inventors of the fungal Taxol technology, are using this technology and fermentation technology to develop a system for manufacturing Taxol in commercial quantities and at lower cost than currently available production methods. See "Business -- Research and Development Programs -- Fungal Taxol Production System Program."

In July 1996, the Company entered into an agreement with the Washington State University Research Foundation ("WSURF") whereby the Company received an exclusive, world-wide license to use and/or sublicense patented technology or prospective patented technology (the "WSURF Technology") related to genes for enzymes and the associated gene products, including the enzymes, in the biosynthetic pathway for Taxol from the yew tree. This gene will be used along with a related fungal gene region to further optimize the Fungal Taxol Production System.

The Company is directing its resources toward developing cancer diagnostic and imaging products utilizing the LCG gene and related MAb ("LCG MAb") isolated by the Company in its Human Gene Discovery Program. The LCG gene and the LCG MAb are associated with specific lung cancer cells. In Phase I human clinical trials, an LCG MAb derived from mouse cells was shown to be highly specific for cancerous lung tissue, but not normal lung tissue. These clinical studies will be expanded with a human-derived form of the LCG MAb which is presently under development. See "Business -- Research and Development Programs -- Human Gene Discovery Program/Lung Cancer Program."

In February 1996, the Company obtained exclusive rights to a technology and pending patent developed at the University of California, Los Angeles for the taxol treatment of polycystic kidney disease, which treatment looks promising in animal studies.

In June 1996, the Company entered into a Patent License Agreement (the "Regents Agreement") with the Board of Regents of the University of Texas System ("Regents") whereby the Company received an exclusive royalty-bearing license to manufacture, have manufactured, use, sell and/or 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 optimum regions within genes to bind Antisense products. Antisense products are under development to control genes involved in human diseases such as cancer, diabetes, or AIDS. This discovery potentially has broad applications to many human and viral genes involved in human disease.

In November 1994, the Company entered into a marketing agreement with Helm AG, a world-wide distributor of pharmaceutical and related products with sales of over \$3 billion in 1994, granting Helm AG the right in certain parts of Europe to market the technology and/or products of, and arrange business introductions for, the Company on a commission basis. See "Business -- Collaborative Agreements -- Helm AG." In addition, the Company is in discussions with several companies regarding the establishment of strategic partnerships for the development, marketing, sales and manufacturing of the Company's proposed products for various segments of the global market. There can be no assurance that the Company's agreement with Helm AG will result in any benefit to the Company or that any additional agreements will be entered into.

To date, the Company has generated no sales revenues and has incurred operating losses of approximately 1,320,000 (unaudited) for the six months ended

5

June 30, 1996 and \$2,691,000 and \$2,265,000 for the years ended December 31, 1995 and 1994, respectively, resulting in a deficit accumulated during the development stage of \$10,282,000 (unaudited) at June 30, 1996. In addition, losses have been increasing and are continuing. The Company expects it will continue to have substantial operating expenses and will be required to make significant up-front expenditures in connection with its research and development activities. As a result, the Company anticipates significant losses for 1996 and that losses will continue thereafter until such time, if ever, as the Company is able to generate sufficient revenues to support its operations. There can be no assurance that any of the Company's proposed products will be successfully developed or commercialized. See "Risk Factors -- Accumulated Deficit; and History of Significant Losses and Anticipated Continuing Significant Future Losses," "Plan of Operation" and Financial Statements.

The Company was originally incorporated in the state of Texas in September 1991 as Bio Pharmaceutics, Inc. In November 1991, the Company changed its name to Cytoclonal Pharmaceutics Inc. The Company was reincorporated in Delaware by merger into a wholly-owned Delaware subsidiary in January 1992. The Company's executive offices are located at 9000 Harry Hines Boulevard, Dallas, Texas 75235 and its telephone number is 214-353-2922.

# THE OFFERING

Warrants, 506,250 Blair Warrants and 810,000 shares of Common Stock issuable upon exercise of the Class A Warrants, Class B Warrants and Blair Warrants. See "Description of Securities."

Terms of Warrants..

..... Each Class A Warrant entitles the holder to purchase 0.4 share of Common Stock, for an exercise price of \$3.75 per share, at any time until November 7, 2000. Each Class B Warrant entitles the holder to purchase 0.4 share of Common Stock, for an exercise price of \$4.375 per share, at any time until November 7, 2000. Each Blair Warrant entitles the holder to purchase 0.4 share of Common Stock, for an exercise price of \$3.75 per share, at any time until November 7, 2000. The exercise prices and numbers of shares issuable upon the exercise of the Warrants are subject to adjustment in certain circumstances. See "Description of Securities -- Class A Warrants, Class B Warrants and Blair Warrants.'

Capital Stock Outstanding Before Offering Assuming No Exercise of the Warrants

Common Stock(1): 7,687,935 shares

Series A Convertible

Preferred Stock: 1,271,240 shares

Class A Warrants: 500,000
Class B Warrants: 1,018,750

6

Blair Warrants: 506,250

Capital Stock Outstanding After Offering Assuming Exercise of All Class A Warrants

Common Stock(1): 7,887,935 shares

Series A Convertible

Preferred Stock: 1,271,240 shares

Class B Warrants: 1,018,750

Blair Warrants: 506,250

Capital Stock Outstanding After Offering Assuming Exercise of All Class A Warrants and Class B Warrants

Common Stock(1): 8,295,435 shares

Series A Convertible

Preferred Stock: 1,271,240 shares

Blair Warrants: 506,250

Capital Stock Outstanding After Offering Assuming Exercise of All Class A Warrants, Class B Warrants and Blair Warrants

Common Stock(1): 8,497,935 shares

Series A convertible

Preferred Stock: 1,271,240 shares

if any, to fund research and development activities (including certain royalties and licensing fees), and for general working capital purposes and operating expenses. See "Use of Proceeds" and "Plan of

Operation."

Risk Factors...... Investment in these securities is speculative and involves a high degree of

Nasdaq SmallCap Market Symbols(3)..... Common Stock - CYPH Class C Warrants - CYPHW Class D Warrants - CYPHZ

(1) Does not include the possible issuance of (i) 1,190,000 shares of Common Stock reserved for issuance upon exercise of options granted or available for grant under the 1992 Plan and the 1996 Plan; (ii) 1,271,240 shares of Common Stock issuable at the option of the holders thereof upon the conversion of the Company's Series A Convertible Preferred Stock ("Series A Preferred Stock"); (iv) 300,000 shares of Common Stock reserved for issuance

7

upon exercise of the unit purchase option granted to the placement agent for the Company's 1992 private placement of units consisting of Common Stock and Series A Preferred Stock and upon the conversion of such Series A Preferred Stock; (v) 200,000 shares of Common Stock reserved for issuance upon exercise of the unit purchase option ("Unit Purchase Option") granted to the underwriters in connection with the IPO; or (vi) 600,000 shares of Common Stock reserved for issuance upon exercise of the warrants contained in the Unit Purchase Option. See "Management," "Certain Transactions," "Description of Securities" and "Bridge Financings."

8

Summary Financial Information(1)

<TABLE> <CAPTION>

Statement of Operations Data:

	Dec	ember 31,	September 1 199 (incep Decer	1 tion) to	]	Months Ended June 30	,	Septem	iber 11,		
		1995	1995	5	1995	19					
<s> Research and development exp</s>			<c> <c> 0 \$1,181</c></c>		<c> \$4,731</c>			<c></c>	729,	000	\$5,460,000
General and admir	nistrative 1,05	54,000	1,138,000			-					000
Net interest expen (income)	se 112	2,000	372,000	356,0	00	218,000		(116,000	))	240,00	00
Net (loss)											203,000)
Net (loss) per shar common stock		. ,	` '			\$(.30)	\$(	.19)			
Weighted average of shares	number . 5,36	7,000									
Balance Sheet Dat											
				-	AT JUN	E 30, 1996	6				

AT JUNE 30, 1996

	As Actual Adj	As usted (2) Adj	As usted (3) Adjust	ted (4)	
Working capital	\$3,940,000	\$4,640,000	\$6,334,000	\$7,093,000	-
Total assets	\$5,350,000	\$6,050,000	\$7,744,000	\$8,503,000	-
Total liabilities	\$1,640,000	\$1,640,000	\$1,640,000	\$1,640,000	-
Deficit accumulated during the developme	nt stage	\$(10,282,000)	\$(10,282,000)	\$(10,282,000)	\$(10,282,000)
Total stockholders' equity	\$3,710,00	00 \$4,410,00	0 \$6,104,00	0 \$6,863,000	-

  |  |  |  | - |

- (2) Gives effect to the exercise of only the 500,000 Class A Warrants and the application on the net proceeds therefrom. See "Plan of Distribution."
- (3) Gives effect to the exercise of the 500,000 Class A Warrants, the 1,018,750 Class B Warrants, the application on the net proceeds therefrom, and assumes that the Solicitation Fee is paid on each Class B Warrant Exercise. See "Plan of Distribution."
- (4) Gives effect to the exercise of the 500,000 Class A Warrants, the 1,018,750 Class B Warrants, the 506,250 Blair Warrants, the application on the net proceeds therefrom, and assumes that the Solicitation Fee is paid on each Class B Warrant Exercise. See "Plan of Distribution."

9

### RISK FACTORS

AN INVESTMENT IN THE SECURITIES OFFERED HEREBY IS HIGHLY SPECULATIVE, INVOLVES A HIGH DEGREE OF RISK AND SHOULD BE MADE ONLY BY INVESTORS WHO CAN AFFORD THE LOSS OF THEIR ENTIRE INVESTMENT. PROSPECTIVE PURCHASERS, PRIOR TO MAKING AN INVESTMENT DECISION, SHOULD CAREFULLY CONSIDER, ALONG WITH OTHER MATTERS REFERRED TO HEREIN, THE FOLLOWING RISK FACTORS:

Accumulated Deficit; and History of Significant Losses and Anticipated Continuing Future Losses. The Company's balance sheet as of December 31, 1995 and June 30, 1996 (unaudited) reflect accumulated deficits of \$(8,962,000) and \$(10,282,000), respectively. In addition, the Company's statements of operations for the year ended December 31, 1995 and the six months ended June 30, 1996 (unaudited) reflect net losses of \$(2,691,000) and \$(1,320,000), respectively, or approximately \$(0.53) and \$(0.19) per share, respectively. The Company has continued to incur substantial operating losses since June 30, 1996 and expects to incur significant operating losses for at least several years. There can be no assurances that future revenues will be generated, that, if generated, the Company's operations will be profitable, or that the Company will be able to obtain sufficient additional funds to continue its planned activities. See "Use of Proceeds," "Plan of Operation" and Financial Statements.

Development Stage Company; No Product Revenue. The Company is in the development stage and through June 30, 1996 has generated no sales revenue and has no prospects for revenue in the foreseeable future. Substantial losses to date have resulted principally from costs incurred in research and development activities and general and administrative expenses, as well as from the purchase of equipment and leasehold improvements to the Company's facilities. The Company will be required to conduct significant research, development, testing and regulatory compliance activities which, together with projected general and administrative expenses, are expected to result in additional significant continuing operating losses. The Company does not expect to receive regulatory approvals for any of its proposed products for at least several years, if ever. The Company currently has no source of operating revenue and there can be no assurance that it will be able to develop any such revenue source or that its operations will become profitable, even if it is able to commercialize any products. Further, as a development stage company, the Company has a limited relevant operating history upon which an evaluation of its prospects can be made. Such prospects must be considered in light of the risks, expenses and difficulties frequently encountered in establishing a new business in the evolving, heavily regulated biotechnology industry, which is characterized by an increasing number of market entrants, intense competition and a high failure rate. In addition, significant challenges are often encountered in shifting from developmental to commercial activities. See "Plan of Operation" and Financial Statements.

Need for Substantial Additional Funds; Negative Cash Flow. The Company is currently experiencing, and has since its inception experienced, negative cash flow from operations which is expected to continue in the foreseeable future. Since its inception the Company has been dependent upon equity infusions and upon the Bridge Financings and the Company's initial public offering in November 1995 (the "IPO") to fund its continuing operations. The Company's cash requirements may vary materially from current estimates because of results of the Company's research and development programs, results of clinical studies, changes in the focus and direction of the Company's research and development programs, competitive and technological advances and other factors. In any event, the Company will require substantial funds, in addition to the proceeds of this Offering, to conduct development activities and pre-clinical and clinical trials, apply for regulatory approvals and commercialize products, if any, that it develops.

The Company does not have any commitments or arrangements to obtain any additional financing and there is no assurance that required financing will be available to the Company on acceptable terms, if at all. Although the Company will seek to fund a portion of its product development efforts by entering into collaborative ventures with corporate partners, obtaining research contracts, entering into research and development partnerships and obtaining government grants, there can be no assurance that the Company will be able to enter into any such additional ventures on acceptable terms, if at all. To the extent the Company raises additional capital by issuing securities, further dilution to the investors in this Offering may result. See "-- Dependence on Collaborations and Licenses with Others" and "Dilution."

Dependence on Collaborations and Licenses with Others. The Company's strategy for the development, clinical testing, manufacturing and commercialization of its proposed products includes entering into various collaborations with corporate partners, licensors, licensees and others, and is dependent upon the subsequent success of these outside parties in performing their responsibilities. In addition to its agreements with RDI and Enzon, Inc. ("Enzon"), the Company has entered into several other research and license agreements and is continually seeking to enter into additional arrangements with other collaborators. There can be no assurance that its current arrangements or any future arrangements will lead to the development of products with commercial potential, that the Company will be able to obtain proprietary rights or licenses for proprietary rights with respect to any technology developed in connection with these arrangements or that the Company will be able to insure the confidentiality of any proprietary rights and information developed in such collaborative arrangements or prevent the public disclosure thereof.

In general, collaborative agreements provide that they may be terminated under certain circumstances. There can be no assurance that the Company will be able to extend any of its collaborative agreements upon their termination or expiration, or that the Company will be able to enter into new collaborative agreements with existing or new partners in the future. To the extent the Company chooses not to or is unable to establish any additional collaborative arrangements, it would require substantially greater capital to undertake research, development and marketing of its proposed products at its own expense. In addition, the Company may encounter significant delays in introducing its proposed products into certain markets or find that the development, manufacture or sale of its proposed products in such markets is adversely affected by the absence of such collaborative agreements. See "--Royalty Obligations; Possible Loss of Patents and Other Proprietary Rights" and "Business -- Collaborative Agreements."

Early Stage of Product Development; Technological and Other Uncertainties. There can be no assurance that the Company's research and development activities will result in any commercially viable products. The development of each product will be subject to the risks of failure inherent in the development of products based on innovative technologies and the expense and difficulty of obtaining regulatory approvals. All of the potential products currently under development by the Company will require significant additional research and development and pre-clinical testing and clinical testing prior to submission of any regulatory application for commercial use. There can be no assurance that the Company's research or product development efforts will be successfully completed, that the products currently under development will be successfully transformed into marketable products, that required regulatory approvals can be obtained, that products can be manufactured at acceptable cost in accordance with regulatory requirements or that any approved products can be successfully marketed or achieve customer acceptance. Additional risks include the possibility that any or all of the Company's products will be found to be ineffective or toxic, or that, if safe and effective, will be difficult to manufacture on a large scale or uneconomical to market; that the proprietary rights of third parties will preclude the Company from marketing one or more

11

products; and that third parties will market superior or equivalent products. See "-- No Assurance of FDA Approval; Government Regulation," "-- Dependence on Third Parties For Manufacturing; No Manufacturing Experience," "-- Dependence on Third Parties For Marketing; No Marketing Experience" and "Business -- Research and Development Programs."

Royalty Obligations; Possible Loss of Patents and Other Proprietary Rights. Pursuant to its License Agreement with RDI relating to Taxol, the Company must pay minimum royalties of \$100,000 by June 10, 1997 and by each June 10 thereafter as long as such license is retained. Pursuant to its Research and Development Agreement with RDI, the Company is required to pay RDI \$250,000 on October 1, 1996. In addition, for the purchase of the Wadley Technology, the Company is required to pay royalties to WadTech of 6.25% of the gross selling price of products incorporating any of the Wadley Technology until payments totalling \$1,250,000 have been made. Thereafter, the royalty rate will be up to 3.75%. Minimum royalties payable to WadTech are \$31,250, payable quarterly, for the year beginning December 1, 1996, are \$62,500, payable quarterly, for the next year and are \$125,000, payable quarterly, for each year thereafter. WadTech has a security interest in the Wadley Technology to secure the payment of the first \$1,250,000 of royalties. WadTech has the right to

license such intellectual property to a third party or sell it through a foreclosure sale in the event that the Company does not fulfill its obligations under the Wadley Agreement. Furthermore, pursuant to its license agreement with WSURF, the Company is required to pay WSURF license fees of \$7,500 per year commencing on July 1, 1997 as well as certain royalties and sublicensing fees. The loss by the Company of the RDI, Wadley or WSURF technology would have a material adverse affect on the Company's business and the development of the Company's proposed products. In addition, the Company's agreements with Enzon provide that if the parties decide to jointly develop any products, the costs and profits of product development will be split equally. If the Company is unable to fund its portion of a product's development costs, the Company will lose its rights to such product, will no longer have the right to split the profits from such product and will only be entitled to a royalty. Pursuant to the License Agreement between the Company and RDI relating to a fungal strain known as FTS-2, the Company must pay to RDI royalties on sales of products incorporating the licensed technology of 6% if the product is covered by a pending or issued patent or 3% if the product is not covered by a patent. The Company is also obligated to pay a royalty of 3% on sales of products produced through the use of a recombinant yeast expression system pursuant to a license agreement assigned to the Company in connection with its purchase of the Wadley Technology. See "Business -- Collaborative Agreements."

Competition. Many of the Company's competitors have substantially greater financial, technical, human and other resources than the Company. In addition, many of these competitors have significantly greater experience than the Company in undertaking pre-clinical testing and human clinical trials of new products and in obtaining United States Food and Drug Administration ("FDA") and other regulatory approvals. Accordingly, certain of the Company's competitors may succeed in obtaining FDA approvals more rapidly than the Company. Furthermore, if the Company is able to commercial production and sale of any products, it will also be competing with companies having substantially greater resources and experience in these areas. Company personnel currently have limited or no experience in the production and sale of any pharmaceutical or biological products. Investors should be aware that in June 1991, the National Cancer Institute ("NCI") formalized a Collaborative Research and Development Agreement ("CRADA") for development of Taxol with Bristol-Myers Squibb Company, Inc. ("Bristol-Myers") as its pharmaceutical manufacturing and marketing partner. This CRADA granted to Bristol-Myers the exclusive use until December 1997 of NCI's clinical data relating to Taxol in seeking approval from the FDA, which significantly shortened the approval process and prevented any other party from obtaining FDA approval using the NCI data. Bristol-Myers received FDA approval for the commercial sale of its Taxol as a treatment for

12

refractory ovarian cancer in December 1992 and for refractory breast cancer in April 1994. Since December 1992, Bristol-Myers has been the sole source of Taxol for commercial purposes. It is the Company's understanding that Bristol-Myers is currently conducting clinical trials required for FDA approval of Taxol for treating other cancers. See "Business -- Research and Development Programs -- Fungal Taxol Production System Program" and "Business -- Competition."

Uncertain Ability to Protect Proprietary Technology. The Company's success will depend, in part, on its ability to obtain patent protection for its products and processes in the United States and elsewhere. The Company has filed and intends to continue to file applications as appropriate. No assurance can be given 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 the Company's technology. In addition, no assurance can be given that any patents issued to or licensed by the Company will not be successfully challenged or circumvented by others, or that the rights granted will provide adequate protection to the Company.

The Company is aware of patent applications and issued patents belonging to competitors and, although it has no knowledge of such, it is uncertain whether any of these, or patent applications of which it may not have any knowledge, will require the Company to alter its potential products or processes, pay licensing fees or cease certain activities. There can be no assurance that the Company will be able to obtain licenses to technology that it may require or, if obtainable, that such licenses will be at an acceptable cost. The Company's failure to obtain any requisite license to any technology may have a material adverse impact on the Company. Expensive and protracted litigation may also be necessary to enforce any patents issued to the Company or to determine the scope and validity of others' claimed proprietary rights.

The Company also relies on trade secrets and confidential information that it seeks to protect, in part, by confidentiality agreements. There can be no assurance that these agreements will not be breached, that the Company would have adequate remedies for any breach or that the Company's trade secrets will not otherwise become known or be independently discovered by competitors. See "Business -- Patents, Licenses and Proprietary Rights."

No Assurance of FDA Approval; Government Regulation. The FDA and comparable agencies in foreign countries impose substantial requirements

upon the introduction of therapeutic and diagnostic pharmaceutical and biological products through lengthy and detailed laboratory and clinical testing procedures, sampling activities and other costly and time-consuming procedures. Satisfaction of these requirements typically takes several years or more and varies substantially based upon the type, complexity and novelty of the product. The regulatory review may result in extensive delay in the regulatory approval process. Regulatory requirements ultimately imposed could adversely affect the Company's ability to clinically test, manufacture or market potential products. Government regulation also applies to the manufacture and marketing of pharmaceutical and biological products.

The effect of government regulation may be to delay marketing of new products for a considerable period of time, to impose costly procedures upon the Company's activities and to furnish a competitive advantage to larger companies that compete with the Company. There can be no assurance that FDA or other regulatory approval for any products developed by the Company will be granted on a timely basis or at all. Any such delay in obtaining, or failure to obtain, such approvals would adversely affect the marketing of any contemplated products and the ability to earn product revenue. Further, regulation of manufacturing facilities by state, local and other authorities is subject to change. Any additional regulation could result in limitations or restrictions on the Company's ability to utilize any of its technologies, thereby adversely affecting the Company's operations. See "Business — Government Regulation."

13

Uncertainty Related to Health Care Reimbursement and Reform Measures. The Company's success in generating revenue from sales of human therapeutic and diagnostic products may depend, in part, on the extent to which reimbursement for the costs of such products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Significant uncertainty exists as to the reimbursement status of newly-approved health care products. There can be no assurance that adequate third-party insurance coverage will be available for the Company to establish and maintain price levels sufficient for realization of an appropriate return on its investment in developing new products. Government and other third-party payors are increasingly attempting to contain health care costs by limiting both coverage and the level of reimbursement of new therapeutic and diagnostic products approved for marketing by the FDA and by refusing, in some cases, to provide any coverage of uses of approved products for disease indications for which the FDA has not granted marketing approval. If adequate coverage and reimbursement levels are not provided by government and third-party payors for uses of the Company's products, the market acceptance of these products would be adversely affected.

Dependence on Third Parties for Manufacturing; No Manufacturing Experience. The Company currently does not have facilities or personnel capable of manufacturing any products in commercial quantities. If the Company completes development of and obtains regulatory approval for fungal Taxol, it intends to use third parties to manufacture Taxol. No assurance can be given that it will be able to enter into any arrangements with such manufacturers on acceptable terms. In the future, the Company may, if it becomes economically attractive to do so, establish its own manufacturing facilities to produce other products that it may develop. Building and operating production facilities would require substantial additional funds and other resources; however, there can be no assurance that such funds would be available. There is no assurance that the Company will be able to make the transition successfully to commercial production, should it choose to do so. See "Business -- Manufacturing and Marketing."

Dependence Upon Third Parties for Marketing; No Marketing Experience. The Company currently has no marketing and sales personnel and no experience with respect to marketing pharmaceutical products. Significant additional expenditures and management resources would be required to develop an internal sales force, and there can be no assurance that such funds would be available. Further, there can be no assurance that, with such a sales force, the Company would be successful in penetrating the markets for any products developed. For certain products under development, the Company may seek to enter into development and marketing agreements which grant exclusive marketing rights to its corporate partners in return for royalties to be received on sales, if any. Under certain of these agreements, the Company's marketing partner may have the responsibility for all or a significant portion of the development and regulatory approval. In the event that the marketing and development partner fails to develop a marketable product or fails to market a product successfully, the Company's business may be adversely affected. The sale of certain products outside the United States will also be dependent on the successful completion of arrangements with future partners, licensees or distributors in each territory. There can be no assurance that the Company will be successful in establishing any additional collaborative arrangements, or that, if established, such future partners will be successful in commercializing products. See "Business -Manufacturing and Marketing."

Dependence Upon Key Personnel and Collaborators; Limited Management Team. The Company's success depends on the continued contributions of

its executive officers, scientific and technical personnel and consultants. The Company is particularly dependent on Arthur P. Bollon, Ph.D., its Chairman, Chief Executive Officer and President, and Daniel Shusterman, its Vice President of Operations, Treasurer and Chief Financial Officer, and its senior scientists,

14

Susan L. Berent, Ph.D., Hakim Labidi, Ph.D., Rajinder S. Sidhu, Ph.D. and Richard M. Torczynski, Ph.D. The Company currently has 16 full-time employees and no executive personnel other than Dr. Bollon and Mr. Shusterman. The Company currently has an employment agreement with Dr. Bollon which expires on November 7, 2000. Although the Company maintains "key person" life insurance in the amount of \$2 million on the life of Dr. Bollon, his death or incapacity would have a material adverse effect on the Company. During the Company's limited operating history, many key 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 adversely affect the business of the Company.

The Company's scientific collaborators and its scientific advisors are employed by employers other than the Company and some have consulting or other advisory arrangements with other entities that may conflict or compete with their obligations to the Company. Inventions or processes discovered by such persons will not necessarily become the property of the Company but may remain the property of such persons or of such persons' full-time employers. See "Management."

Product Liability and Insurance. The use of Company products in clinical trials and the marketing of any products may expose the Company to product liability claims. Although none of the Company's proposed products are currently in clinical trials, the Company is hopeful (although there can be no assurance) that clinical trials will commence on certain of such products during 1997. The Company currently has no product liability insurance, it will, however, attempt to obtain such insurance prior to commencement of such trials, if any. There can be no assurance that the Company will be able to obtain such insurance or, if obtainable, that such insurance can be acquired at a reasonable cost or will be sufficient to cover all possible liabilities. In the event of a successful suit against the Company, lack or insufficiency of insurance coverage could have a material adverse effect on the Company. Furthermore, certain distributors of pharmaceutical and biological products require minimum product liability insurance coverage as a condition precedent to purchasing or accepting products for distribution. Failure to satisfy such insurance requirements could impede the ability of the Company to achieve broad distribution of its proposed products, which would have a material adverse effect upon the business and financial condition of the Company. See "Business-Product Liability Insurance".

Control of the Company; Ability to Direct Management. The current executive officers, directors and principal stockholders of the Company beneficially own or control approximately 46.80% of the outstanding shares of Common Stock, which represents approximately 40.68% of the total outstanding voting securities of the Company. Such officers, directors and principal stockholders may, therefore, be able to elect all of the Company's directors, to determine the outcome of most corporate actions requiring stockholder approval, and otherwise to control the business of the Company. Such control could preclude any unsolicited acquisition of the Company and consequently adversely affect the market price of the Company's securities. In addition, the Company's 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," "Principal Stockholders" and "Description of Securities."

Dividend Policy. Since its inception, the Company has not paid any dividends on its Common Stock. The Company intends to retain future earnings, if any, to provide funds for the operation of its business and, accordingly, does not anticipate paying any cash dividends on its Common Stock in the reasonably foreseeable future. Furthermore, the terms of the Company's outstanding Series A Preferred Stock do not allow for the payment of cash dividends on the Common

15

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. 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 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, an insurance policy, which provides for coverage for certain liabilities of its officers and directors has been issued to the Company.

Possible Restriction on "Market Making" Activities in the Company's Securities; Illiquidity. Bruce Meyers and Peter Janssen beneficially own approximately 10.99% and 10.84%, respectively, of the outstanding shares of Common Stock prior to this Offering, which represents approximately 9.64% and 9.61%, respectively, of the total outstanding voting securities of the Company. See "Principal Stockholders." JMA is a limited partnership of which Messrs Meyers and Janssen are the principals of the corporate general partner. If JMA and/or its affiliates are deemed to have control of the Company, regulatory requirements of the Securities and Exchange Commission (the "Commission") and Nasdaq and the New York Stock Exchange, Inc. could prevent JMA from engaging in market making activities relating to the Company's securities. If JMA is unable to make a market in the Company's securities because it is deemed to have effective voting control of the Company or if, for any other reason, it chooses not to or is unable to make a market in the Company's securities, there can be no assurance that any other broker-dealers would make a market in the Company's securities. Without market makers, it would be very difficult for holders of the Company's securities to sell their securities in the secondary market and the market prices for such securities would be adversely affected. Moreover, there can be no assurance that an active trading market for the Company's securities will develop or be maintained whether or not JMA makes a market in the Company's securities. In the absence of such a market, investors may be unable to liquidate their investment in the Company. See "-- Absence of Public Market; Possible Volatility of Common Stock and Warrant Prices."

Possible Delisting of Securities from the Nasdaq Stock Market. The Company's Common Stock is listed on the Nasdaq SmallCap Market. However, there can be no assurance that the Company will continue to meet the criteria for continued listing of securities on the Nasdaq SmallCap Market adopted by the Commission. These continued listing criteria include a minimum of \$2,000,000 in total assets and a minimum bid price of \$1.00 per share of common stock. If an issuer does not meet the \$1.00 minimum bid price standard, it may, however, remain on the Nasdaq SmallCap Market if the market value of its public float is at least \$1,000,000 and the issuer has capital and surplus of at least \$2,000,000. If the Company became unable to meet the continued listing criteria of the Nasdaq SmallCap Market, because of continued operating losses or otherwise, and became delisted therefrom, trading, if any, in the Common Stock would thereafter 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, an investor may find it more difficult to dispose of, or to obtain accurate quotations as to the value of, the Company's securities.

Risk of Low-Priced Stocks; "Penny Stock" Regulations. If the Company's securities are delisted from the Nasdaq SmallCap Market, they may

16

become subject to Rule 15g-9 under the Securities Exchange Act of 1934 (the "Exchange Act"), which imposes additional sales practice requirements on broker/dealers that sell such securities except in transactions exempted by such Rule, including transactions meeting the requirements of Rules 505 or 506 or Regulation D under the Securities Act of 1933, as amended (the "Securities Act"), and transactions in which the purchaser is an institutional accredited investor (as defined) or an established customer (as defined) of the broker/dealer. For transactions covered by this Rule, a broker-dealer must make a special suitability determination for the purchaser and have received the purchaser's written consent to the transaction prior to sale. Consequently, the Rule may affect the ability and/or willingness of broker-dealers to sell the Company's securities and may consequently affect the ability of purchasers in this Offering to sell any of the securities acquired in the Offering in the secondary market.

The Commission has also adopted regulations which define a "penny stock" to be any equity security that has a market price (as therein defined) of less than \$5.00 per share or with an exercise price of less than \$5.00 per share, subject to certain exceptions. Unless exempt, the rules require the delivery, prior to any transaction in a penny stock, of a disclosure schedule prepared by the Commission relating to the penny stock market. Disclosure also has to be made about commissions payable to both the broker-dealer and the registered representative and current quotations for the securities. Finally, monthly statements have to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks. The foregoing penny stock restrictions will not

apply to the Company's securities if such securities are listed on the Nasdaq SmallCap Market and have certain price and volume information provided on a current and continuing basis or meet certain minimum net tangible assets or average revenue criteria. There can be no assurance that the Company's securities will qualify for exemption from these restrictions. In any event, even if the Company were exempt from such restrictions, it would remain subject to Section 15(b)(6) of the Exchange Act, which gives the Commission the authority to prohibit any person that is engaged in unlawful conduct while participating in a distribution of penny stock from associating with a broker-dealer or participating in a distribution of penny stock, if the Company's securities were subject to the rules on penny stocks, the prices of and market liquidity for the Company's securities could be severely adversely affected.

Immediate and Substantial Dilution; Dilution from Dividends In-Kind. At June 30, 1996, the Company had a net tangible book value of approximately \$.37 per share. Giving effect to the exercise of all 500,000 outstanding Class A Warrants at an exercise price of \$3.75 per share, the Class A Warrantholders will experience immediate and substantial dilution of approximately \$3.30 per share. Giving effect to the exercise of all 1,018,750 outstanding Class B Warrants at an exercise price of \$4.375 per share, the Class B Warrantholders will experience immediate and substantial dilution of approximately \$3.825 per share. Giving effect to the exercise of all 506,250 outstanding Blair Warrants at an exercise price of \$3.75 per share, the Blair Warrantholders will experience immediate and substantial dilution of approximately \$3.30 per share. Holders of the Company's Common Stock will continue to be diluted as a result of the issuance of additional shares of the Series A Preferred Stock as dividends in-kind. See "Dilution," "Dividend Policy" and "Description of Securities-Preferred Stock."

Shares Eligible for Future Sale; Registration Rights; Potential Dilutive Effect of Outstanding Securities and Possible Negative Impact on Future Financings. Certain of the Company's outstanding securities are, and will be, "restricted securities" as that term is defined in Rule 144 promulgated under the Securities Act and may, under certain circumstances, be sold without registration pursuant to Rule 144. A substantial portion of the outstanding shares of Common Stock are and will be eligible for sale under Rule 144 at varying periods. Holders of (i) 1,580,000 shares of Common Stock outstanding, (ii) options to purchase 300,000 shares of Common Stock, (iii) options to purchase warrants to acquire 200,000 shares of Common Stock and (iv) options to purchase 50,000 shares of Series A Preferred Stock convertible into an equal number of shares of Common Stock have agreed not to sell, assign or transfer any of their shares of the Company's securities until December 7, 1996 without JMA's prior written consent. In addition, in connection with their subscription to purchase units consisting of Common Stock and Series A Preferred Stock in the Company's 1992 Private Placement, the holders of an aggregate of approximately 2,000,000 shares of Common Stock and 1,271,240 shares of Series A Preferred Stock convertible into an equal number of shares of Common Stock agreed not to sell any such securities for 180 days following November 2, 1995 or such longer period as JMA may require, without the prior written consent of JMA. JMA has advised the Company that it expects it will generally require these holders to refrain from selling such shares of Common Stock and Series A Preferred Stock for a period ending on December 7, 1996.

17

The holders of the unit purchase option (the "Unit Purchase Option") issues in the IPO will have certain demand registration rights with respect to the securities underlying such Option, which would permit resale of the securities acquired upon exercise thereof commencing November 2, 1998. Holders of (i) 2,000,000 shares of Common Stock outstanding, (ii) options to purchase 200,000 shares of Common Stock, (iii) 1,271,240 shares of Series A Preferred Stock convertible into an equal number of shares of Common Stock and (iv) options to purchase 100,000 shares of Series A Preferred Stock convertible into an equal number of shares of Common Stock (the Common Stock referred to in (i) through (iv) above collectively, the "Registrable Securities") are entitled to demand and "piggy-back" registration rights with respect to such Registrable Securities commencing December 7, 1996 and ending November 7, 2000. The holders of more than 50% of the Registrable Securities may request that the Company file a registration statement under the Securities Act, and, subject to certain conditions, the Company generally will be required to use its best efforts to effect any such registration. In addition, if the Company proposes to register any of its securities, either for its own account or for the account of other stockholders, the Company is 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 shares of the Registrable Securities requested to be included by such holders. Holders of 20,000 shares of Common Stock issued by the Company in connection with the formation of the joint venture with Pestka Biomedical Laboratories, Inc. also have certain "piggy-back" registration rights. Exercise of one or more of these registration rights may involve substantial expense to the Company and may adversely affect the terms upon which the Company may obtain additional financing. See "Description of Securities --

Additionally, any shares of Common Stock purchased upon exercise of the Warrants may be tradeable without restriction, provided that the Company satisfies certain securities registration and qualification requirements. The sale, or availability for sale, of substantial amounts of Common Stock and/or Warrants in the public market pursuant to Rule 144 or otherwise could adversely affect the market price of the Common Stock and the Company's other securities and could impair the Company's ability to raise additional capital through the sale of its equity securities or debt financing. Also, to the extent that the Unit Purchase Option, any options granted under the 1992 Plan or the 1996 Plan, or any other rights, warrants and options are exercised, the ownership interest of the Company's stockholders will be diluted correspondingly. If, and to the extent, that the Company in the future reduces the exercise price(s) of outstanding warrants and/or options, the Company's stockholders could experience additional dilution.

Arbitrary Determination of Offering Price. The exercise prices and other terms of the Warrants have been determined by negotiation between the Company and JMA and between the Company and Blair and do not necessarily bear any relationship to the Company's assets, book value or financial condition, or to any other recognized criterion of value. It should be noted that Messrs. Meyers and Janssen, who are principals of JMA, own collectively 21.83% of the Company's Common Stock.

Absence of Public Market; Possible Volatility of Common Stock and Warrant Prices. There can be no assurances that an active market for the Warrants or Common Stock will be sustained. The market prices for securities of emerging health care companies have been highly volatile. Announcements of biological or medical discoveries or technological innovations by the Company or its 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 the Company's revenues and financial

18

results and other factors may have a significant impact on the market price of the Company's securities. See "Shares Eligible for Future Sale."

Potential Anti-takeover Effects. The Company is governed by the provisions of Section 203 of the General Corporation Law of the State of Delaware, an anti-takeover law enacted in 1988. In general, the law prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. "Business combination" is defined to include mergers, asset sales and certain other transactions resulting in a financial benefit to the stockholders. An "interested stockholder" is defined as a person who, together with affiliates and associates, owns (or, within the prior three years, did own) 15% or more of a corporation's voting stock. As a result of the application of Section 203, potential acquirors of the Company may be discouraged from attempting to effect an acquisition transaction with the Company, thereby possibly depriving holders of the Company's securities of certain opportunities to sell or otherwise dispose of such securities at above-market prices pursuant to such transaction. See "Description of Securities -- Delaware Anti-Takeover Law." In addition, certain provisions contained in each of the employment agreements with each of Dr. Arthur P. Bollon, Chairman, President and Chief Executive Officer of the Company, and Mr. Daniel Shusterman, Vice President of Operations, Treasurer and Chief Financial Officer of the Company, obligate the Company to make certain salary payments if employment is terminated without just cause or due to a Disability (as defined therein). See "Management -- Employment Contracts and Termination of Employment and Change-In-Control Arrangements."

Possible Adverse and Anti-takeover Effects of Authorization of Preferred Stock. The Company's Certificate of Incorporation authorizes the issuance of a maximum of 10,000,000 shares of preferred stock on terms which may be fixed by the Company's Board of Directors without further stockholder action. Of these 10,000,000 shares, 4,000,000 shares have been designated Series A Preferred Stock. The terms of the Series A Preferred Stock include dividend and liquidation preferences and conversion rights which could adversely affect 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 the rights, preferences or privileges of the Series A Preferred Stock 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 adversely affect the rights of holders of the Common Stock being offered hereby. Other than 1,271,240 shares of Series A Preferred Stock, no preferred stock has been issued to date and the Company has no current plans to issue additional preferred stock other than in payment of in-kind dividends.

However, in connection with the original placement of the Series A Preferred Stock in 1992, the placement agent received options to purchase up to 100,000 shares of the Series A Preferred Stock. These options expire in 1997. The issuance of such preferred stock could make the possible takeover of the Company or the removal of management of the Company more difficult, discourage hostile bids for control of the Company in which stockholders may receive premiums for their shares of Common Stock, otherwise dilute or subordinate the rights of holders of Common Stock and adversely affect the market price of the Common Stock. See "Description of Securities -- Preferred Stock."

Current Prospectus and State Registration Required to Exercise Warrants; Adverse Effect of Possible Redemption of Warrants. The Warrants will be exercisable only if a current prospectus relating to the securities underlying the Warrants is then in effect under the Securities Act and such securities are qualified for sale or exempt from qualification under the applicable securities

19

or "blue sky" laws of the states in which the various holders of the Warrants then reside. There can be no assurance that the Company will be able to do so. The value of the Warrants may be greatly reduced if a current prospectus covering the securities issuable upon the exercise of the Warrants is not kept effective or if such securities are not qualified or exempt from qualification in the states in which the holders of the Warrants then reside. See "Description of Securities -- The Warrants."

#### DILUTION

At June 30, 1996, the Company's Common Stock had a net tangible book value of \$2,810,000 or \$.37 per share, which represents the amount of the Company's total tangible assets less liabilities, based on 7,682,717 shares of Common Stock outstanding. Exercising warrantholders will suffer substantial dilution per share, the difference between the Warrant exercise price and the pro forma net tangible book value per share after the exercise.

Giving effect to the exercise of all 500,000 outstanding Class A Warrants and receipt by the Company of the estimated net proceeds of approximately \$700,000 therefrom, the pro forma net tangible book value at June 30, 1996 would have been \$3,510,000 or \$.45 per share, representing an immediate increase in net tangible book value of \$.08 per share to the present shareholders and an immediate dilution of \$3.30 per share to the exercising Class A Warrantholders.

The following table illustrates the per share dilution which would be incurred by Class A Warrantholders as described above: <TABLE>

<CAPTION>

 $\langle S \rangle$ 

Class A Warrant exercise price.....

Net tangible book value before exercise.... \$.37 Increase attributable to exercising Class A Warrantholders ...... .08

<C>

<C>

\$3.75

Pro forma net tangible book value after exercise.... .45

\$3.30

Dilution to exercising Class A Warrantholders......

</TABLE>

Giving effect to the exercise of the 1,018,750 Class B Warrants and receipt by the Company of the estimated net proceeds of approximately \$1,643,672 from the exercise of such Class B Warrants, the pro forma net tangible book value at June 30, 1996 would have been \$4,453,672 or \$.55 per share, representing an immediate increase in net tangible book value of \$.18 per share to the shareholders prior to such exercise and an immediate dilution of \$3.825 per share to the exercising Class B Warrantholders.

The following table illustrates the per share dilution which would be incurred by Class B Warrantholders as described above: <TABLE>

<CAPTION>

<S>

Class B Warrant exercise price..... \$4.375

<C> <C>

Net tangible book value before exercise....\$ .37 Increase attributable to exercising

Pro forma net tangible book value after exercise....

.45

</TABLE>

20

Giving effect to the exercise of the 506,250 Blair Warrants and receipt by the Company of the estimated net proceeds of approximately \$709,375 therefrom, the pro forma net tangible book value at June 30, 1996 would have been \$3,519,375 or \$.45 per share, representing an immediate increase in net tangible book value of \$.08 per share to the present shareholders and an immediate dilution of \$3.30 per share to the exercising Blair Warrantholders.

The following table illustrates the per share dilution which would be incurred by Blair Warrants as described above:

<TABLE>

<CAPTION>

<S>

 <C>
 <C>

 Blair Warrant exercise price.....
 \$3.75

Pro forma net tangible book value after exercise.....

Dilution to Blair Warrantholders......\$3.30

</TABLE>

The following table sets forth the differences at June 30, 1996 between (i) the present stockholders who are officers, directors or beneficial owners of 5% or more of the outstanding shares of Common Stock ("Insiders"); (ii) the other present stockholders; and (iii) the individuals exercising Warrants with respect to the number of shares purchased from the Company, the cash consideration paid and the average price per share. The calculations in this table assume no exercise of any of the Company's outstanding options, warrants or any securities which are convertible and exchangeable into Common Stock. To the extent that shares of Series A Preferred Stock are issued as dividends and shares of Common Stock are issued pursuant to the exercise of options, warrants or any securities which are exchangeable or convertible into Common Stock (including Series A Preferred Stock), there may be further dilution to the new investors.

<TABLE>

<CAPTION>

			Total	l				
	Shares Pur	rchased		Cons	siderations	Average		
				Price Per				
	Number	Percent	Am	ount	Perce	nt Sha	re	
<s></s>	<c></c>	<c></c>	<c></c>		<c></c>	<c></c>		
Executive Officers, D	irectors							
and Initial Investors.	3,196	,000	38.4%	\$	1,000	* \$	0.0003	
Other Existing Comn	non							
Stockholders	4,324,0	000 5	1.9%	\$16,	533,000	83.4%	\$3.82	
Warrantholders exerc	ising							
Class A Warrants	200	,000	2.4%	\$ 7	750,000	3.8%	\$3.75	
Warrantholders exerc	ising							
Class B Warrants	407	,500	4.9%	\$ 1,	782,812.50	9.0%	\$4.375	
Warrantholders exerc	ising							
the Blair Warrants	202	,500	2.4%	\$ 7	59,375	3.8%	\$3.75	
Total	8,330,000	100.00	0% \$1 ====	9,82	6,187.50	100.00%		

<sup>&</sup>lt;/TABLE>

# DIVIDEND POLICY

The Company has never paid cash dividends on its Common Stock and does not anticipate paying cash dividends in the foreseeable future. The terms

<sup>\*</sup> Less than one percent

of the Company's 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. The Company paid dividends in cash of \$121,491 and in-kind of shares of Series A Preferred Stock in payment of its 1992 dividend on the Series A Preferred Stock. For years 1993, 1994 and 1995, the Company also paid in-kind dividends of shares of Series A Preferred Stock in payment of dividends on the Series A Preferred Stock. The Company currently intends to retain all earnings, if any, to finance the growth and development of its business and anticipates that, for the foreseeable future, that it will continue to pay dividends in-kind on its outstanding Series A Preferred Stock. See "Plan of Operation" and "Description of Securities."

# USE OF PROCEEDS

Holders of Warrants are not obligated to exercise their Warrants and there can be no assurance that such holders will choose to exercise all or any of their Warrants. Furthermore, the Company is unable to predict the timing, if ever, of the exercise of any of the above securities, although they are likely to be exercised at such time as the market price of the Common Stock is substantially above the exercise price of the Warrants. In the event that all of the 500,000 outstanding Class A Warrants, the 1,018,750 Class B Warrants and the 506,250 Blair Warrants are exercised, the net proceeds to the Company would be approximately \$3,153,000 after deducting the expenses of the offering and assuming payment of the Solicitation Fee. The net proceeds received upon the exercise of the Warrants will be used for research and development and general corporate purposes.

The foregoing represents the company's best estimate of the allocation of the net proceeds received upon exercise of the Class A Warrants the Class B Warrants based upon the current status of its business operations, its current plans and current economic conditions. Future events, including the problems, delays, expenses and complications frequently encountered by early stage companies as well as changes in competitive conditions affecting the Company's business and the success or lack thereof of the Company's marketing efforts, may make shifts in the allocation of funds necessary or desirable.

Prior to expenditure, the net proceeds will be invested in high-liquidity, United States government and corporate obligations, interestbearing money market funds and other financial instruments.

### CAPITALIZATION

The following table sets forth the actual and pro forma capitalization of the Company as of June 30, 1996. The information in this table does not include 5,218 shares of Preferred Stock that were converted into 5,218 shares of Common Stock prior to this offering. This table should be read in conjunction with the Financial Statements and Notes thereto included elsewhere in this Prospectus.

<TABLE>

<CAPTION>

STOCKHOLDERS' EQUITY		As Actual	As A Adjusted(1)(2)		Adjusted(1)(4)
<\$> <c> Preferred stock - \$.01 par value; 10,000,000 shares authorized: Series A Convertible Preferred Stock, 1,276,458 shares issued and outstanding actual and as adjusted</c>	<c></c>	<c></c>	<c> 0 13,000</c>	<c> 13,000</c>	

22

Common Stock \$.01 par value; 30,000,000 shares authorized, 7,682,717 shares issued and outstanding actual (1)	77,000	79,000	83,000	85,000
Additional Paid-in capital	13,902,000	14,600,000	16,290,000	17,047,000
Deficit accumulated during the development stage	(10,282,000)	(10,282,000)	(10,282,000)	(10,282,000)
Total stockholders' equity	3,710,000	4,410,000	6,104,000	6,863,000
Total capitalization	\$3,710,000	\$4,410,000	\$6,104,000	\$6,863,000

(1) Does not include the possible issuance of (i) 1,190,000 shares of Common Stock reserved for issuance upon exercise of options granted or available for grant under the 1992 Plan and the 1996 Plan; (ii) 1,276,458 shares of

Common Stock reserved for issuance upon conversion of the Series A Preferred Stock; (iii) an aggregate of 300,000 shares of Common Stock reserved for issuance upon exercise of the unit purchase option granted to the placement agent for the Company's 1992 private placement of units consisting of Common Stock and Series A Preferred Stock and the conversion of such Series A Preferred Stock; (iv) 200,000 shares of Common Stock reserved for issuance upon exercise of the Unit Purchase Option; or (v) 600,000 shares of Common Stock reserved for issuance upon exercise of the warrants contained in the Unit Purchase Option. In addition, the actual number also does not include shares of Common Stock reserved for issuance upon exercise of the Warrants. See "Management -- Stock Options," "Certain Transactions," "Description of Securities" and "Bridge Financings.

- (2) Gives effect to the exercise of 500,000 outstanding Class A Warrants at \$3.75 per share and the application of the net proceeds therefrom. See "Plan of Distribution."
- (3) Gives effect to the exercise of 500,000 outstanding Class A Warrants at \$3.75 per share, 1,018,750 outstanding Class B Warrants at \$4.375 per share, the net proceeds therefrom, and assumes that the Solicitation Fee is paid on each Class B Warrant Exercise. See "Plan of Distribution."
- (4) Gives effect to the exercise of 500,000 outstanding Class A Warrants at \$3.75 per share, 1,018,750 outstanding Class B Warrants at \$4.375 per share, 506,250 outstanding Blair Warrants at \$3.75 per share, the net proceeds therefrom, and assumes that the Solicitation Fee is paid on each Class B Warrant exercise. See "Plan of Distribution."

### SELECTED FINANCIAL DATA

The following selected financial data has been derived from, and is qualified by reference to, the Financial Statements of the Company. The Company's Financial Statements as of and for the years ended December 31, 1994 and 1995 and for the period September 11, 1991 (the date of the Company's inception) through December 31, 1995, including the Notes thereto which have been audited by Richard A. Eisner & Company, LLP, independent auditors, are included elsewhere in this Prospectus. The financial data for the six month periods ended June 30, 1996 and 1995 and for the period September 11, 1991 (inception) through June 30, 1996 are derived from unaudited financial statements included elsewhere in this Prospectus. The unaudited interim financial statements include all adjustments consisting of normal recurring accruals, which the Company considers necessary for a fair presentation of the financial position and results of operations for these periods. Operating results for the six months ended June

23

30, 1996 are not necessarily indicative of the result that may be expected for the entire fiscal year ending December 31, 1996. The following data should be read in conjunction with such Financial Statements and "Plan of Operation."

<TABLE> <CAPTION> Statement of Operations Data:

	De	ear Ended cember 31,	September 199 (ince)	91 ption) to	E		Septer			
			199				96 to June			
<\$>	<c></c>	 <c></c>	> <c< td=""><td>&gt;</td><td><c></c></td><td></td><td><c> <c></c></c></td><td></td><td></td><td></td></c<>	>	<c></c>		<c> <c></c></c>			
Research and development expe	nses	\$1,099,000	0 \$1,18	1,000	\$4,731,	000	\$599,000	\$729,0	00 5	\$5,460,000
General and admini			1,138,000	3,796	,000	615,00	0 707,0	000 4	4,503,00	0
Net interest expense (income)		2,000	372,000	356,0	00	218,000	(116,00	0) 2	240,000	
Net (loss)	(2,26	5,000)	(2,691,000)	(8,883	5,000)	(1,432,0	000) (1,32	0,000)	(10,203	,000)
Net (loss) per share common stock		\$(.48)	\$ (.53)		9	6(.30)	\$(.19)			
Weighted average r			5,695,000		5,3	67,415	7,603,193			

Balance Sheet Data:

AT JUNE 30, 1996 As As

Actual Adjusted (2) Adjusted (3) Adjusted (4)									
Working capital	\$3,940.000	\$4,640,000	\$6,334,000	\$7,093,000					
Total assets	\$5,350,000	\$6,050,000	\$7,744,000	\$8,503,000					
Total liabilities	\$1,640,000	\$1,640,000	\$1,640,000	\$1,640,000					
Deficit accumulated during the developmen	nt stage	\$(10,282,000)	\$(10,282,000)	\$(10,282,000)	\$(10,282,000)				
Total stockholders' equity	\$3,710,0	00 \$4,410,00	90 \$6,104,00	0 \$6,863,000					

  |  |  |  |  |

- (1) Through June 30, 1996, and since then, the Company has not generated any sales revenues.
- (2) Gives effect to the exercise of only the 500,000 Class A Warrants, the application on the net proceeds therefrom, and assumes that the Solicitation Fee is paid on each Class B Warrant Exercise. See "Plan of Distribution."
- (3) Gives effect to the exercise of the 500,000 Class A Warrants, the 1,018,750 Class B Warrants, the application on the net proceeds therefrom, and assumes that the Solicitation Fee is paid on each Class B Warrant Exercise. See "Plan of Distribution."
- (4) Gives effect to the exercise of the 500,000 Class A Warrants, the 1,018,750 Class B Warrants, the 506,250 Blair Warrants, the application

on the net proceeds therefrom, and assumes that the Solicitation Fee is paid on each Class B Warrant Exercise. See "Plan of Distribution."

### PLAN OF OPERATION

The Company was organized and commenced operations in September 1991. The Company is in the development stage, and its efforts have been principally devoted to research and development activities and organizational efforts, including the development of products for the treatment of cancer and infectious diseases, recruiting its scientific and management personnel and advisors and raising capital.

The Company has not been profitable since inception and expects to incur substantial operating losses for at least the next several years. For the period from inception to June 30, 1996, the Company incurred a cumulative net loss of approximately \$10,203,000. To the extent that the Company does not enter into agreements with collaborative partners providing for research or other funding, the Company expects that it will generate losses until at least such time as it can commercialize products, if ever. The Company's results of operations may vary significantly from quarter to quarter due to timing of and pace of research and development activities.

The Company believes that the net proceeds from the exercise of all of the Class A Warrants and Class B Warrants will be sufficient to finance the Company's plan of operation for at least 12 months from such exercise. See "Use of Proceeds." There can be no assurance that the Company will generate sufficient revenues to fund its operations after such period or that any required financings will be available, through bank borrowings, debt or equity offerings, or otherwise, on acceptable terms or at all or that any or all of the Warrants will be exercised.

The Company's plan of operation for the next 12 months following completion of this Offering will consist of research and development and related activities aimed at:

- further increasing the Taxol yield from the Fungal Taxol Production System using alternative fermentation technologies, inducers, media and strain improvements using Taxol-specific genes. See "Business -- Research and Development Programs --Fungal Taxol Production System Program.'
- further development of a diagnostic test using the LCG gene and related MAb to test in vitro serum, tissue or respiratory aspirant material for the presence of cells which may indicate a predisposition to, or early sign of, lung or other cancers. See "Business -- Human Gene Discovery Program/Lung Cancer Program."
- developing a humanized antibody specific for the protein associated with the LCG gene and, if successful, submission of an IND for clinical trials. See "Business -- Research and Development Programs -- Human Gene Discovery Program/Lung Cancer Program."
- testing the TNF-PEG technology as an anti-cancer agent in animal studies. See "Business -- Research and Development Programs --

Other Programs -- TNF-PEG: Broad Range Anticancer Drug Program."

o further development of proprietary vectors which have been constructed for the expression of specific proteins that may be utilizable for vaccines for different diseases. See "Business -- Research and Development Programs -- Other Programs -- IL-T: Prevention of Radiation and Chemotherapy Damage Program."

25

- o initiating animal studies of IL-T and IL-P, and, if successful submission of an IND for clinical trials. See "Business -- Research and Development Programs -- Other Programs -- Vaccine Program."
- o continuing the funding of the research on anti-sense technology currently being conducted at the University of Texas at Dallas. See "Business -- Research and Development Programs -- Other Programs -- Anti-sense Therapeutics Program."
- making modest improvements to the Company's laboratory facilities. See "Use of Proceeds."
- hiring approximately three additional research technicians and a financial vice president.
- seeking to establish strategic partnerships for the development, marketing, sales and manufacturing of the Company's proposed products. See "Business -- Manufacturing and Marketing."

The actual research and development and related activities of the Company may vary significantly from current plans depending on numerous factors, including changes in the costs of such activities from current estimates, the results of the Company's research and development programs, the results of clinical studies, the timing of regulatory submissions, technological advances, determinations as to commercial potential and the status of competitive products. The focus and direction of the Company's operations will also be dependent upon the establishment of collaborative arrangements with other companies, the availability of financing and other factors.

### BUSINESS

Cytoclonal Pharmaceutics Inc. ("CPI" or the "Company") is a development stage biopharmaceutical company focusing on the development of diagnostic and therapeutic products for the identification, treatment and prevention of cancer and infectious diseases. To date, the Company has been involved solely in research and development activities relating to several products that are at various stages of development. The Company's research and development activities relate principally to its proprietary fungal paclitaxel (commonly referred to as "Taxol") production system and its diagnostic and imaging lung cancer products and Human Gene Discovery Program.

The Company's strategy is to focus on its (i) Fungal Taxol Production System program since Taxol has been approved by the FDA as a treatment for refractory breast and ovarian cancer; and (ii) Human Gene Discovery Program, including a proprietary cancer related gene ("LCG gene") and related monoclonal antibody ("MAb") addressing the need for diagnosis and treatment of lung cancer, the second most common form of cancer. Other programs which involve tumor necrosis factor - polyethylene glycol ("TNF-PEG"), cancer and infectious disease vaccines, a fusion protein ("IL-T"), a potential anti-leukemia drug ("IL-P") and anti-sense therapeutics are being pursued at modest levels. These other programs may serve as platforms for future products and/or alternatives to the two primary programs if unforeseen problems develop. In addition, several of the technologies under development are complementary and could possibly potentiate each other. Hence, the Company currently intends to develop (1) therapeutic products, (2) diagnostic and imaging products, (3) vaccines for cancer, and (4) products for protecting against the detrimental effects of radiation therapy and chemotherapy

The Company was created in 1991 to acquire rights to certain proprietary cancer and viral therapeutic technology ("Wadley Technology") developed at the Wadley Institutes in Dallas, Texas ("Wadley"). See "--Collaborative Agreements -- WadTech." Through its own research and development

20

efforts and agreements with other research institutions and biotechnology companies, the Company has acquired and/or developed additional proprietary technology and rights. The Company has not developed any commercial products, will require significant additional financing to complete development and obtain regulatory approvals for its proposed products which can take several years.

In July 1996, the Company entered into an agreement with the Washington State University Research Foundation ("WSURF") whereby the Company received an exclusive, world-wide license to use and/or sublicense patented technology or prospective patented technology (the "WSURF Technology") related to genes for enzymes and the associated gene products, including the enzymes, in the biosynthetic pathway for Taxol from the yew tree. This gene will be used along with a related fungal gene region to further optimize the Fungal Taxol Production System.

In February 1996, the Company obtained exclusive rights to a technology and pending patent developed at the University of California, Los Angeles for the taxol treatment of polycystic kidney disease, which treatment looks promising in animal studies.

In June 1996, the Company entered into a Patent License Agreement (the "Regents Agreement") with the Board of Regents of the University of Texas System ("Regents") whereby the Company received an exclusive royalty-bearing license to manufacture, have manufactured, use, sell and/or 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 optimum regions within genes to bind Antisense products. Antisense products are under development to control genes involved in human diseases such as cancer, diabetes, or AIDS. This discovery potentially has broad applications to many human and viral genes involved in human disease.

In November 1994, the Company entered into a marketing agreement with Helm AG, a world-wide distributor of pharmaceutical and related products with sales of over \$3 billion in 1994, granting Helm AG the right in certain parts of Europe to market the Technology and/or products of, and arrange introductions for, the Company on a commission basis. See "Business-Collaborative Agreements -- Helm AG". In addition, the Company is in discussions with several other companies regarding the establishment of strategic partnerships for development, marketing, sales and manufacturing of the Company's proposed products for various segments of the global market. There can be no assurance that the Company's agreement with Helm AG will result in any benefit to the Company or that any such additional agreements will be entered into.

# RESEARCH AND DEVELOPMENT PROGRAMS

### FUNGAL TAXOL PRODUCTION SYSTEM PROGRAM

Scientists at the Company in collaboration with the inventors of the fungal Taxol technology (the "Fungal Taxol Technology"), have developed a system for the production of Taxol (the "Fungal Taxol Production System") utilizing microbial fermentation. Microbial fermentation is considered one of the most cost effective systems for drug production. The Company's objective under this program is to become a low-cost, high volume producer of Taxol.

Presently, Taxol is made from the inner bark and needles of the slow-growing Pacific yew tree. Supplies of Taxol are limited and it is expensive. The Fungal Taxol Technology licensed by the Company utilizes a Taxol producing micro-organism, specifically the fungus Taxomyces andreanae. This fungus was initially isolated from a Pacific yew tree and has been adapted to grow independently from the yew tree utilizing fermentation processes. Detailed chemical analysis of the Taxol produced by the fungus indicates chemical

27

equivalency to Taxol produced from the Pacific yew tree. Science, 260, 214-216 (1993).

The Taxol producing fungus was discovered by Dr. Gary Strobel from Montana State University ("MSU"), Dr. Andrea Stierle from MSU and Montana College of Mineral Science and Technology ("MCMST") and Dr. Donald Stierle of MCMST. Drs. Stierle and Dr. Strobel assigned their rights to the Fungal Taxol Technology to Research & Development Institute, Inc. ("RDI"), a non-profit corporation which manages intellectual property for MSU and MCMST. RDI was issued a patent on the Fungal Taxol Technology on June 21, 1994. The patent covers the method of isolating the fungus which produces Taxol, the use of the fungus to make Taxol, and the method of producing Taxol from the fungus. In June 1993, RDI granted the Company worldwide exclusive rights to the Fungal Taxol Technology and technologies related thereto. See "-- Collaborative Agreements --RDI." It has been reported that over ten companies, including several major pharmaceutical companies, were competing to license this technology. The Company believes that experience of Dr. Arthur Bollon, the Company's Chairman, President and Chief Executive Officer, in the area of fungi, which originated from his Post-Doctoral Fellowship at Yale University, combined with the research and development activities of the Company in anti-cancer products, contributed to the Company obtaining the Fungal Taxol Technology.

The Fungal Taxol Production System also produces certain compounds called Taxanes which can be precursors to Taxol or related compounds like Taxotere. These compounds are under investigation by several entities, including Rhone-Poulenc Rorer Pharmaceuticals, Inc., which is developing Taxotere as a therapeutic for use in the treatment of lung cancer.

Development efforts are continuing with respect to the Fungal Taxol Production System with the goal of generating commercial quantities of Taxol at reduced cost. Scientists at the Company, in conjunction with the inventors of the Fungal Taxol Technology, have increased the level of Taxol production over 3,000 fold from the initial levels of production under the Fungal Taxol Production System. Media, growth conditions and strain improvements continue to be used to improve the Fungal Taxol Production System. The Company's participation in this development program is under the direction of Dr. Rajinder Sidhu, Director of the Company's Fungal Taxol Program, and Dr. Arthur Bollon, the Company's Chairman. In February 1996, the Company entered into two license agreements with the Regents of the University of California, granting to the Company exclusive rights to: (1) a pending patent, entitled Inhibition of Cyst

Formation by Cytoskeletal Specific Drugs that makes use of various drugs, one of which is Taxol and (2) technology in the field of Pharmacological Treatment for Polycystic Kidney Disease. See "UCLA License Agreements."

The Company entered into an exclusive license agreement with Washington State University granting the Company the exclusive rights to a gene isolated from the Yew tree by Dr. Rodney Croteau. The gene codes for the enzyme Taxadiene synthase which is involved in a critical step for Taxol production. The gene and a related gene region isolated by the Company will be utilized to further increase the efficiency of Taxol synthesis by the fungus. Manipulation of genes by genetic engineering have greatly improved production of pharmaceutical products such as antibiotics and human interferon and insulin.

The National Cancer Institute ("NCI") has recognized Taxol as one of the most important cancer drugs discovered in the past decade. Taxol, although not a cure for cancer, promotes the assembly of cellular microtubules so fast growing cells such as cancer cells are unable to divide and proliferate. This mode of action is in contrast to most cancer drugs which target the cell nucleus or DNA. Taxol has proven to be effective in treating refractory (treatment-resistant) ovarian and breast cancers and, in preliminary clinical trials, has shown potential for treating refractory non-small cell lung cancer

2.8

("NSCLC") and certain other cancers. Due to its different mode of action, Taxol is being tested in combination therapy with other cancer therapeutic drugs.

Evidence to date has shown that Taxol is generally well tolerated by patients with reduced side effects compared to other chemotherapy treatments. Considering that no currently available anticancer agents are free from toxicity, Taxol's comparative safety profile suggests substantial improvements in quality of life for patients who must undergo chemotherapy. Nevertheless, hypersensitivity reactions and other side effects have been noted during Taxol administration. Reactions are characterized by transient hypotension and an allergic type response, which appear to cease upon stopping drug administration. Premedication effectively minimizes or eliminates this problem, although side effects may nevertheless limit Taxol use in some patients. In addition, Taxol has been shown to produce peripheral neuropathy (loss of sensation or pain and tingling in the extremities) and neutropenia (low white blood cell counts), which also may, in certain cases, limit Taxol's use.

In June 1991, the NCI formalized a Collaborative Research and Development Agreement ("CRADA") for development of Taxol with Bristol-Myers Squibb Company, Inc. ("Bristol-Myers") as its pharmaceutical manufacturing and marketing partner. This CRADA granted to Bristol-Myers the exclusive use of NCI's clinical data relating to Taxol in seeking approval from the FDA, which significantly shortened the approval process and prevented any other party from obtaining FDA approval using the NCI data. Bristol-Myers received FDA approval for the commercial sale of its Taxol as a treatment for refractory ovarian cancer in December 1992 and for refractory breast cancer in April 1994. Since December 1992, Bristol-Myers has been the sole source of Taxol for commercial purposes. It is the Company's understanding that Bristol-Myers is currently conducting clinical trials required for FDA approval of Taxol for treating other cancers.

The exclusive right of Bristol-Myers to the NCI clinical data expires in December 1997 when the FDA will begin accepting Abbreviated New Drug Applications ("ANDAs") for the approval of Taxol produced by others based on a showing of bioequivalency to the commercial Taxol approved by the FDA. The Company believes, though there can be no assurances, that it will be able to show bioequivalency based, in significant part, upon the chemical equivalence of its Taxol produced under the Fungal Taxol Production System to the Taxol produced from the Pacific yew tree. Under regulations of the FDA, approval of a generic drug from a new production source can be submitted by an ANDA where the generic drug from the new source contains the same active ingredient as that in the pioneer drug. In addition, information must be submitted showing similar indications, routes of administration, dosage form and strength, and that the generic drug is "bioequivalent" to the pioneer drug. Also included in the ANDA submission is information concerning manufacturing, processing and packaging required in NDA applications. Additional safety and efficacy information is usually not required. However, there can be no assurance that the Company will not be required to submit such information or that any ANDA submitted by the Company will be approved.

Alternative production systems for Taxol, such as plant cell culture, complete synthesis and improved processing of yew tree material, are under investigation by others and there can be no assurance that such alternative methods will not be developed prior to the Company's proposed method or that they will not prove more efficient and cost effective than the method being developed by the Company.

# HUMAN GENE DISCOVERY PROGRAM/LUNG CANCER PROGRAM

The Company's Human Gene Discovery Program focuses on identifying and isolating human genes by utilizing biological markers employing MAbs and analyzing cellular activities associated with the cause or treatment of various diseases. Genes play an important role in the development of a variety of

therapeutics, diagnostics and other products and services. Proteins expressed by genes are the targets of many drugs. As a result, the identification of proteins can play an important role in the development of drugs and drug screens. The identification of genes that code for proteins that may be missing or defective can enable the development of therapeutics for genetic diseases. In addition, identification of genes that may predispose a person to a particular disease may enable the development of diagnostic tests for the disease.

One of the central features of the Company's Human Gene Discovery Program is its proprietary human gene expression libraries. Currently, these libraries consist of over 50,000 human gene clones isolated by the Company through extracting expressed messenger RNA from human tissue and cells in different development stages and in normal and diseased states. By comparing the genes expressed from tissue in different physiological states (e.g., diseased and normal), the Company hopes to identify genes that are expressed during different stages of a disease and that could serve as components of diagnostic tests or as targets for therapeutic drugs. Thus, the Company's Human Gene Discovery Program concentrates on gene products with associated biological or medical use as opposed to only DNA sequences. At present the Company is focusing on creating MAb and DNA probes products for diagnostic and imaging applications.

The Company is developing a proprietary MAb (the "LCG MAb") which recognizes a specific protein (the "LCG protein") on the surface of some lung cancer cells, such as NSCLC which is believed to represent approximately 65% of lung cancers. In addition, the cancer related human gene ("LCG gene") that makes this surface protein, has been isolated by CPI scientists. The specificity of the LCG protein to some lung cancers is based on studies on biopsy material, biodistribution studies on animal model systems and Phase I clinical trials. The major claims for a patent for the LCG gene, filed by the Company in July 1994, have been approved.

The LCG gene and LCG MAb are being developed by the Company as a potential diagnostic product to test in vitro serum, tissue or respiratory aspirant material for presence of cells which may indicate a predisposition or early sign of lung cancer. The LCG MAb is also being developed as an in vivo imaging agent for lung cancer. An imaging agent may assist physicians in establishing the location of a cancer and if the cancer has spread to other sites in the body. In Phase I human clinical trials performed at Wadley, the LCG MAb made from mouse cells and labelled with a radioactive marker showed strong specificity in 5 of 6 patients. In these trials, the LCG MAb bound to the lung cancer but was not detectable for normal lung cells. These clinical studies will be expanded with a human-related form of the LCG MAb which is presently under development by the Company. Working with cells in culture, the Company is studying whether the LCG gene itself may be potentially useful as a DNA probe to test for the presence of the LCG gene expression where the LCG protein has not been made or has been made at low levels.

Additional potential products under development using the LCG gene and LCG MAb are products for the delivery of therapeutic drugs such as Taxol and/or TNF-PEG to the cancer. The involvement of the LCG gene in the formation and metabolism of the lung cancer is also under investigation. In addition, the LCG protein could possibly be used as an antigen for a vaccine against NSCLC. The Company has deferred plans to initiate testing in animal model systems and conducting clinical trials since successful development of vaccine applications will take significant additional research and development efforts and expenditures.

The Human Gene Discovery Program is also being used to isolate additional novel cancer related genes utilizing specific MAbs for breast and ovarian cancer and melanoma which are proprietary to the Company. See "--Collaborative Agreements -- WadTech." A U.S. patent for the melanoma MAb was issued to WadTech and assigned to the Company.

30

The Human Gene Discovery Program is conducted under the direction of Dr. Richard Torczynski, along with Dr. Bollon. Dr. Torczynski and Dr. Bollon have extensive experience isolating human genes including IFN-WA, a novel interferon, and the LCG gene. The human-related form of the LCG MAb is under the direction of Dr. Susan Berent.

# OTHER PROGRAMS

In addition to its Fungal Taxol Production System Program and Human Gene Discovery Program/Lung Cancer Program, the Company is pursuing other programs at modest levels which may serve as platforms for the development of future products and/or alternatives to such primary programs. These include TNF-PEG: Broad Range Anticancer Drug Program, Vaccine Program, IL-T: Prevention of Radiation and Chemotherapy Damage Program, IL-P Anti-leukemic Product Program and Anti-sense Therapeutics Program.

Vaccine Program. The main objective of the Company's vaccine program is to develop genetically engineered live vaccines for diseases that are life threatening. CPI's current strategy consists of (i) identifying bacterial host strains that are the best suited for delivering recombinant immunogens and cancer markers; (ii) developing proprietary cloning and expression vectors that can transfer, maintain and express recombinant immunogens and cancer markers in the delivery system; and (iii) cloning genes for specific immunogens or cancer markers into the vectors and testing the vaccine system in appropriate animal

models and, if successful, commencing clinical trials.

The Company has identified three host strains of mycobacteria that appear well suited for expressing and delivering protein and lipid antigens. Furthermore, CPI has constructed plasmid and phage based cloning vectors and developed reproducible transformation techniques for the host strains. These vectors have large cloning capacities and are highly efficient in transformation. Potential antigens for cancer markers are the proprietary LCG gene and other cancer genes for breast cancer and melanoma which are under development by the Company. The Company's goal is to license, as licensor and licensee, new cancer specific marker genes and to enter into strategic partnerships to develop vaccines for infectious diseases, such as tuberculosis.

These vaccine studies are under the direction of Dr. Labidi, who is director of the Company's vaccine program. Dr. Labidi, who received his Ph.D. in Microbiology from the Pasteur Institute, in Paris, France, was one of the early investigators to establish the plasmid profile of several mycobacterium species and was the first to isolate, characterize and sequence the mycobacterium plasmid pAL5000 which has contributed to mycobacterium cloning and expression vectors. Working with the Company and Dr. Labidi is Dr. Hugo David, a consultant to the Company and a member of its Scientific Advisory Board. Dr. David was formerly the head of the tuberculosis program at the Center for Disease Control (CDC) in the U.S. and at the Pasteur Institute. The Company is establishing research support for Dr. David's work on a new vaccine for tuberculosis

Anti-sense Therapeutics Program. Anti-sense has the potential of regulating genes involved in various disease states. The Company is sponsoring anti-sense research and development under the direction of Dr. Donald Gray, Professor of Molecular and Cell Biology at University of Texas at Dallas. The Company has had first rights of refusal for an exclusive worldwide license for the technology developed in connection with these research activities. The Company has exercised its option and has received an exclusive world-wide license for Antisense technology developed by Dr. Gray. Pursuant to this program, Dr. Gray has developed, and a patent application has been submitted covering, proprietary technology which may improve the efficiency of anti-sense reagents potentially applicable to a broad spectrum of diseases. The capability has recently been computerized which will be contained in a related patent continuation-in-part. See "-- Collaborative Agreements -- University of Texas."

31

TNF-PEG: Broad Range Anticancer Drug Program. TNF is a natural immune protein (cytokine) made by human cells. It has been found to kill in vitro a high percentage of different cancer cells compared to normal cells and is one of the most potent anticancer agents tested in animals. CPI has TNF technology, including TNF analogs, which the Company believes are proprietary and which were developed at Wadley utilizing a genetically engineered bacteria and developed further by Lymphokine Partners Limited, a partnership set up by an affiliate of Wadley and Phillips Petroleum Company (the "Wadley/Phillips Partnership"). CPI acquired this technology from Wadley Technologies, Inc. ("WadTech"). See "--Collaborative Agreements -- WadTech." Phase I and II human clinical trials were performed at Wadley using 23 patients with different kinds of cancer. These studies, as well as studies on TNF technology developed by others, showed no therapeutic benefit from TNF in humans because of the high toxicity of TNF at therapeutic doses and its relatively short half life (approximately 30 minutes) at lower doses.

Pursuant to a research collaboration (the "Enzon Agreement") with Enzon, Inc. ("Enzon"), the Company and Enzon are developing an anticancer agent combining the Company's TNF technology with Enzon's patented polyethylene glycol ("PEG") technology. See "-- Collaborative Agreements -- Enzon." The PEG process involves chemically attaching PEG, a relatively non-reactive and non-toxic polymer, to proteins and certain other biopharmaceuticals for the purpose of enhancing their therapeutic value. Attachment of PEG helps to disguise the proteins and to reduce their recognition by the immune system, thereby generally lowering potential immunogenicity. Both the increased molecular size and lower immunogenicity result in extended circulating blood life, in some cases from minutes to days. The PEG technology is a proven technology covered by patents held by Enzon. Enzon has two products on the market using PEG, namely, PEG-adenosine deaminase, for treatment of the immune deficiency disease know as the "bubble boy," and PEG-Asparaginase, a cancer chemotherapeutic drug. In preliminary animal studies at Sloan-Kettering Institute for Cancer Research ("Sloan-Kettering"), a TNF-PEG construct has been tested in an animal cancer model system and was shown to kill tumors with possibly reduced toxicity. See "-- Collaborative Agreements -- Sloan-Kettering." The results of these studies will be confirmed and expanded and, if the TNF-PEG does result in longer half life and reduced toxicity, an IND for clinical trials is expected to be submitted by the Company and/or Enzon during 1996. There can, however, be no assurance that similar results will be found in humans. The Enzon Agreement also involves directing TNF-PEG to human cancers using Enzon's proprietary single chain antibodies.

The Enzon Agreement involves equal sharing of revenue from sales of TNF-PEG if both parties contribute equally to its development, which is CPI's intention. There can, however, be no assurance that the Company will have the financial resources to meet such obligations. The Enzon Agreement also specifies that Enzon will work with only CPI on the construction of TNF-PEG, unless CPI consents to Enzon working with a third party. See "-- Collaborative

IL-T: Prevention of Radiation and Chemotherapy Damage Program. This program involves a novel protein called IL-T. CPI and the Wadley/Phillips Partnership constructed IL-T through genetic engineering by fusing together parts of two human immune proteins ("cytokines"), Interleukin and TNF. The Company is testing various combinations of cytokines for improved protection against radiation and chemotherapy damage. The IL-T protein has been tested in animal studies for protection against radiation damage at Sloan-Kettering and these studies are expected to continue. Following animal studies contemplated to commence in the later part of 1996, confirmation of protection against radiation damage could potentially lead to filing, in 1996, an investigational new drug ("IND") application with the FDA followed by Phase I clinical trials. Products proprietary to others have shown protection against radiation damage and to potentiate weakened immune cells. The Company has filed a patent application for

32

IL-T. See "-- Collaborative Agreements -- WadTech" and "-- Collaborative Agreements -- Sloan-Kettering."

IL-P Anti-Leukemic Product Program. Through its joint venture with Pestka Biomedical Laboratories, Inc. ("Pestka"), the Company is participating in the development of a novel anti-leukemic drug known as ("IL-P"). This research and development involves the application of certain phosphorylation technology developed at Pestka and licensed to the joint venture to interleukin-2. Various constructs of IL-P have been tested at Pestka and the Company expects to provide additional funding to the joint venture for the continuation of such tests. See "-- Collaborative Agreements -- Cytomune."

# COLLABORATIVE AGREEMENTS

# WADTECH

In October 1991, the Company entered into a purchase agreement with WadTech (the "WadTech Agreement"), whereby the Company acquired certain of WadTech's right, title and interest in and to the Wadley Technology, including technology developed by Wadley, and acquired by WadTech upon dissolution of the Wadley/Phillips Partnership and licensed to WadTech by Phillips Petroleum Company ("Phillips"). The Wadley Technology includes, but is not limited to, technology related to TNF, IL-T, a novel interferon designated IFN-WA, and select melanoma, ovarian, breast, colon and lung cancer MAbs. See "-- Research and Development Programs -- Human Gene Discovery Program/Lung Cancer Program" and "-- Research and Development Programs -- Other Programs -- TNF/PEG: Broad Anticancer Drug Program."

Pursuant to the WadTech Agreement, the Company agreed to (i) pay WadTech the sum of \$1,250,000 (the "Fixed Sum"), (ii) pay WadTech royalties on sales of products incorporating the Wadley Technology and a percentage of all royalties and other consideration paid to the Company by any licensees of the Wadley Technology, all of which are to be applied toward the Fixed Sum, (iii) assume WadTech's obligations under a license agreement entered into in March 1989 between the Wadley/Phillips Partnership and Phillips (the "Phillips Agreement"), namely the obligation to pay royalties of up to 3.75% on sales products produced using Phillips recombinant yeast expression system, and (iv) pay to WadTech minimum annual royalties of \$31,250 for the year beginning October 1, 1996, \$62,500 for the year beginning October 1, 1997 and \$125,000 for each year thereafter. The WadTech Agreement provides that the royalties and other sums payable by the Company to WadTech are at a higher rate until the Fixed Sum has been paid in full. The term of the WadTech Agreement is for 99 years but may be terminated earlier by WadTech if the Company fails to cure a default in its payment obligations or breaches any material term or condition of the agreement.

In order to secure the Company's obligation to pay the Fixed Sum to WadTech, the Company and WadTech entered into a Security Agreement (the "Security Agreement"), pursuant to which WadTech retains a security interest in all of the Wadley Technology until the Fixed Sum is paid in full to WadTech. The Security Agreement also provides that in the event of a default (which includes failure of the Company to perform any material obligation under the WadTech Agreement), WadTech would have the right to license the Wadley Technology to a third party or sell the Wadley Technology through a foreclosure sale.

RD

In June 1993, the Company entered into a license agreement (the "Taxol License Agreement") with RDI, a non-profit entity which manages the intellectual property of MSU and MCMST, granting to the Company worldwide exclusive rights to the Fungal Taxol Technology. Pursuant to the Taxol License Agreement, the Company made an initial payment of \$150,000 to RDI and has agreed to pay RDI royalties on sales of products using the Fungal Taxol Technology and

3

a percentage of royalties paid to the Company by sublicensees of the Fungal Taxol Technology in minimum amounts of \$25,000 for the first year, \$50,000 for the second year, \$75,000 for the third year, and \$100,000 for all years thereafter that the license is retained. The Company also granted to RDI stock options to purchase up to 20,000 shares of the Company's Common Stock at \$2.50 per share exercisable over four years. The Company and RDI also entered into a

Research and Development Agreement (the "Taxol R&D Agreement") effective the date of the RDI License Agreement. The Taxol R&D Agreement provides for RDI to perform research and development at MSU relating to the Fungal Taxol Production System. Pursuant to the Taxol R&D Agreement, the Company has agreed to make payments of \$250,000 per year for four years. The Company has paid a total of \$675,000 under both RDI agreements to date. In February 1995, the Company and RDI amended the RDI License Agreement and Taxol R&D Agreement to include technology applicable to commercial products, in addition to Taxol and Taxol related technology, identified and developed from organisms/products supplied to CPI by Dr. Gary Strobel, Dr. Andrea Stierle and/or Dr. Donald Stierle pursuant to the Taxol License Agreement and Taxol R&D Agreement. These additional technologies could include, but are not limited to, anti-cancer, anti-viral, anti-fungal or any other activities which could result in any commercial products.

In February 1995, the Company entered into a license agreement (the "FTS-2 License Agreement") with RDI, granting to the Company worldwide exclusive rights to practice all intellectual property rights relating to a fungal strain identified as "FTS-2" (the "FTS-2 Rights") which contains a cytotoxic activity for a breast cancer line and related activities. In October 1995, the Company entered into a license agreement (the "Tbp-5 License Agreement") with RDI, granting to the Company worldwide exclusive rights to practice all intellectual property rights relating to a fungal strain identified as "Tbp-5" (the "Tbp-5 Rights"; the FTS-2 Rights and the Tbp-5 Rights are collectively referred to herein as the "Intellectual Property Rights") which contains a cytotoxic activity for a breast cancer cell line. Pursuant to the FTS-2 License Agreement and the Tbp-5 License Agreement, the Company has agreed to pay RDI royalties on sales of products or services using the Intellectual Property Rights and a percentage of royalties paid to the Company by sublicensees using the Intellectual Property Rights.

# UCLA LICENSE AGREEMENTS

In February 1996, the Company entered into two license agreements with the Regents of the University of California, granting to the Company exclusive rights to: (1) a pending patent, entitled Inhibition of Cyst Formation By Cytoskeletal Specific Drugs ("UCLA License Agreement I") that makes use of various drugs, one of which is Taxol and (2) technology in the field of Pharmacological Treatment for Polycystic Kidney Disease ("UCLA License Agreement II"). Pursuant to the UCLA License Agreement I, the Company paid a license issue fee of \$5,000 and has agreed to pay the University of California \$10,000 upon issuance of a patent. Pursuant to the UCLA License Agreement II, the Company paid a license issue fee of \$5,000 upon issuance of a patent. The Company must pay a yearly license maintenance fee on both licenses until the Company is commercially selling a product based on the technology derived from these UCLA License Agreements, at which time a royalty based on net sales will be due.

# ENZON

In July 1992, the Company and Enzon entered into the Enzon Agreement providing for the conduct of a collaborative research and development program to develop an anticancer agent by combining the Company's TNF technology with Enzon's PEG technology. Pursuant to this agreement, each party agreed to fund its own development costs associated with the initial stage, roughly the first year, of the program. The agreement provides that if both parties agree to continue the TNF-PEG program jointly each party shall share equally in the cost

34

of such research and development and the profits therefrom. If one party decides not to proceed or later is unable to share jointly, the continuing party will receive exclusive (even as to the other party) worldwide licenses in the applicable technology of the other party and will pay the other party royalties. The term of the Enzon Agreement is 15 years for each product developed under the program from the date of FDA approval to market such product. The Company and Enzon also entered into a similar agreement in March 1992 relating to combining various target proteins to be developed by the Company with Enzon's PEG-technology pursuant to which agreement Enzon funded certain of the Company's initial research and development activities thereunder. To the extent this earlier agreement applied to TNF, it was superseded by the Enzon Agreement. Currently, the primary focus of the parties is on the Enzon Agreement and the TNF-PEG technology.

# SLOAN-KETTERING

Pursuant to a Research Agreement effective April 8, 1994 between the Company and Sloan-Kettering, Sloan-Kettering has agreed to continue evaluating the IL-T fusion protein to determine whether such protein protects mice against radiation and chemotherapy. In connection with such activities, Sloan-Kettering has agreed to provide all necessary personnel, equipment supplies and facilities in completion of the protocol set forth in the agreement for a budget not to exceed \$35,000. Inventions resulting from Sloan-Kettering's research which were not contemplated by the parties, if any, will be the property of Sloan-Kettering; however, Sloan-Kettering must grant the Company the right of first refusal to acquire a world-wide exclusive license to develop and commercialize any such invention upon mutually agreeable terms. The term of the agreement is through completion of the protocol which is expected to begin following the Offering.

#### CYTOMUNE

Cytomune, Inc. ("Cytomune") is a joint venture (50:50) between CPI and Pestka. A novel anti-leukemic drug, IL-P, is in development utilizing proprietary technology developed by Dr. Sidney Pestka. Dr. Pestka developed interferon for commercial use for Hoffmann-La Roche, Inc. The objective of the joint venture is to develop IL-P for the diagnosis and treatment of leukemia. For their respective interests in the joint venture the Company contributed \$233,000 and certain technology and Pestka contributed exclusive rights to phosphorylation technology as applied to interleukin-2. Pestka has performed research and development for Cytomune relating to IL-P using this technology. Additional funding is not required but, if provided, will permit such research and development to continue.

### UNIVERSITY OF TEXAS

In June 1992, the Company and the University of Texas at Dallas ("UTD") entered into an agreement, which has been amended, pursuant to which UTD performs certain research and development activities relating to anti-sense compounds and related technology for use in humans as therapeutic and diagnostic products. Pursuant to the agreement, UTD provides all necessary personnel, equipment supplies and facilities in consideration for an amended budget not to exceed \$240,240. Inventions under the agreement, if any, will be the property of UTD; however, UTD must grant the Company the right of first refusal to acquire a license to develop and commercialize any intellectual property resulting from the agreement for a royalty to be negotiated, not to exceed eight percent of the net sales (as defined in the agreement) of commercialized products. The Company is not required to pay any upfront fee or any minimum royalty. The agreement has been extended through May 1998 for an additional funding of \$90,000.

In June 1996, the Company entered into a Patent License Agreement (the "Regents Agreement") with the Board of Regents of the University of Tevas

35

System ("Regents") whereby the Company received an exclusive royalty-bearing license to manufacture, have manufactured, use, sell and/or 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 optimum regions within genes to bind Antisense products. Antisense products are under development to control genes involved in human diseases such as cancer. diabetes, or AIDS. This discovery potentially has broad applications to many human and viral genes involved in human disease. The Company is required to pay Regents certain royalties and sublicensing fees. The Regents Agreement shall be in full force and effect until patent rights have expired or 20 years, whichever is longer. However, the Regents Agreement will terminate (i) automatically if the Company's obligations to pay royalties and sublicensing fees are not satisfied within 30 days after the Company receives written notice of its failure to make such payment; (ii) upon 90 days' written notice if the Company or Regents shall breach or default on any obligation under the Regents Agreement; and (iii) upon 60 days' written notice by the Company. In addition, Regents may terminate the exclusivity of the Regents Agreement at any time after June 1999 and may terminate the license completely at any time after June 2001 if the Company fails to provide Regents with written evidence that it has commercialized or is actively attempting to commercialize the licensed product. There can be no assurance that any revenues will be derived by the Company from this Agreement.

# HELM AG

The Company entered into a marketing agreement, effective in November 1994, with Helm AG, a world-wide distributor of pharmaceutical and related products with sales of over \$3 billion in 1994, granting Helm AG the right, in certain parts of Europe, to market the technology and/or products of, and arrange business introductions for, the Company on a commission basis. The agreement is terminable by either party on six months' notice. To date, the Company has no products available for distribution and thus no revenues have been derived from such agreement. There can be no assurance that any revenues will be derived by the Company from this agreement in the future.

# WSURF

In July 1996, the Company entered into an agreement with the Washington State University Research Foundation ("WSURF") whereby the Company received an exclusive, world-wide license to use and/or sublicense patented technology or prospective patented technology (the "WSURF Technology") related to genes for enzymes and the associated gene products, including the enzymes, in the biosynthetic pathway for Taxol. The Company is required to pay WSURF license fees of \$7,500 per year commencing on July 1, 1997 as well as certain royalties and sublicensing fees. This Agreement shall be in full force and effect until the last to expire of the patents licensed under the WSURF Technology. However, the Company may terminate this Agreement on 90 days notice provided that all amounts due to WSURF are paid. WSURF may terminate this Agreement immediately if the Company ceases to carry on its business or on 90 days notice if the Company is in default in payment of fees and/or royalties, is in breach of any provisions of this Agreement, provides materially false reports or institutes bankruptcy, insolvency, liquidation or receivership proceedings. There can be no assurance that any revenues will be derived by the Company from this Agreement.

### PATENTS, LICENSES AND PROPRIETARY RIGHTS

The Company has rights to a number of patents and patent applications. In 1991, the Company entered into the Wadley Agreement, whereby it was assigned two issued United States patents (expiring, under current law, in 2006 and 2007, respectively), three pending United States patent applications and six pending foreign patent applications held by WadTech. Pursuant to the Taxol License Agreement, the Company has been granted an exclusive license to the technology contained in the Fungal Taxol Production System, including one issued

36

United States patent and foreign patent applications. In addition, UTD has filed a patent application relating to certain anti-sense technology with respect to which, pursuant to the agreement between the Company and UTD, the Company has a right of first refusal to acquire a license to develop and commercialize products using such technology.

The Company's policy is to protect its technology by, among other things, filing patent applications for technology it considers important in the development of its business. In addition to filing patent applications in the United States, the Company has filed, and intends to file, patent applications in foreign countries on a selective basis. The Company has filed patent applications relating to its IL-T and Lung Cancer Gene technologies and is preparing to file additional patent applications, relating primarily to technologies for vaccines and Taxol production. Although a patent has a statutory presumption of validity in the United States, the issuance of a patent is not conclusive as to such validity or as to the enforceable scope of the claims of the patent. There can be no assurance that the Company's issued patents or any patents subsequently issued to or licensed by the Company will not be successfully challenged in the future. The validity or enforceability of a patent after its issuance by the patent office can be challenged in litigation. If the outcome of the litigation is adverse to the owner of the patent, third parties may then be able to use the invention covered by the patent, in some cases without payment. There can be no assurance that patents in which the Company has rights will not be infringed or successfully avoided through design innovation.

There can be no assurance that patent applications owned by or licensed to the Company will result in patents being issued or that the patents will afford protection against competitors with similar technology. It is also possible that third parties may obtain patent or other proprietary rights that may be necessary or useful to the Company. In cases where third parties are first to invent a particular product or technology, it is possible that those parties will obtain patents that will be sufficiently broad so as to prevent the Company from using certain technology or from further developing or commercializing certain products. If licenses from third parties are necessary but cannot be obtained, commercialization of the related products would be delayed or prevented. The Company is aware of patent applications and issued patents belonging to competitors and it is uncertain whether any of these, or patent applications filed of which the Company may not have any knowledge, will require the Company to alter its potential products or processes, pay licensing fees or cease certain activities.

The Company also relies on unpatented technology, trade secrets and information and no assurance can be given that others will not independently develop substantially equivalent information and techniques or otherwise gain access to the Company's technology or disclose such technology, or that the Company can meaningfully protect its rights in such unpatented technology, trade secrets and information. The Company requires each of its employees to execute a confidentiality agreement at the commencement of an employment relationship with the Company. The agreements generally provide that all inventions conceived by the individual in the course of employment or in the providing of services to the Company and all confidential information developed by, or made known to, the individual during the term of the relationship shall be the exclusive property of the Company and shall be kept confidential and not disclosed to third parties except in limited specified circumstances. There can be no assurance, however, that these agreements will provide meaningful protection for the Company in the event of unauthorized use or disclosure of such confidential information

37

# COMPETITION

All of the Company's proposed products will face competition from existing therapies. The development by others of novel treatment methods for those indications for which the Company is developing compounds could render the Company's compounds non-competitive or obsolete. This competition potentially includes all of the pharmaceutical concerns in the world that are developing pharmaceuticals for the diagnosis and treatment of cancer. Competition in pharmaceuticals is generally based on performance characteristics, price and timing of market introduction of competitive products. Acceptance by hospitals, physicians and patients is crucial to the success of a product. Price competition may become increasingly important as a result of an increased focus by insurers and regulators on the containment of health care costs. In addition, the various federal and state agencies have enacted regulations requiring rebates of a portion of the purchase price of many

pharmaceutical products.

Most of the Company's existing or potential competitors have substantially greater financial, technical and human resources than the Company and may be better equipped to develop, manufacture and market products. In addition, many of these companies have extensive experience in pre-clinical testing, human clinical trials and the regulatory approval process. These companies may develop and introduce products and processes competitive with or superior to those of the Company. See"-- Research and Development Programs -- Fungal Taxol Production System Program" for a discussion of a CRADA granted to Bristol-Myers.

The Company's competition also will be determined in part by the potential indications for which the Company's compounds are developed. For certain of the Company's potential products, an important factor in competition may be the timing of market introduction of its own or competitive products. Accordingly, the relative speed with which the Company can develop products, complete the clinical trials and regulatory approval processes and supply commercial quantities of the products to the market are expected to be important competitive factors. The Company expects that competition among products approved for sale will be based on, among other things, product efficacy, safety, reliability, availability, price and patent position.

The Company's competitive position also depends upon its ability to attract and retain qualified personnel, obtain patent protection or otherwise develop proprietary products or processes and secure sufficient capital resources for the often lengthy period between technological conception and commercial sales.

### GOVERNMENT REGULATION

The production and marketing of the Company's products and its research and development activities are subject to regulation for safety and efficacy by numerous governmental authorities in the United States and other countries. In the United States, drugs and pharmaceutical products are subject to rigorous FDA review. The Federal Food, Drug, and Cosmetic Act, the Public Health Service Act and other federal statutes and regulations govern or influence the testing, manufacture, safety, labeling, storage, record keeping, approval, advertising and promotion of such products. Non-compliance with applicable requirements can result in fines, recall or seizure of products, total or partial suspension of production, refusal of the government to approve product license applications or allow the Company to enter into supply contracts and criminal prosecution. The FDA also has the authority to revoke product licenses and establishment licenses previously granted.

In order to obtain FDA approval of a new product, the Company must submit proof of safety, purity, potency and efficacy. In most cases such proof entails extensive pre-clinical, clinical and laboratory tests. The testing,

38

preparation of necessary applications and processing of those applications by the FDA is expensive and may take several years to complete. There is no assurance that the FDA will act favorably or quickly in making such reviews, and significant difficulties or costs may be encountered by the Company in its efforts to obtain FDA approvals that could delay or preclude the Company from marketing any products it may develop. The FDA may also require post-marketing testing and surveillance to monitor the effects of approved products or place conditions on any approvals that could restrict the commercial applications of such products. Product approvals may be withdrawn if compliance with regulatory standards is not maintained or if problems occur following initial marketing. With respect to patented products or technologies, delays imposed by the governmental approval process may materially reduce the period during which the Company will have the exclusive right to exploit them.

The time period between when a promising new compound is identified and when human testing is initiated is generally referred to as the pre-clinical development period. During this time, a manufacturing process is identified and developed to be capable of producing the compound in an adequately pure and well characterized form for human use. Production of compounds for use in humans is governed by a series of FDA regulations known as Good Manufacturing Practices ("GMP"), which govern all aspects of the manufacturing process. The FDA has published a "Points to Consider" guidance document with respect to the manufacture of MAbs for human use.

The FDA approval process for a new and unfamiliar term or drug involves completion of pre-clinical studies and the submission of the results of these studies to the FDA in an investigational new drug application ("IND"). Pre-clinical studies involve laboratory evaluation of product characteristics and animal studies to assess the efficacy and safety of the product. Pre-clinical studies are regulated by the FDA under a series of regulations called the Good Laboratory Practices ("GLP") regulations. Violations of these regulations can, in some cases, lead to invalidation of the studies, requiring those studies to be replicated.

Once the IND is approved, human clinical trials may be conducted. Human clinical trials are typically conducted in three sequential phases, but the phases may overlap. Phase I trials consist of testing the product in a small number of volunteers, primarily for safety at one or more

doses. In Phase II, in addition to safety, the efficacy of the product is evaluated in a patient population somewhat larger than Phase I trials. Phase III trials typically involve additional testing for safety and clinical efficacy in an expanded population at geographically dispersed test sites. A clinical plan, or "protocol," accompanied by the approval of the institution participating in the trials, must be submitted to the FDA prior to commencement of each clinical trial. The FDA may order the temporary or permanent discontinuation of a clinical trial at any time.

To date an IND was submitted for the LCG-MAb clinical trials at Wadley. The Company intends to file an IND for a humanized form of the LCG-MAb followed by clinical trials in 1997. The results of the pre-clinical and clinical testing are submitted to the FDA in the form of a New Drug Application ("NDA") or, in the case of a biologic, such as LCG-MAb and other MAbs, as part of a product license application ("PLA"). In a process which generally takes several years, the FDA reviews this application and once, and if, it decides that adequate data is available to show that the new compound is both safe and effective, approves the drug or biologic product for marketing. The amount of time taken for this approval process is a function of a number of variables including the quality of the submission and studies presented, the potential contribution that the compound will make in improving the treatment of the disease in question and the workload at the FDA. There can be no assurance that any new drug will successfully proceed through this approval process or that it will be approved in any specific period of time.

39

The FDA may, during its review of an NDA or PLA, ask for the production of additional test data. If the FDA does ultimately approve the product, it may require post-marketing testing, including potentially expensive Phase IV studies, and surveillance to monitor the safety and effectiveness of the drug. In addition, the FDA may in some circumstances impose restrictions on the use of the drug that may be difficult and expensive to administer and may seek to require prior approval of promotional materials.

Manufacture of a biologic product must be in a facility covered by an FDA-approved Establishment License Application. Manufacture, holding, and distribution of both biologic and non-biologic drugs must be in compliance with GMPs. Manufacturers must continue to expend time, money, and effort in the area of production and quality control and record keeping and reporting to ensure full compliance with those requirements. The labeling, advertising, and promotion of a drug or biologic product must be in compliance with FDA regulatory requirements. Failures to comply with applicable requirements relating to manufacture, distribution, or promotion can lead to FDA demands that production and shipment cease, and, in some cases, that products be recalled, or to enforcement actions that can include seizures, injunctions, and criminal prosecution. Such failures can also lead to FDA withdrawal of approval to market the product.

The FDA may designate a biologic or drug as an Orphan Drug for a particular use, in which event the developer of the biologic or drug may request grants from the government to defray the costs of certain expenses related to the clinical testing of such drug and be entitled to a seven year marketing exclusivity period.

The Company's ability to commercialize its products successfully may also depend in part on the extent to which reimbursement for the cost of such products and related treatment will be available from government health administration authorities, private health insurers and other organizations. Such third-party payors are increasingly challenging the price of medical products and services. Several proposals have been made that may lead to a government-directed national health care system. Adoption of such a system could further limit reimbursement for medical products and services. Significant uncertainty exists as to the reimbursement status of newly approved health care products, and there can be no assurance that adequate third-party coverage will be available to enable the Company to maintain price levels sufficient to realize an appropriate return on this investment in product development.

The Company is also subject to regulation by the Occupational Safety and Health Administration ("OSHA") and the Environmental Protection Agency ("EPA") and to regulation under the Toxic Substances Control Act, the Resource Conservation and Recovery Act and other regulatory statutes, and may in the future be subject to other federal, state or local regulations. Either or both of OSHA or the EPA may promulgate regulations that may affect the Company's research and development programs. The Company is unable to predict whether any agency will adopt any regulation which would have a material adverse effect on the Company's operations.

Sales of pharmaceutical products outside the United States are subject to foreign regulatory requirements that vary widely from country to country. Whether or not FDA approval has been obtained, approval of a product by comparable regulatory authorities of foreign countries must be obtained prior to the commencement of marketing the product in those countries. The time required to obtain such approval may be longer or shorter than that required for FDA approval.

#### MANUFACTURING AND MARKETING

Neither the Company nor any of its officers or employees has pharmaceutical marketing experience. Furthermore, the Company has never manufactured or marketed any products and the Company does not have the resources to manufacture or market on a commercial scale any products that it may develop. The Company's long-term objective is to manufacture and market certain of its products and to rely on independent third parties for the manufacture of certain of its other products. For the foreseeable future, the Company will be required to rely on corporate partners or others to manufacture or market products it develops, although no specific arrangements have been made. No assurance can be given that the Company will enter into any such arrangements on acceptable terms.

Manufacturing. While the Company intends to select manufacturers that comply with GMP and other regulatory standards, there can be no assurance that these manufacturers will comply with such standards, that they will give the Company's orders the highest priority or that the Company would be able to find substitute manufacturers, if necessary. In order for the Company to establish a manufacturing facility, the Company will require substantial additional funds and will be required to hire and retain significant additional personnel and comply with the extensive GMP regulations of the FDA applicable to such a facility. No assurance can be given that the Company will be able to make the transition successfully to commercial production, should it choose to do so.

Marketing. Despite the Company's strategy to develop products for sale to concentrated markets, significant additional expenditures and management resources will be required to develop an internal sales force, and there can be no assurance that the Company will be successful in penetrating the markets for any products developed. For certain products under development, the Company may seek to enter into development and marketing agreements which grant exclusive marketing rights to its corporate partners in return for royalties to be received on sales, if any. Under certain of these agreements, the Company's marketing partner may have the responsibility for all or a significant portion of the development and regulatory approval. In the event that the marketing and development partner fails to develop a marketable product or fails to market a product successfully, the Company's business may be adversely affected. The sale of certain products outside the United States will also be dependent on the successful completion of arrangements with future partners, licensees or distributors in each territory. There can be no assurance that the Company will be successful in establishing any additional collaborative arrangements, or that, if established, such future partners will be successful in commercializing products.

### PRODUCT LIABILITY INSURANCE

The testing, marketing and sale of human health care products entail an inherent risk of allegations of product liability, and there can be no assurance that product liability claims will not be asserted against the Company. The Company intends to obtain product liability insurance for its ongoing clinical trials. Such coverage may not be adequate as and when the Company further develops products. There can be no assurance that the Company will be able to obtain, maintain or increase its insurance coverage in the future on acceptable terms or that any claims against the Company will not exceed the amount of such coverage.

# FACILITIES

The Company occupies an aggregate of approximately 10,200 square feet of both office and laboratory space in Dallas, Texas at two separate facilities. The Company leases approximately 4,800 square feet of office and laboratory space pursuant to a lease agreement expiring in August 1997. In addition, the Company

4

occupies an additional approximate 5,400 square feet of office and laboratory space pursuant to a lease assigned to the Company by the Wadley/Phillips Partnership and which lease term has been extended until December 31, 1996. The Company's current minimum annual lease payments are approximately \$124,873. See Note I of Notes to Financial Statements.

# HUMAN RESOURCES

As of September 30, 1996, the Company had 16 employees, 13 of whom were engaged directly in research and development activities and 3 of whom were in executive and administrative positions. The Company's employees are not governed by any collective bargaining agreement and the Company believes that its relationship with its employees is good.

# LEGAL PROCEEDINGS

The Company is not a party to any legal proceedings.

42

### EXECUTIVE OFFICERS, DIRECTORS AND PRINCIPAL SCIENTISTS

The executive officers, directors and principal scientists of the Company are as follows: <TABLE> <CAPTION> Name Position Age - ----<C> <S> <C> 53 Chairman, President and Chief 

 Ira J. Gelb, M.D.(1)
 67
 Director

 Irwin C. Gerson(1)
 66
 Director

 Walter M. Lovenberg, Ph.D.
 62
 Director

 Daniel Shusterman, J.D.
 33
 Vice President of Operations,

 Treasurer and Chief Financial Officer Susan L. Berent, Ph.D. ..... 44 Director of Gene & Protein Engineering and Computer Systems, Co-Director Molecular Immunology and Gene Expression Systems Hakim Labidi, Ph.D. 38 Director of Vaccine Program 47 Director of Fungal Taxol Program, Rajinder Singh Sidhu, Ph.D..... Co-Director of Gene Expression Systems Richard M. Torczynski, Ph.D..... 42 Director of Human Gene Discovery, Mammalian Expression System and Diagnostic Development, Co-Director of Molecular Immunology </TABLE>

(1) Members of Audit and Compensation Committees

Arthur P. Bollon, Ph.D., a founder of the Company, has, since the Company's inception in 1991, served as Chairman of the Board of Directors, President, Chief Executive Officer and, until March 1995, Treasurer. Dr. Bollon received his Ph.D. from the Institute of Microbiology at Rutgers University and was a Post Doctoral Fellow at Yale University. He has served as consultant to a number of major companies (including Merck, Sharp & Dohme and Diamond Shamrock) and has previously served on the Board of Directors and Advisory Boards of several biotechnology companies, including Viragen, Inc., Wadley Biosciences Corp. and American Bionetics, Inc. From 1987 to 1991, Dr. Bollon served as President and Chief Executive Officer of the Wadley/Phillips Partnership. Prior to that time, he was Director of Genetic Engineering and Chairman of the Department of Molecular Genetics at Wadley Institutes of Molecular Medicine. In his capacities at the Wadley/Phillips Partnership and Wadley Institutes, Dr. Bollon has played a leading role in bringing the technology that forms the basis of CPI from conception to reality.

Ira J. Gelb, M.D. has been a director of the Company since April 1994. Dr. Gelb received his M.D. from New York University School of Medicine in 1951. After finishing his training in cardiology at the Mount Sinai Hospital in New York City in 1957, he continued his association with that institution until his retirement in 1992. During this period, he was appointed Attending Cardiologist and Associate Clinical Professor at the Mount Sinai School of Medicine. Other appointments included Associate Clinical Professor of Cardiology at Cornell Medical School, Adjunct Clinical Professor of Cardiology at New York

43

Medical College, Cardiology Consultant at Lawrence Hospital, Bronxville, N.Y. and United Hospital, Portchester, N.Y. Dr. Gelb is a past President of the American Heart Association, Westchester-Putnam Chapter and was a Senior Assistant Editor with the American Journal of Cardiology from 1968-1983, when be became a founding editor of the Journal of the American College of Cardiology (the "JACC"). Dr. Gelb continued as a Senior Assistant Editor of JACC until his retirement in 1992. Since that time, he has served on the boards of various pharmaceutical companies.

Irwin C. Gerson has been a director since March 1995. Mr. Gerson has been, since 1986, Chairman and Chief Executive Officer of William Douglas McAdams, Inc., one of the largest independent advertising agencies in the U.S. specializing in pharmaceutical communications to healthcare professionals. Mr. Gerson received his B.S. in pharmacy from Fordham University and an MBA from the NYU Graduate School of Business Administration. In 1992 Mr. Gerson received an honorary Doctor of Humane Letters from the Albany College of Pharmacy. Mr. Gerson serves as a Trustee of Long Island University, Chairman of The Council of Overseers -- Arnold and Marie Schwartz College of Pharmacy, member of the Board of Trustees of the Albany College of Pharmacy and, from 1967through 1974, was a lecturer on sales management pharmaceutical marketing at the Columbia College School of Pharmacy. Mr. Gerson also serves as a Member of the Board of Governors, New York Council, American Association of Advertising Agencies, a Director (and past chairman) of Business Publications Audit ("BPA"), a Director of the Connecticut Grand Opera, a Director of the Stamford Chamber Orchestra, and has previously served as Director of the Foundation of

Pharmacists and Corporate Americans for AIDS Education, the Pharmaceutical Advertising Council, Penn Dixie Industries, Continental Steel Corporation, the Nutrition Research Foundation and as a Trustee of the Chemotherapy Foundation.

Walter M. Lovenberg, Ph.D. has been a director since August 1995. Dr. Lovenberg was an executive Vice President and member of the Board of Directors of Marion Merrell Dow Inc. from 1989 through August 1993. Dr. Lovenberg served as the President of the Marion Merrell Dow Research Institute from 1989 to 1993 and Vice President from 1986 through 1989. Prior to joining Marion Merrell Dow (1958-1985), he was a Senior Scientist and Chief of Biochemical Pharmacology at the National Institutes of Health. Currently Dr. Lovenberg is President of Lovenberg Associates, Inc. and is a member of the Board of Directors of Oncogene Science Inc. and Xenometrix Inc. Dr. Lovenberg received his Ph.D. from George Washington University and his B.S. and M.S. from Rutgers University. Dr. Lovenberg, who serves as Executive Editor of Analytical Biochemistry and Editor (USA) of Neurochemistry International, is a consulting editor to several other scientific journals. He has been the recipient of many awards, including a Fulbright-Hays Senior Scholar Award and a Public Health Service Superior Service Award. Dr. Lovenberg is a member of the American College of Neuropsychopharmacology, the American Society of Neurochemistry and the American Society of Biochemistry and Molecular Biology.

Daniel M. Shusterman, J.D. was named Vice President of Operations of the Company in 1994 and Treasurer and Chief Financial Officer in March 1995, after having served as Director of Operations since he joined the Company in 1991. Mr. Shusterman received his M.S. degree with an emphasis on biotechnology from the University of Texas in 1988. He was Director of Operations at Wadley/Phillips Partnership for three years prior to joining CPI. Mr. Shusterman is a registered Patent Agent and received his J.D. from Texas Wesleyan University School of Law in 1993 and has been a member of the Texas bar since 1994. In addition to his role as a V.P. of Operations, he is contributing to the implementation of an intellectual property protection and maintenance system at CPI.

Susan L. Berent, Ph.D. has been with the Company since 1991 as Director of Gene and Protein Engineering and Computer Systems. Dr. Berent received her Ph.D in Biological Chemistry from the University of Michigan and completed a postdoctoral fellowship at the Department of Molecular Genetics,

44

Wadley Institutes of Molecular Medicine. She was appointed to Senior Scientist at Wadley in 1984 and maintained that position in the Wadley/Phillips Partnership until she joined the Company in 1991. Dr. Berent is an expert in protein chemistry, DNA libraries, cytokines such as TNF, and production systems.

Hakim Labidi, Ph.D. has been with the Company since 1991 as Director of the Vaccine Program. Dr. Labidi received his Ph.D. in Microbiology at the Pasteur Institute in Paris, France and has been a senior scientist at CPI since 1991. Prior to joining the Company, Dr. Labidi was a Senior Research Investigator and Assistant Professor at the University of Texas from 1987 to 1989 and an Associate Professor at Kuwait University from 1989 until 1991. Dr. Labidi was the first to isolate and sequence a plasmid from mycobacterium.

Rajinder Singh Sidhu, Ph.D. has been with the Company since 1991 as Director of the Fungal Program and Co-Director of Gene Expression Systems. Dr. Sidhu received his Ph.D. degree in Microbiology from Haryana Agricultural University in Hissar, India, and completed a postdoctoral fellowship at Osaka University in Japan. He was appointed to Senior Scientist at Wadley in 1984 and maintained that position in the Wadley/Phillips Partnership until he joined the Company. Dr. Sidhu is an expert on gene fusion and engineering, fungal genes and secretion, cytokines such as TNF, and production systems.

Richard M. Torczynski, Ph.D. has been with the Company since 1991 as Director of Human Gene Discovery, Mammalian Expression System and Diagnostic Development, and Co-Director of Molecular Immunology. Dr. Torczynski received his Ph.D. degree in Biology from the University of Texas and completed his research fellowship under the direction of Dr. Arthur Bollon. He was appointed to Senior Scientist at Wadley in 1984 and maintained that position in the Wadley/Phillips Partnership. Dr. Torczynski is an expert on certain specialized gene libraries, monoclonal antibodies and cytokines such as interferon.

The Board of Directors currently consists of four members. All directors hold office until the next annual meeting of stockholders and until their successors are duly elected and qualified. Officers are elected to serve, subject to the discretion of the Board of Directors, until their successors are appointed.

Directors receive fees of \$1,000 per month. Dr. Gelb has also received options to purchase 69,000 shares of Common Stock, of which 50,000 are exercisable at \$4.125 per share, 10,000 are exercisable at \$3.75 per share, 5,000 are exercisable at \$5.00 per share and 4,000 are exercisable at \$3.9375 per share. Mr. Gerson has received options to purchase 65,000 shares of Common Stock of which 50,000 are exercisable at \$4.125 per share, 6,000 are exercisable at \$4.375 per share, 5,000 are exercisable at \$5.00 per share and 4,000 are exercisable at \$3.9375 per share. Dr. Lovenberg has received options to purchase 65,000 shares of Common Stock of which 50,000 are exercisable at \$4.125 per share, 11,000 are exercisable at \$5.00 per share and 4,000 are exercisable at

\$3.9375 per share. Directors are also reimbursed for expenses actually incurred in connection with their attendance at meetings of the Board of Directors.

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 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

45

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.

The Company has been advised that it is the position of the Securities and Exchange Commission that insofar as the foregoing provision may be invoked to disclaim liability for damages arising under the Securities Act, such provision is against public policy as expressed in the Securities Act and is therefore unenforceable.

## SCIENTIFIC ADVISORS/CONSULTANTS

The Company's Scientific Advisory Board currently consists of individuals having extensive experience in the fields of molecular genetics, chemistry, oncology and microbiology. At the Company's request, the scientific advisors review and evaluate the Company's research programs and advise the Company with respect to technical matters in fields in which the Company is involved.

The following table sets forth the name and current position of each scientific advisor:

Name Position

Hugo David, M.D., Ph.D. Consultant, New University of Lisbon, Institute of Hygiene and Topical Medicine

Donald M. Gray, Ph.D. Professor, Department of Molecular and Cell Biology, University of Texas at Dallas

Sidney Pestka, M.D. Chairman & Professor, Department of Molecular Genetics and Microbiology and Professor of Medicine University of

Professor of Medicine, University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School

Jeffrey Schlom, Ph.D. Chief, Laboratory of Tumor Immunology and

Biology, Division of Cancer Biology and Diagnosis, National Cancer Institute, National Institutes of Health

David A. Scheinberg, M.D., Ph.D. Chief, Leukemia Service; Head, Hematopoietic Cancer Immunochemistry

Laboratory, Memorial Sloan-Kettering Cancer Center

Gary Strobel, Ph.D. Professor, Montana State University

All of the scientific advisors are employed by other entities and some have consulting agreements with entities other than the Company, some of which entities may in the future compete with the Company. Four of the current scientific advisors receive \$1,000 per month from the Company. The scientific advisors are expected to devote only a small portion of their time to the Company and are not expected to participate actively in the day-to-day affairs of the Company. Certain of the institutions with which the scientific advisors are affiliated may adopt new regulations or policies that limit the ability of the scientific advisors to consult with the Company. It is possible that any inventions or processes discovered by the scientific advisors will remain the

46

property of such persons or of such persons' employers. In addition, the institutions with which the scientific advisors are affiliated may make available the research services of their personnel, including the scientific advisors, to competitors of the Company pursuant to sponsored research agreements.

Institute of Hygiene and Tropical Medicine at New University of Lisbon. He was chief of the mycobacteriology branch at the Center for Disease Control (CDC) and was Professor and Head of the Mycobacterial and Tuberculosis Unit at the Pasteur Institute in Paris. Dr. David is an authority on mycobacterial infections and vaccine development for tuberculosis and leprosy.

Dr. Donald M. Gray is a Professor and was, until August 1995, Chairman, Department of Molecular and Cell Biology, University of Texas at Dallas. He is a world authority on DNA structures in solution and is working with CPI on anti-sense therapy.

Dr. Sidney Pestka is Professor and Chairman of the Department of Molecular Genetics and Microbiology and Professor of Medicine, University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School. Dr. Pestka was formerly head of the program at the Roche Institute of Molecular Biology which resulted in the development of interferon for commercialization.

Dr. Jeffrey Schlom is Chief of the Laboratory of Tumor Immunology and Biology, Division of Cancer Biology and Diagnosis at the National Cancer Institute, National Institutes of Health and is one of the world leaders in the development of monoclonal antibodies for cancer therapy.

Dr. David A. Scheinberg is Chief of Leukemia Service and Head of the Hematopoietic Cancer Immunochemistry Laboratory at Memorial Sloan-Kettering Cancer Center. He is an authority on the immunotherapy of cancer and has directed many clinical trials for new anticancer products.

Dr. Gary Strobel is Professor at Montana State University. Dr. Strobel and colleagues Dr. Andrea Stierle and Dr. Donald Stierle isolated the fungus, Taxomyces andreanae, which is being used by the Company to make the anticancer drug, Taxol.

## EXECUTIVE COMPENSATION

The following summary compensation table sets forth the aggregate compensation paid or accrued by the Company to the Chief Executive Officer and to the four most highly compensated executive officers other than the Chief Executive Officer whose annual compensation exceeded \$100,000 for the fiscal year ended December 31, 1995 (collectively, the "named executive officers") for services during the fiscal years ended December 31, 1995, December 31, 1994 and December 31, 1993:

#### SUMMARY COMPENSATION TABLE

<TABLE> <CAPTION>

ptions #
-

√IABLE>

(1) Consisting of car allowances.

47

# EMPLOYMENT CONTRACTS AND TERMINATION OF EMPLOYMENT AND CHANGE-IN-CONTROL ARRANGEMENTS

Arthur P. Bollon, Ph.D. is employed under a five year employment agreement with the Company, expiring February 28, 1997, providing for the payment to Dr. Bollon of a base salary of \$125,000 per year with annual increases of not less that 5% per year. In addition, in the event Dr. Bollon is terminated without just cause or due to a Disability (as defined in the employment agreement), the employment agreement provides that Dr. Bollon shall receive severance payments of equal monthly installments at the base rate until the earlier of the expiration of the term or the expiration of 36 months. Dr. Bollon also receives a car expense allowance of \$500 per month under the employment agreement. In November 1992, the Company granted Dr. Bollon options to purchase (i) 200,000 shares of Common Stock, at an exercise price of \$1.65 per share, which options are all currently exercisable and (ii) 50,000 shares of Common Stock, at an exercise price of \$4.125 per share, which options are exercisable to the extent of 40% on October 2, 1996 and the remaining 60%becomes exercisable in 20 percent increments commencing on April 2, 1997 and annually thereafter until 100% of the option is exercisable. In March 1995, the Company's Board of Directors approved an amendment to Dr. Bollon's employment agreement, effective November 7, 1995, to extend the term until November 7, 2000 and to increase his base salary to \$165,000 per annum. See "-- Stock Options."

Daniel Shusterman, Vice President of Operations and/or Treasurer (principal financial and accounting officer), effective as of November 2, 1995, providing for the payment to Mr. Shusterman of a base salary of \$75,000 per year with annual increases of not less that 5% per year. In addition, in the event Mr. Shusterman is terminated without just cause or due to a Disability (as defined in the employment agreement), the employment agreement provides that Mr. Shusterman shall receive severance payments of equal monthly installments at the base rate for a period of three months. The employment agreement with Mr. Shusterman has an initial term of three years. In March 1992, the Company granted Mr. Shusterman options to purchase 10,000 shares of Common Stock, at an exercise price of \$1.65 per share, which options are all currently exercisable. On August 8, 1996, the Company granted Mr. Shusterman options to purchase 15,000 shares of Common Stock, at an exercise price of \$3.25 per share, which shares are exercisable to the extent of 40% on February 8, 1996, 20% on August 8, 1997 and 20% on August 8, 1998. See "-- Stock Options."

Each of the Company's executive officers and the Company's principal scientists have entered into confidentiality and patent assignment agreements with the Company.

#### STOCK OPTIONS

In October 1992, the Board of Directors of the Company adopted the Cytoclonal Pharmaceutics Inc. 1992 Stock Option Plan (the "1992 Plan"). Under the 1992 Plan, as amended, 520,000 shares of Common Stock were reserved for issuance to officers, employees, consultants and advisors of the Company. As of September 20, 1996, no shares are available for future grant and options to acquire 440,000 shares remain outstanding under the 1992 Plan. The exercise prices of such options range from \$1.65 to \$5.00 per share. The 1992 Plan provides for the grant of incentive stock options intended to qualify as such under Section 422 of the Internal Revenue Code of 1986, as amended, and nonstatutory stock options which do not so qualify.

In April 1996, the Board of Directors of the Company adopted the Cytoclonal Pharmaceutics Inc. 1996 Stock Option Plan (the "1996 Plan"). Under the 1996 Plan, as amended, 750,000 shares of Common Stock were reserved for issuance

48

to officers, employees, consultants and advisors of the Company. As of September 20, 1996, 515,000 shares are available for future grant and options to acquire 235,000 shares remain outstanding under the 1996 Plan. The exercise prices of such options range from \$3.25 to \$4.125 per share. The 1996 Plan provides for the grant of incentive stock options intended to qualify as such under Section 422 of the Internal Revenue Code of 1986, as amended, and nonstatutory stock options which do not so qualify.

The 1992 Plan and the 1996 Plan are administered by the Board of Directors. Subject to the limitations set forth in the 1992 Plan and the 1996 Plan, the Board has the authority to determine to whom options will be granted, the term during which options granted under the 1992 Plan and the 1996 Plan may be exercised, the exercise price of options and the rate at which options may be exercised and may vest. The maximum term of each incentive stock option granted under the 1992 Plan and the 1996 Plan is ten years. The exercise price of shares of Common Stock subject to options qualifying as incentive stock options may not be less than the fair market value of the Common Stock on the date of the grant. The exercise price of incentive options granted under the 1992 Plan and the 1996 Plan to any participant who owns stock possessing more than 10% of the total combined voting power of all classes of outstanding stock of the Company must be at least equal to 110% of the fair market value on the date of grant. Any incentive stock options granted to such participants must also expire within five years from the date of grant. Under the 1992 Plan and the 1996 Plan, the exercise price of both incentive stock options and nonstatutory stock options is payable in cash or, at the discretion of the Board, in Common Stock or a combination of cash and Common Stock.

The following table sets forth certain information with respect to each exercise of stock options during the fiscal year ended December 31, 1995 by each of the named executive officers and the number and value of unexercised options held by such named executive officers as of December 31, 1995:

<TABLE> <CAPTION>

			Valı	ie of	
		Num	ber of	Unexercise	ed
		Unex	ercised	In-the-Mo	ney
		Optio	ons/SARS	Options/	SARS
	Shares	at	FY-End (#)	at FY-I	End (\$)
	Acquired on	Value	Exercisable/	Ex	ercisable/
Name	Exercise(#)	Realized(\$)	Unexerc	isable	Unexercisable
<s></s>	<c></c>	<c></c>	<c></c>	<c></c>	
Arthur P. Bollon, Ph.D. 					

 0 | 0 | 200,000/50,0 | 00 \$3 | 520,000/\$6,250 |The Company was originally financed in October 1991 through the sale of an aggregate of \$200,000 principal amount 10% subordinated notes (the "1991 Notes") to six investors. Purchasers of the 1991 Notes included Arthur P. Bollon, Chairman of the Board, President and Chief Executive Officer and a principal stockholder of the Company, Peter W. Janssen and Bruce Meyers, principals, officers and sole directors of the corporate general partner of JMA and principal stockholders of the Company, and Kinder Investments, L.P., a principal stockholder of the Company. See "Principal Stockholders." In connection with the sale of the 1991 Notes, the Company issued warrants to purchase an aggregate of 120,000 shares of its Common Stock to the purchasers of the 1991 Notes, which warrants expired on December 31, 1993. Also in connection with its formation, the Company sold an aggregate of 3,200,000 shares of its Common Stock for a total purchase price of \$1,000 to six investors: 200,000 shares to Arthur P. Bollon, 750,000 shares to Bruce Meyers, 750,000 shares to Peter W. Janssen and the remainder to Kinder Investment L.P. and Lindsay Rosenwald, M.D., principal stockholders of the Company.

40

During January and February 1992, the Company issued to accredited investors in a private placement (the "1992 Private Placement") an aggregate of 100 Units (the "Private Placement Units"). Each Private Placement Unit consisted of 10,000 shares of Series A Preferred Stock and 20,000 shares of Common Stock. The purchase price for a Private Placement Unit was \$50,000. The 1992 Private Placement was conducted by D.H. Blair Investment Banking Corp. ("Blair") on a "best efforts" basis and, in connection therewith, Blair received commissions aggregating \$649,000 and options to purchase an aggregate of ten Private Placement Units at a purchase price of \$50,000 per Unit. Of these options, Blair transferred to Peter Janssen options to purchase an aggregate of three Private Placement Units and to Bruce Meyers options to purchase an aggregate of two Private Placement Units. See "Description of Securities --Preferred Stock." Mr. Meyers, a principal stockholder and formerly an officer and director of the Company, and Mr. Janssen, a principal stockholder of the Company, are former officers of D.H. Blair & Co., Inc., which acted as a selling agent in the 1992 Private Placement. See "Bridge Financings." Kinder Investments, L.P. ("Kinder"), also a principal stockholder of the Company, is a Delaware limited partnership, whose limited partners include the children and grandchildren of the sole stockholder of Blair. A portion of the proceeds of the 1992 Private Placement were used to repay the 1991 Notes. Kinder invested \$200,000 in the 1994 Bridge Financing and in such capacity was issued \$200,000 principal amount of 1994 Notes and Class A Warrants to purchase an aggregate of 40,000 shares of Common Stock. See "Principal Stockholders" and "Bridge Financings.

Bruce Meyers was Vice Chairman of the Board and Vice President in charge of Business Development for the Company until his resignation in April 1995. See "Management."

See "Bridge Financings" for additional transactions between the Company and certain of its principal stockholders and former officers and directors.

## PRINCIPAL STOCKHOLDERS

The following table sets forth certain information regarding the beneficial ownership of the capital stock of the Company as of September 19, 1996 by (i) each person deemed to be the beneficial owner of more than 5% of any class of capital stock of the Company, (ii) each director of the Company, (ii) the named executive officers, and (iv) all directors and executive officers as a group, prior to this Offering. A person is deemed to be a beneficial owner of any securities of which that person has the right to acquire beneficial ownership of such securities within 60 days. Except as otherwise indicated, each of the persons named has sole voting and investment power with respect to the shares shown below.

Common Stock

<TABLE> <CAPTION>

Name and Address of Beneficial Owner (1)		Number % of Class(2)	% of		Voting	
<s> <c></c></s>	> <c></c>	<c></c>	<c< td=""><td>&gt; &lt;(</td><td>C&gt;</td><td></td></c<>	> <(	C>	
Janssen-Meyers Associates, L.P	39,500(6) 21	.69 50	,000	3.78	19.09	
Bruce Meyers	849,500(7)	10.99	20,000	1.55	9.64	
Peter W. Janssen	840,000(8)	10.84	30,000	2.31	9.61	
Kinder Investments, L.P	790,000(9)	10.28			8.82	
Lindsay A. Rosenwald, M.D	630,000	(10) 8.19			7.03	
Arthur P. Bollon, Ph.D	420,000(11)	5.31			4.57	
Ira Gelb, M.D	33,400(12)	.43			.37	
Irwin Gerson	29,000(13)	.38			.32	

Series A Preferred Stock

waiter Loveliberg, Fil.D	29,000	)(14)	.36			
Directors and executive officers as a group (5 persons)	521,400(15)	6.51		-	5	.62
50						

.32

 Except as otherwise indicated, the address of each beneficial owner is c/o the Company, 9000 Harry Hines Boulevard, Dallas, Texas 75235.

- (2) Calculated on the basis of 7,687,935 shares of Common Stock outstanding, except that shares of Common Stock underlying options or warrants exercisable within 60 days of the date hereof are deemed to be outstanding for purposes of calculating the beneficial ownership of securities of the holder of such options or warrants.
- (3) Each entry under this heading consists entirely of options to purchase shares of Series A Preferred Stock exercisable within 60 days of the date hereof.
- (4) Calculated on the basis of 1,271,240 shares of Series A Preferred Stock outstanding except that shares of Series A Preferred Stock underlying options or warrants exercisable within 60 days of the date hereof are deemed to be outstanding for purposes of calculating beneficial ownership of securities of the holder of such options or warrants.
- (5) Calculated on the basis of an aggregate of 8,959,175 shares of Common Stock and Series A Preferred Stock outstanding except that shares of Common Stock and Series A Preferred Stock underlying options and warrants exercisable within 60 days of the date hereof are deemed to be outstanding for purposes of calculating beneficial ownership of securities of the holder of such options or warrants. This calculation excludes shares of Common Stock issuable upon the conversion of Series A Preferred Stock.
- (6) The address for Janssen-Meyers Associates, L.P. ("JMA") is 17 State Street, New York, New York 10004. Messrs. Meyers and Janssen are each 50% stockholders and the sole officers and directors of the corporate general partner of JMA. The aggregate number of shares of Common Stock and Series A Preferred Stock, respectively, owned by Messrs. Meyers and Janssen, or with respect to which they own warrants or options exercisable within 60 days of the date hereof, are also set forth as though owned by JMA.
- (7) Mr. Meyers' address is c/o Janssen-Meyers Associates, L.P., 17 State Street, New York, New York 10004. Consists of 789,500 shares of Common Stock and options to acquire an aggregate of 40,000 shares of Common Stock and options to purchase 20,000 shares of Series A Preferred Stock convertible into 20,000 shares of Common Stock, all exercisable within 60 days of the date hereof.
- (8) Mr. Janssen's address is c/o Janssen-Meyers Associates, L.P., 17 State Street, New York, New York 10004. Consists of 750,000 shares of Common Stock and options to acquire 60,000 shares of Common Stock and options to purchase 30,000 shares of Series A Preferred Stock convertible into 30,000 shares of Common Stock, all of which are exercisable within 60 days of the date hereof.
- (9) The address for Kinder Investments, L.P. is 779 CR403, Greenville, New York 12083. Kinder Investments, L.P. is a Delaware limited partnership, the general partner of which is the Chairman of the Board of D.H. Blair & Co., Inc., and, whose limited partners consist of the children (including the wife of Dr. Rosenwald) and grandchildren of J. Morton Davis the sole

51

stockholder of Blair. Consists of 750,000 shares of Common Stock and Class A Warrants to acquire 40,000 shares of Common Stock, all of which are exercisable within 60 days of the date hereof.

- (10) The address for Dr. Rosenwald is c/o 375 Park Avenue, New York, New York 10022. Dr. Rosenwald is a son-in-law of J. Morton Davis. See note (9) above.
- (11) Consists of 200,000 shares of Common Stock and options to acquire 220,000 shares of Common Stock exercisable within 60 days of the date hereof. Does not include options to purchase 30,000 shares of Common Stock not exercisable within 60 days of the date hereof.
- (12) Consists of options to purchase 33,400 shares which are currently exercisable. Does not include options to purchase 35,600 shares of Common Stock not exercisable within 60 days of the date hereof.
- (13) Consists of options to purchase 29,000 shares which are currently exercisable. Does not include options to purchase 36,000 shares of Common Stock which are not exercisable within 60 days of the date hereof.
- (14) Consists of options to purchase 29,000 shares which are currently

exercisable. Does not include options to purchase 36,000 shares of Common Stock which are not exercisable within 60 days of the date hereof.

(15) Consists of 200,000 shares of Common Stock and options to purchase an aggregate of 321,400 shares of Common Stock exercisable within 60 days of the date hereof. Does not include options to purchase 107,600 shares of Common Stock not exercisable within 60 days of the date hereof.

52

## SELLING SECURITY HOLDERS

An aggregate of up to 500,000 Class A Warrants, 1,018,750 Class B Warrants, 506,250 Blair Warrants and an aggregate of 810,000 shares of Common Stock issuable upon exercise of the Warrants may be offered by certain security holders who received their Warrants in connection with the 1994 Bridge Financing and/or the 1995 Bridge Financing or by their transferees.

Blair is a Selling Security Holder that beneficially owns all 506,250 Blair Warrants and the Common Stock underlying such warrants. The Company is registering all 506,250 Blair Warrants for resale to the public. The following table sets forth certain information with respect to each Selling Security Holder for whom the Company is registering the Class A and Class B Warrants and the Common Stock underlying such warrants for resale to the public. The Company will not receive any of the proceeds from the sale of the Warrants, however, it will receive proceeds from the exercise, if any, of any such Warrants. Except as described below, there are no material relationships between any of the Selling Security Holders and the Company, nor have any such material relationships existed within the past three years.

<TABLE>

<CAPTION>

	Number of Class A Warrants Beneficially Owned and Maximum Number To Be Sold(1)	Number of Class B Warrants Beneficially Owned and Maximum Number To Be Sold(2)	
<s> Lea &amp; Uriel Adar</s>	<c></c>	<c> 25,000</c>	
Argonaut Partnership L.P.		15,093.75	
Tom & Noreen Axon		25,000	
Clifford Barr	12,500		
Anthony Bartone	25,000		
L. Robert Bauers		12,500	
Bear Stearns Sec. Corp. Custodian Marc Friedland IRA		25,000	
Andrew Bressman	25,000		
David F. Burr		25,000	
Robert V. Call, Jr.	12,500	25,000	
Michael Cantor	12,500		
Horace J. Caulkins	6,250		
Cooke B. Christopher		15,000	
CLFS, Ltd.		12,500	
Douglas M. Colbert	12,500	6,250	
Howard Commander		12,500	
Richard H. Davimos TTEE FBO Richard H. Davimos Tru	25,000		
Davstar II Managed Investments Corp. N.V.		25,000	

  |  |  |53

<TABLE>

<CAPTION>

Owned and Maximum Number To Be Sold(1)

Selling Securityholder

Owned and Maximum Number To Be Sold(2)

Selling Securityholder	Sold(1)	Sold(2)	
<s> Delaware Charter Guarantee &amp; Trust Co. F/B/O Beverly Levy IRA</s>	<c></c>	<c> 6,250</c>	
Kenneth Eitman IRA		25,000	
John C. Farinick		6,250	
Richard Friedman		25,000	
Paul B. and Laura G. Garrison		50,000	
Gerstenhaber Investments		9,906.25	
Joseph Giamanco		25,000	
Jerome Gilbert	12,500		
Ronald D. Glickman	12,500		
Mark P. Greenstein	18,750	6,250	
Richard J. Haughwout		12,500	
Gerald A. Holmes	12,500		
Ginger Huggins		6,250	
Richard Incandela Trust		150,000	
Barry J. Jacobson c/o Joseph P. Day Realty		18,750	
Barry J. Jacobson		50,000	
Steven A. Jaffe	6,250		
J.M. Hull Associates, L.P.	12,500		
Gary Kaplowitz		12,500	
Kinder Investments L.P. Attn: Kenton E. Wood	100,000		
Lewis Kooden		20,000	
Lewis Kooden IRA		5,000	
Herbert Lerman	12,500		
Dale S. Lersch		50,000	
George Lionikis, Sr.	12,500		
Scott E. Lowry		43,750	
Daniel A. McKenzie		25,000	
Momentum Enterprises Inc. Money Purchase Trust	12,50		
Todd J. Mueller		12,500	
James B. Murphy		12,500	
Denis Nayden	25,000	50,000	

  |  |  || 54 |  |  |  |
Number of Class A Number of Class B Warrants Warrants Beneficially Owned and Maximum Number To Be Beneficially
Owned and Maximum
Number To Be

Selling Securityholder Sold(1) Sold(2) <S> <C> <C> Omnitek, Inc. 12,500 Thomas L. and Easter C. Parks, 12,500 **JTWROS** 

Charles Potter	12,500		
James Rhodes		10,000	
Michel McNulty Rosner		12,500	
Phillip Rossett, M.D.		12,500	
Allan Rothstein		25,000	
John Santoro		50,000	
Barry A. Schatz		25,000	
Robert Schultz	12,500		
James Scibelli	25,000		
Leonard P. Shaykin	12,500		
Mark Shnitkin	6,250		
Nicholas Sitnycky	6,250		
Software Marketing Corporation		12,500	
Kathleen and Forrest Vander Vliet	12,500		
Carl F.R. Weiman	12,500		
Myron Weiner	6,250		
TOTAL	500,000	1,018,750	

#### </TABLE>

- (1) Does not include shares of Common Stock issuable upon exercise of the Class A Warrants.
- (2) Does not include shares of Common Stock issuable upon exercise of the Class B Warrants.

55

## DESCRIPTION OF SECURITIES

## AUTHORIZED STOCK

The authorized capital stock of the Company consists of 30,000,000 shares of Common Stock, par value \$.01 per share, and 10,000,000 shares of Preferred Stock, par value \$.01 per share.

## COMMON STOCK

Of the authorized Common Stock, as of October 1, 1996, 7,687,935 shares are currently outstanding and are held by 161 record holders. Subject to the prior rights of the holders of any shares of Preferred Stock currently outstanding or which may be issued in the future, the holders of the Common Stock are entitled to receive dividends from funds of the Company legally available therefor when, as and if declared by the Board of Directors of the Company, and are entitled to share ratably in all of the assets of the Company available for distribution to holders of Common Stock upon the liquidation, dissolution or winding-up of the affairs of the Company subject to the liquidation preference, if any, of any then outstanding shares of Preferred Stock of the Company. Holders of the Common Stock do not have any preemptive, subscription, redemption or conversion rights. Holders of the Common Stock are entitled to one vote per share on all matters which they are entitled to vote upon at meetings of stockholders or upon actions taken by written consent pursuant to Delaware corporate law. The holders of Common Stock do not have cumulative voting rights, which means that the holders of a plurality of the outstanding shares can elect all of the directors of the Company. All of the shares of the Common Stock currently issued and outstanding are, and the shares of the Common Stock to be issued upon exercise of the Warrants, when paid for in accordance with the terms will be, fully-paid and nonassessable. No dividends have been paid to holders of the Common Stock since the incorporation of the Company, and no dividends are anticipated to be declared or paid in the reasonably foreseeable future. See "Dividend Policy." The Common Stock and the Warrants are traded on the Nasdaq SmallCap Market. There can be no assurance, however, that the securities will not be delisted from the Nasdaq SmallCap Market.

## PREFERRED STOCK

The Board of Directors of the Company has the authority, without further action by the holders of the outstanding Common Stock, to issue Preferred Stock from time to time in one or more classes or series, to fix the number of shares constituting any class or series and the stated value thereof, if different from the par value, and to fix the terms of any such series or class, including dividend rights, dividend rates, conversion or exchange rights, voting rights, rights and terms of redemption (including sinking fund

provisions), the redemption price and the liquidation preference of such class or series. The Company presently has one series of Preferred Stock outstanding, designated as the Company's Series A Convertible Preferred Stock (the "Series A Preferred Stock"). The Company has no present plans to issue any other series or class of Preferred Stock. The designations, rights and preferences of the Series A Preferred Stock is set forth in the Certificate of Designations of Series A Convertible Preferred Stock, which has been filed with the Secretary of State of the State of Delaware.

Series A Preferred Stock. Of the authorized Preferred Stock, as of October 1, 1996, 4,000,000 shares have been designated Series A Preferred Stock, of which 1,271,240 shares are currently issued and outstanding and held by 166 stockholders. Dividends are payable on the Series A Preferred Stock in the amount of \$.25 per share, payable annually in arrears. At the option of the Board of Directors of the Company, dividends will be paid either (i) wholly or partially in cash or (ii) in newly issued shares of Series A Preferred Stock valued at \$2.50 per share to the extent a cash dividend is not paid. Shares of Series A Preferred Stock were issued in January 1993 as partial payment of the dividend due on the

56

Series A Preferred Stock for the year ended December 31, 1992 (the remaining dividend was paid in cash), 104,869 shares of Series A Preferred Stock were issued in January 1994 as full payment of the dividend due on the Series A Preferred Stock for the year ended December 31, 1993, 115,307 shares of Series A Preferred Stock were issued in January 1995 as full payment of the dividend due on Series A Preferred Stock for the year ended December 31, 1994 and 126,888 shares of Series A Preferred Stock were issued in January 1996 as full payment of the dividend due on the Series A Preferred Stock for the year ended December 31, 1995. See "Dividend Policy." Holders of Series A Preferred Stock have the right to convert their shares, at their option exercisable at any time, into shares of Common Stock of the Company on a one-for-one basis subject to anti-dilution adjustments. These anti-dilution adjustments are triggered in the event of any subdivision or combination of the Company's outstanding Common Stock, any payment by the Company of a stock dividend to holders of the Company's Common Stock or other occurrences specified in the Certificate of Designations relating to the Series A Preferred Stock. The Company may elect to convert the Series A Preferred Stock into Common Stock or a substantially equivalent preferred stock in case of a merger or consolidation of the Company in which the Company does not survive, a sale of all or substantially all of the Company's assets or a substantial reorganization of the Company. 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 the rights, preferences or privileges of the Series A Preferred Stock and any increase in the number of authorized shares of Series A Preferred Stock. The Company, at its sole option, may redeem all or any portion of the Series A Preferred Stock at \$2.50 per share plus accrued and unpaid dividends. In the event of any liquidation or winding up of the Company, the holders of the Series A Preferred Stock will be entitled to receive \$2.50 per share plus any accrued and unpaid dividends before any distribution to the holders of the Common Stock.

The Series A Preferred Stock was originally sold by the Company as part of a private placement of Units consisting of 10,000 shares of Series A Preferred Stock and 20,000 shares of Common Stock (the "Private Placement Units") in January and February 1992 (the "1992 Private Placement"). A total of 100 Private Placement Units were sold in the 1992 Private Placement at a purchase price of \$50,000 per unit. In addition, the placement agent for the 1992 Private Placement, D.H. Blair Investment Banking Corp. ("Blair"), received options to purchase ten Private Placement Units, or an aggregate of 100,000 shares of Series A Preferred Stock and 200,000 shares of Common Stock, at a purchase price of \$50,000. Blair has transferred to Peter Janssen options to purchase three Private Placement Units and to Bruce Meyers options to purchase two Private Placement Units. These options held by Blair and Messrs. Janssen and Meyers expire in 1997. See "Certain Transactions."

## CLASS A WARRANTS, CLASS B WARRANTS AND BLAIR WARRANTS

The following discussion of the terms and provisions of (i) the Class A Warrants and 166,667 Blair Warrants is qualified in its entirety by reference to that certain warrant agreement, dated April 22, 1994, between the Company, Blair and American Stock Transfer and Trust Company (the "Warrant Agent") and (ii) the Class B Warrants and 339,583 Blair Warrants is qualified in its entirety by reference to that certain warrant agreement, dated October 26, 1994, between the Company, JMA and the Warrant Agent.

There are currently outstanding Warrants to purchase an aggregate of 810,000 shares of Common Stock. The Warrants consist of 500,000 Class A Warrants, 1,018,750 Class B Warrants and 506,250 Blair Warrants. Each Class A Warrant, Class B Warrant and Blair Warrant entitles the holder to purchase four-tenths of a share of Common Stock. The Class A Warrants and the Blair Warrants are exercisable at \$3.75 per share of Common Stock and the Class B Warrants are exercisable at \$4.375

57

The Warrants may be exercised upon surrender of the certificate therefor on or prior to the expiration or redemption date (as explained above) at the offices of the Company's Warrant Agent with the form of "Election to Purchase" on the reverse side of the certificate filled out and executed as indicated, accompanied by payment (in the form of a certified or cashier's check payable to the order of the Company) of the full exercise price for the number of Warrants being exercised. The Company, in its discretion, has the right to reduce the exercise price of either or all classes of Warrants subject to compliance with Rule 13e-4 promulgated under the Exchange Act, if applicable.

The Warrants contain provisions that protect the holders thereof against dilution by adjustment of the exercise price and rate in certain events, such as stock dividends, stock splits or combinations, mergers, sales of all or substantially all of the Company's assets at less than market value, sales of stock at below market price and other unusual events.

The Company is not required to issue fractional shares and in lieu thereof will make a cash payment based upon the current market value of such fractional shares (determined as the mean between the last reported bid and asked prices reported or, if the Common Stock is an NNM security or traded on a securities exchange, the last reported sales price, in each case as of the last business day prior to the date of exercise). The holder of Warrants will not have any rights as a stockholder of the Company unless and until the Warrants are exercised.

#### WSURF WARRANTS

The Company has granted, to the Washington State University Research Foundation, 36,000 warrants (the "WSURF Warrants"). The holder of each WSURF Warrant is entitled to purchase one share of Common Stock at an aggregate exercise price of \$4.25. An aggregate of 12,000 WSURF Warrants may be exercised after July 7, 1999, an aggregate of 24,000 WSURF Warrants may be exercised after July 7, 2000 and an aggregate of 36,000 WSURF Warrants may be exercised after July 7, 2001 and all such WSURF Warrants will remain exercisable until July 7, 2002 when the right to exercise shall terminate absolutely.

#### CLASS C WARRANTS AND CLASS D WARRANTS

The following discussion of the terms and provisions of the Class C and Class D Warrants is qualified in its entirety by reference to that certain warrant agreement (the "Warrant Agreement") between the Company, JMA and American Stock Transfer and Trust Company as the warrant agent (the "Warrant Agent"). The Warrants will be evidenced by warrant certificates in registered form.

As of the date of this Prospectus, the Company has 2,300,000 Class C Warrants and 2,300,000 Class D Warrants outstanding. The holder of each Class C Warrant is entitled to purchase one share of Common Stock and one Class D Warrant at an aggregate exercise price of \$6.50. The Class C Warrants are exercisable at any time until November 2, 2000, provided that at such time a current prospectus under the Securities Act relating to the Common Stock and the Class D Warrants is then in effect and the Common Stock and the Class D Warrants are qualified for sale or exempt from qualification under applicable state securities laws.

The holder of each Class D Warrant is entitled to purchase one share of Common Stock at an exercise price of \$8.75. The Class D Warrants are exercisable at any time after issuance until November 2, 2000, provided that at such time a current prospectus under the Securities Act relating to the Common Stock is then in effect and the Common Stock is qualified for sale or exempt from qualification under applicable state securities laws. The Class D Warrants

58

issuable upon exercise of the Class C Warrants are, upon issuance, transferable separately from the Common Stock and Class C Warrants. The Class C Warrants and the Class D Warrants are subject to redemption, as described in the Warrant Agreement.

## UNIT PURCHASE OPTION

Pursuant to an agreement by and between the Company and the underwriters in the IPO, the Company sold to the underwriters, or their designee(s), for nominal consideration, a Unit Purchase Option (the "Unit Purchase Option") to purchase up to an aggregate of 200,000 Units at \$8.25 per Unit, subject to certain anti-dilution adjustments. The Units purchasable upon exercise of the Unit Purchase Option are identical to the Units offered in the IPO, except that the Class C and Class D Warrants issuable in connection therewith are subject to redemption, if at the time of a call for redemption the Unit Purchase Option has been exercised and such Class C and Class D Warrants are then outstanding, and have certain different anti-dilution provisions. The Unit Purchase Option will be exercisable during the two-year period commencing on November 2, 1998. The Unit Purchase Option is not transferable for the three-year period commencing on the date of issuance, except that it may be assigned in whole or in part to any officer of the underwriters or member of the selling group. During the term of the Unit Purchase Option, the holder thereof is given, at nominal cost, the opportunity to profit from a rise in the market

price of the Common Stock by exercising such Option, with a resulting dilution in the interests of other Company stockholders. As a result, the Company may find it more difficult to raise additional equity capital if it should be needed for the operation of the Company while the Unit Purchase Option is outstanding. Moreover, at any time when the holder(s) of the Unit Purchase Option might be expected to exercise it, the Company would probably be able to obtain additional equity capital on terms more favorable than those provided by the Unit Purchase Option. The Company has agreed to register under the Securities Act on two separate occasions, the first at its own expense, the Unit Purchase Option and/or the securities underlying it at the request of the holder thereof. The Company has also agreed to provide certain "piggy-back" registration rights for the holder(s) of the Unit Purchase Option and/or the securities underlying it.

#### TRANSFER AGENT AND WARRANT AGENT

American Stock Transfer and Trust Company will serve as the Transfer Agent for the Common Stock and Warrants and as Warrant Agent for the Warrants.

#### REGISTRATION RIGHTS

Holders of (i) 2,000,000 shares of Common Stock outstanding, (ii) warrants to purchase 200,000 shares of Common Stock, (iii) 1,271,240 shares of Series A Preferred Stock convertible into an equal number of shares of Common Stock and (iv) warrants to purchase 100,000 shares of Series A Preferred Stock convertible into an equal number of shares of Common Stock (the Common Stock referred to in (i) through (iv) above collectively, the "Registrable Securities") are entitled to demand and "piggy-back" registration rights with respect to such Registrable Securities commencing December 2, 1996 and ending November 2, 2000. The holders of more than 50% of the Registrable Securities may request that the Company file a registration statement under the Securities Act, and, subject to certain conditions, the Company generally will be required to use its best efforts to effect any such registration. In addition, if the Company proposes to register any of its securities, either for its own account or for the account of other stockholders, the Company is 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 2, 1996 and by November 2, 2000, all of the shares of the Registrable Securities requested to be included

59

by such holders. Holders of 36,000 WSURF warrants to purchase 36,000 shares of Common Stock have certain "piggy-back" registration rights. Holders of 20,000 shares of Common Stock issued by the Company in connection with the formation of the joint venture with Pestka Biomedical Laboratories, Inc. also have certain "piggy-back" registration rights. The Company is generally obligated to bear the expenses, other than underwriting discounts and sales commissions, of all of these registrations. Any exercise of such registration rights may hinder efforts by the Company to arrange future financings of the Company and may have an adverse effect on the market price of the Company's securities.

## BUSINESS COMBINATION PROVISIONS

The Company is subject to a Delaware statute regulating "business combinations," defined to include a broad range of transactions, between Delaware corporations and "interested stockholders," defined as persons who have acquired at least 15% of a corporation's stock. Under the law, a corporation may not engage in any business combination with any interested stockholder for a period of three years from the date such person became an interested stockholder unless certain conditions are satisfied. The statute contains provisions enabling a corporation to avoid the statute's restrictions.

At this time, the Company will not seek to "elect out" of the statute and, therefore, upon closing of this offering and the registration of its securities under the Securities Exchange Act of 1934, the restrictions imposed by such statute will apply to the Company.

## BRIDGE FINANCINGS

In order to fund its continuing operations, the Company completed two bridge financings, one in August 1994 ("1994 Bridge Financing") and one in April 1995 ("1995 Bridge Financing"). In connection with the 1994 Bridge Financing, the Company issued (i) an aggregate of \$1,000,000 in principal amount of 9%, Subordinated Notes ("1994 Notes") and (ii) an aggregate of 500,000 Bridge Warrants ("Class A Warrants") to purchase an aggregate of 200,000 shares of the Company's Common Stock exercisable at \$3.75, which Class A Warrants are exercisable until November 7, 2000. In connection with the 1995 Bridge Financing, the Company issued (i) an aggregate of \$2,037,500 in principal amount of 9% Subordinated Notes ("1995 Notes") and (ii) an aggregate of 1,018,750 Bridge Warrants ("Class B Warrants") to purchase an aggregate of 407,500 shares of the Company's Common Stock exercisable at \$4.375, which Class B Warrants are exercisable until November 7, 2000. The Company has repaid the 1994 and the 1995 Notes. In addition, warrants were issued to the placement agent of the 1994 Bridge Financing, as described below.

In connection with the 1994 Bridge Financing, Blair acted as placement agent. In consideration of these services, the Company paid to Blair a fee equal to \$120,000, a non-accountable expense allowance of \$10,000 and an option to acquire warrants to purchase up to an aggregate of 66,667 shares of

the Company's Common Stock at an exercise price of \$3.75 per share. In addition, in connection with the 1994 Bridge Financing, the Company executed a merger and acquisition agreement ("M/A Agreement") with Blair and granted Blair a right of first refusal with respect to offerings of securities of the Company. In anticipation of the 1995 Bridge Financing all such rights of Blair with respect to the M/A Agreement and right of first refusal were cancelled in consideration of the payment by the Company to Blair of \$50,000. In addition, pursuant to a consulting agreement with the Company, Blair rendered investment banking advice and assistance in structuring the 1995 Bridge Financing. In consideration of these services, the Company granted Blair an option to acquire warrants equaling 33-1/3% of all warrants issued in connection with the 1995 Bridge Financing. Such warrants to purchase an aggregate of 135,833 shares of Common Stock provide for an exercise price of \$3.75 per share. The holders of these warrants issued to the placement agent of the 1994 Bridge Financing have certain demand and "piggy-back" registration rights. The warrants

60

granted to Blair to purchase an aggregate of 66,667 shares of Common Stock and 135,833 shares of Common Stock are herein referred to as the "Blair Warrants."

JMA acted as placement agent for the 1995 Bridge Financing and in consideration thereof received a fee of \$203,750 plus a non-accountable expense allowance of \$61,125. In addition, JMA was granted, in connection with its services as Placement Agent for the 1995 Bridge Financing, a (i) five-year right of first refusal to act as agent for offerings of securities by the Company and certain of its shareholders and (ii) merger and acquisition agreement.

The aggregate net proceeds to the Company from the issuance of its 1994 Notes and 1995 Notes and its Class A Warrants and Class B Warrants was approximately \$2,500,000. The Company used the proceeds from the 1994 Bridge Financing to fund its operations (including paying for research and development activities, operating expenses and accrued liabilities, and for officers compensation) and a portion of the expenses of the 1994 Bridge Financing and the 1995 Bridge Financing.

#### SHARES ELIGIBLE FOR FUTURE SALE

The Company has 7,687,935 shares of Common Stock outstanding. Holders of the Warrants will be entitled to purchase an aggregate of 810,000 shares of Common Stock upon the exercise of the Warrants until November 7, 2000 and holders of the Class C and Class D Warrants will be entitled to purchase an aggregate of 6,900,000 additional shares of Common Stock upon the exercise of such warrants until November 2, 2000, provided that the Company satisfies certain securities registration and qualification requirements with respect to the securities underlying the Warrants and the Class C and Class D Warrants. All shares of Common Stock purchased upon exercise of the Warrants and the Class C and Class D Warrants will be freely tradeable without restriction under the Securities Act (provided that such registration and qualification requirements are met), except for any shares purchased by any person who is or thereby becomes an "affiliate" of the Company, which shares may be subject to the resale limitations contained in Rule 144 promulgated under the Securities Act.

Up to 800,000 additional shares of Common Stock, may be purchased by the underwriters in connection with the IPO through the exercise of the Unit Purchase Option and the warrants included therein (including the Class D Warrants issuable upon exercise of the Class C Warrants included therein) (collectively, the "Option Warrants"). Any and all shares of Common Stock purchased upon exercise of the Option Warrants may be freely tradeable, provided that the Company satisfies certain securities registration and qualification requirements in accordance with the terms of the Unit Purchase Option.

5,387,935 shares of Common Stock, none of which are being offered hereby, are "restricted securities" within the meaning of Rule 144 under the Securities Act and, if held for at least two years (which a substantial portion of the shares are), may be eligible for sale in the public market in reliance upon Rule 144 following the expiration of such two-year period.

In general, under Rule 144, as currently in effect, a person (or persons whose shares are aggregated), including a person who may be deemed to be an "affiliate" of the Company as that term is defined under the Securities Act, will be entitled to sell within any three-month period a number of shares beneficially owned for at least two years that does not exceed the greater of (i) one (1%) percent of the then outstanding shares of Common Stock, or (ii) the average weekly trading volume in the Common Stock during the four calendar weeks preceding such sale. Sales under Rule 144 are also subject to certain requirements as to the manner of sale, notice and the availability of current public information about the Company. However, a person who is not deemed to have been an affiliate of the Company during the 90 days preceding a sale by such person, and who has

6

beneficially owned shares of Common Stock for at least three years, may sell such shares without regard to the volume, manner of sale or notice requirements of Rule 144.

Common Stock pursuant to Rule 144 or otherwise, or the availability of such shares for sale, will have on the market price prevailing from time to time. Nevertheless, sales by the existing stockholders of substantial amounts of Common Stock in the public market could adversely affect prevailing market prices for the Common Stock. In addition, the availability for sale of a substantial amount of Common Stock acquired through the exercise of the Warrants, the Class C and Class D Warrants and the Unit Purchase Option could adversely affect prevailing market prices for the Common Stock. However, holders of (i) 1,580,000 shares of Common Stock outstanding, (ii) options to purchase 300,000 shares of Common Stock, (iii) options to purchase the Blair Warrants and (iv) options to purchase 50.000 shares of Series A Preferred Stock convertible into an equal number of shares of Common Stock agreed not to sell, assign or transfer any of their shares of the Company's securities held by them for a period of 13 months ending on December 7, 1996 without JMA's prior written consent. In addition, in connection with their subscription to purchase units consisting of Common Stock and Series A Preferred Stock in the Company's 1992 Private Placement, the holders of an aggregate of approximately 2,000,000 shares of Common Stock and 1,271,240 shares of Series A Preferred Stock agreed not to sell any such securities for 180 days from November 7, 1995 or such longer period as JMA may require, without the prior written consent of JMA. JMA has advised the Company that it expects it will generally require these holders to refrain from selling such shares of Common Stock and Series A Preferred Stock for a period of 13 months ending on December 7, 1996. After December 7, 1996, the shares subject to such agreements may be sold under Rule 144, subject to the Rule's conditions

## PLAN OF DISTRIBUTION

The securities offered hereby are being offered directly by the Company pursuant to the terms of the Warrants. No underwriter is being utilized in connection with this offering.

The Company has agreed to pay JMA a fee (the "Solicitation Fee") equal to 5% of the aggregate exercise price of all Class B Warrants exercised if (i) the market price of the Common Stock on the date that the Warrants are exercised is greater than the Warrant exercise price; (ii) the exercise of the Warrants was solicited by JMA or its representative or agent and the warrantholder designates in writing that the exercise was solicited thereby; (iii) the Warrants are not held in a discretionary account; (iv) disclosure of this compensation arrangement is made by JMA at the time of the exercise of the Warrants; and (v) the solicitation of the exercise of the Warrants was not in violation of Rule 10b-6 promulgated under the Exchange Act. JMA will generally be prohibited, pursuant to Rule 10b-6, from engaging in market making activities with regard to the Company's securities for a period specified by Rule 10b-6 prior to any solicitation of the exercise of Warrants until the termination of such solicitation. Accordingly, JMA may be unable to provide a market for the Company's securities during certain periods while the Warrants are exercisable.

## LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for the Company by Bryan Cave LLP, New York, New York. Certain legal matters with respect to information contained in this Prospectus under the headings "Risk Factors --Royalty Obligations; Possible Loss of Patents and Other Proprietary Rights," " -- Uncertain Ability to Protect Proprietary Technology" and "Business

62

- -- Patents, Licenses and Proprietary Rights" will be passed upon for the Company by Warren & Perez, Dallas, Texas.

## **EXPERTS**

The balance sheet as at December 31, 1995 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, 1995 and for the period from inception (September 11, 1991) through December 31, 1995 included in this Prospectus have been audited by, and are included 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.

63

CYTOCLONAL PHARMACEUTICS INC. (a development stage company)

- INDEX-

<TABLE> <CAPTION>

<S>

BALANCE SHEETS AS AT DECEMBER 31, 1995 AND AS AT JUNE 30, 1996 (UNAUDITED)

F-3

STATEMENTS OF OPERATIONS FOR EACH OF THE YEARS IN THE TWO-YEAR PERIOD ENDED DECEMBER 31, 1995, FOR THE PERIOD SEPTEMBER 11, 1991 (INCEPTION) THROUGH DECEMBER 31, 1995, FOR THE SIX-MONTH PERIODS ENDED JUNE 30, 1995 AND JUNE 30, 1996 (UNAUDITED) AND FOR THE PERIOD FROM SEPTEMBER 11, 1991 (INCEPTION) THROUGH JUNE 30, 1996 (UNAUDITED)

STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (CAPITAL DEFICIENCY) FOR THE PERIOD SEPTEMBER 11, 1991 (INCEPTION) THROUGH DECEMBER 31, 1995, AND FOR THE SIX-MONTH PERIOD ENDED JUNE 30, 1996 (UNAUDITED)

STATEMENTS OF CASH FLOWS FOR EACH OF THE YEARS IN THE TWO-YEAR PERIOD ENDED DECEMBER 31, 1995, FOR THE PERIOD FROM SEPTEMBER 11, 1991 (INCEPTION) THROUGH DECEMBER 31, 1995, FOR THE SIX-MONTH PERIODS ENDED JUNE 30, 1995 AND JUNE 30, 1996 (UNAUDITED) AND FOR THE PERIOD SEPTEMBER 11, 1991 (INCEPTION) THROUGH JUNE 30, 1996 (UNAUDITED)

NOTES TO FINANCIAL STATEMENTS </TABLE>

F-7

F-1

#### REPORT OF INDEPENDENT AUDITORS

Board of Directors and Stockholders Cytoclonal Pharmaceutics Inc. Dallas, Texas

We have audited the accompanying balance sheet of Cytoclonal Pharmaceutics Inc. (a development stage company) as at December 31, 1995, and the related 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, 1995 and for the period September 11, 1991 (inception) through December 31, 1995. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements enumerated above present fairly, in all material respects, the financial position of Cytoclonal Pharmaceutics Inc. at December 31, 1995, and results of its operations and its cash flows for each of the years in the two-year period ended December 31, 1995 and for the period September 11, 1991 (inception) through December 31, 1995 in conformity with generally accepted accounting principles.

Richard A. Eisner & Company, LLP

New York, New York February 2, 1996

F-2

CYTOCLONAL PHARMACEUTICS INC. (a development stage company)

BALANCE SHEETS

<TABLE> <CAPTION>

ASSETS

December 31,

June 30, 1996

<\$>	<c></c>	(Unaudited) <c></c>	
Current assets: Cash and cash equivalents (Note B[6]) Prepaid expenses and other current assets		\$ 5,442,000 31,000	\$ 4,290,000 40,000
Total current assets	5,473		330,000
Equipment, net (Notes B[1] and E)		60,000	88,000
Patent rights, less accumulated amortization of \$312,000 and \$350,000 (Notes B[2] and C)		938,000	900,000
Investment in joint venture - at equity (Note D[2])		39,000	27,000
Other assets	. 5,000	5,00	00
T O T A L	\$ 6,515,0		50,000
LIABILITIES AND STOCKHOLDERS'	EQUITY		
Current liabilities: Accounts payable and accrued expenses (Note K)		\$ 235,00	390,000
Royalties payable (Note C)	1,	,250,000	1,250,000
Total liabilities	. 1,485,00		0,000
Commitments and other matters (Notes C, D, I and J)			
Stockholders' equity (Note F):  Preferred stock - \$.01 par value, 10,000,000 shares auth 1,276,458 shares of Series A convertible preferred isst at December 31, 1995 and June 30, 1996, respectively \$3,172,000 and \$3,192,000 at December 31, 1995 and respectively)	ued and outstan (liquidation va June 30, 1996, . 13,00	ding llue 0 13,0	000
7,682,717 shares issued and outstanding at December 1996, respectively.	31, 1995 and Ju	ine 30,	7,000
Additional paid-in capital	13,9	903,000	13,902,000
Deficit accumulated during the development stage	· · · · · · · · · · · · · · · · · · ·	(8,962,00	0) (10,282,000)
Total stockholders' equity	5,0	030,000	3,710,000
T O T A L	\$ 6,515,0	000 \$ 5,3	50,000

The accompanying notes to financial statementare an integral part hereof.	ts					
F-3						
CYTOCLONAL PHARMACEUTICS IN (a development stage company)	IC.					
STATEMENTS OF OPERATIONS						
September 11,		Septembe	r 11,			
` **.**	\*	Months Ended	(Inception)			
December 31, throug December 1994 1995 1995	er 31,		hrough June 30, 1996			
		(Unaudite				
~~Operating expenses:~~						
Research and development \$ 1,099,000 \$ 1,181,000	\$ 4,731,000	\$ 599,000	\$ 729,000 \$ 5,460,000			

General and administrative.	1,054,000	) 1,138,000	3,796,000	615,000	707,000	4,503,000
-			8,527,000 1,2			9,963,000
Other (income) exp	penses:					
Interest (income)	(5,000	(47,000)	(203,000)	(5,000)	(116,000)	(319,000)
Interest expense.	117,000	419,000	559,000	223,000		559,000
	112,000	372,000	356,000 218	3,000 (1	16,000) 2	240,000
			000) \$(8.883.00	00) \$(1.43)	2.000) \$(1.3	320,000) \$(10,203,000)
Net (loss) per com- share	mon \$(.48) =====	\$(.53) ======	\$(.30) ===	\$(.19)		
Weighted average shares outstandir (Note B[5]) 						

5,695,000	= 5,	367,415	7,603,193 = =====				ompanying notes e an integral part	s to financial state hereof.	ements			
	F-4											
	TOCLONAL P	HARMACEUTI	CS INC.									
STATEMENT	CS OF CHANGE (Note F)	ES IN STOCKHO	LDERS' EQUITY	(CAPITAL	DEFICIENCY	Y)						
<TABLE> <CAPTION>

	Conve		Comm	on Stock	Additiona aid-in	1
	Shares	Amount	Shares	Amount	Capital	
<s> Common stock issued, no par Value assigned to warrants issued. Exchange of shares of no par shares for \$.01 par value shares Net (loss) for the period September (inception) through December 31,</s>	11, 1991	<c></c>	<c> 3,20</c>	<c> 0,000 \$32,000</c>	 <c> \$ 1,00 3,000 47,000</c>	00
Balance - December 31, 1991			3,20	00,000 32,	,000 5	1,000
Stock issued in connection with pri- less expenses of \$649,000 Common stock issued, \$1.65 per sh Net (loss) for the year	are (Note D	1,000,000	\$10,000	2,000,000 20,000	20,000	4,321,000 33,000
Balance - December 31, 1992		1,000,000	10,000	5,220,000	52,000	4,405,000
Value assigned to options issued (N Preferred dividend (cash and stock) Net (loss) for the year		48,611 	1,000		13,0 (123	00 3,000)
Balance - December 31, 1993		1,048,611	11,000	5,220,000	52,000	4,295,000
Value assigned to warrants issued in placement of debt securities (Note Preferred dividend (stock)	F[4])	104,869	1,000		187,000 (1,000	
Balance - December 31, 1994		1,153,480	12,000	5,220,000	52,000	4,481,000
Value assigned to warrants issued in placement of debt securities (Note Preferred dividend (stock) Simultaneous exercise of options (\$	F[4])	115,307 nare)	1,000		82,000 (1,000	
and purchase of treasury stock (\$4. Retirement of treasury stock	00 per share		(36,5	80,000 500)	1,000 (146,000	145,000

Issuance of common stock in initial public offering (net of costs of \$2,135,000) (\$5.00 per unit) Net (loss) for the year	2,300,000 23,000 9,342,000
Balance - December 31, 1995 1,268,787 13,0	000 7,563,500 76,000 13,903,000
Preferred dividend (stock)	1,000 (1,000) 119,217
BALANCE - JUNE 30, 1996 (UNAUDITED) 1,276,4	58 \$13,000 7,682,717 \$77,000 \$13,902,000
[BROKEN TABLE]	
Deficit Accumulated Treasury During	
Development Common Stage Shares Am	ount Total
Common stock issued, no par	\$ 1,000 3,000
for \$.01 par value shares \$ (79,000)  Net (loss) for the period September 11, 1991  (inception) through December 31, 1991 (218,000)	- 0 - (218,000)
Balance - December 31, 1991 (297,000)	(214,000)
Stock issued in connection with private placement, less expenses of \$649,000	4,351,000 33,000 (1,317,000)
Balance - December 31, 1992 (1,614,000)	2,853,000
Value assigned to options issued (Note D[1]) Preferred dividend (cash and stock)	13,000 (122,000) (2,392,000)
Balance - December 31, 1993 (4,006,000)	352,000
Value assigned to warrants issued in private placement of debt securities (Note F[4])  Preferred dividend (stock)	187,000 - 0 - (2,265,000)
Balance - December 31, 1994 (6,271,000)	(1,726,000)
Value assigned to warrants issued in private placement of debt securities (Note F[4])	82,000 - 0 -
and purchase of treasury stock (\$4.00 per share) . (36 Retirement of treasury stock	5,500) \$(146,000) - 0 - 146,000 - 0 - 9,365,000 (2,691,000)
Balance - December 31, 1995 (8,962,000) -	
Preferred dividend (stock)	- 0 -
Net (loss) for the six-month period (1,320,000)	(1,320,000)
BALANCE - JUNE 30, 1996 (UNAUDITED)	2,000) - 0 - \$ - 0 - \$ 3,710,000

  || The accompanying notes to financial statements are an integral part hereof. |  |
| F-5 |  |
STATEMENTS OF CASH FLOWS

(a development stage company)

CYTOCLONAL PHARMACEUTICS INC.

<TABLE> <CAPTION>

			991	
	Yea	ar Ended	(Inception)	
		cember 31,	through	
	1994	1995	December 31, 1995	
<\$>	<c></c>	<c></c>	<c></c>	
Cash flows from operating activities:	\$(2.26	5 000) \$(2.60	01.000) \$78.882.000)	
Net (loss)	\$(2,26: used in)	3,000) \$(2,0)	91,000) \$(8,883,000)	
operating activities:	,			
Depreciation and amortization		118,000	112,000 454,000	
Amortization of debt discount		64,000 180,000	205,000 269,000 374,000 554,000	
Value assigned to warrants and options		,	16,000	
Equity in loss of joint venture		23,000	23,000 193,000	
Changes in operating assets and liabilities: (Increase) decrease in other assets		(2,000)	(16,000) (40,000)	
Increase (decrease) in accounts payable and a	accrued			
expenses	162	,000 (45,0	000) 235,000	
-				
Net cash (used in) operating activities		(1,720,000)	(2,038,000) (7,202,000)	
-				
Cash flows from investing activities:				
Purchase of equipment		(2,000)	(121,000) (233,000)	
			(233,000)	
Net cash (used in) investing activities		(2,000)	(354,000)	
· · · · · · · · · · · · · · · · · · ·		(2,000)	(334,000)	
Cash flows from financing activities:				
Net proceeds from sales of preferred and commo	on stock		9,365,000 13,750,000	
Proceeds from bridge loans, net of expenses		1,726,00	00 758,000 2,684,000	
Deferred registration costs		(3	038,000) (3,238,000)	
Principal payments of equipment notes		(5,	(76,000)	
Dividends paid			(122,000)	
Net cash provided by financing activities			7,085,000 12,998,000	
-				
				,000
-	CASH EQ	QUIVALENTS		,000
NET INCREASE (DECREASE) IN CASH AND	CASH EQ	QUIVALENTS	4,000 5,047,000 5,442,	,000,
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.	CASH EQ		4,000 5,047,000 5,442, 000 395,000	,000
NET INCREASE (DECREASE) IN CASH AND	CASH EQ		4,000 5,047,000 5,442, 000 395,000	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.	CASH EQ		4,000 5,047,000 5,442, 000 395,000	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF EACH EQUIVALENTS AT EXPLORED EQUIVALENTS EXPLORED EQUIVALENTS EXPLORED EQUIVALENTS EXPLORED EQUIVALENTS EXPLORED E	CASH EQ	201VALENTS	\$ 395,000 \$ 5,442,000 \$ 5,442,000 \$ 5,442,000 \$ 5,442,000	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END O	CASH EQ	201VALENTS	4,000 5,047,000 5,442, 000 395,000	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF EACH EQUIVALENTS AT EXPLORED EQUIVALENTS EXPLORED EQUIVALENTS EXPLORED EQUIVALENTS EXPLORED EQUIVALENTS EXPLORED E	CASH EQ	201VALENTS	\$ 395,000 \$ 5,442,000 \$ 5,442,000 \$ 5,442,000 \$ 5,442,000	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF EACH EQUIVALENTS AT EXPLORED EQUIVALENTS EXPLORED EQUIVALENTS EXPLORED EQUIVALENTS EXPLORED EQUIVALENTS EXPLORED E	CASH EQ	201VALENTS	\$ 395,000 \$ 5,442,000 \$ 5,442,000 \$ 5,442,000 \$ 5,442,000	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF THE CASH AND CASH EQUIVALENTS AT END OF THE CASH PAID (Supplemental disclosure of cash flow informations).	CASH EQ	QUIVALENTS 391,0	\$ 395,000 \$ 5,442,	.000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF THE CASH AND CASH EQUIVALENTS AT END OF THE CASH PAID (Supplemental disclosure of cash flow informations).	CASH EQ	391,0 	\$ 395,000 \$ 5,442,000 \$ 5,442,000 \$ 5,442,000 \$ 5,442,000	0000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF THE CASH AND CASH EQUIVALENTS AT END OF THE CASH PAID (Supplemental disclosure of cash flow informations).	CASH EQ	\$ 267  September 2011 August 2	4,000 5,047,000 5,442, 000 395,000  \$ 395,000 \$ 5,442,000 \$ 5,442,000  \$ 0000 =  ptember 11, 1991 (Inception)	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF THE CASH AND CASH EQUIVALENTS AT END OF THE CASH PAID (Supplemental disclosure of cash flow informations).	CASH EQ	391,0 	4,000 5,047,000 5,442,000 5,442,000 \$ 5,44	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF THE CASH AND CASH EQUIVALENTS AT END OF THE CASH PAID (Supplemental disclosure of cash flow informations).	CASH EQ	\$ 267  September 2011 August 2	4,000 5,047,000 5,442,000 5,442,000 \$ 5,44	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF THE CASH AND CASH EQUIVALENTS AT END OF THE CASH PAID (Supplemental disclosure of cash flow informations).	F PERIOL  Six M  Jun  1995	\$ 267  September 2001 September 2002	4,000 5,047,000 5,442,000 5,442,000 \$ 395,000 \$ 5,442,	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF THE CASH AND CASH EQUIVALENTS AT END OF THE CASH PAID of THE CASH PAID (TO ASH PAID OF THE CASH PAID OF	F PERIOL  Six M  Jun  1995	\$ 267  September 2001	4,000 5,047,000 5,442, 000 395,000  \$ 395,000 \$ 5,442,000 \$ 5,442,000  contember 11, 1991  (Inception) through June 30, 1996	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF THE CASH AND CASH EQUIVALENTS AT END OF THE CASH PAID (Supplemental disclosure of cash flow informations).	F PERIOL  Six M  Jun  1995	\$ 267  Sep  Months Ended ne 30,	4,000 5,047,000 5,442, 000 395,000  \$ 395,000 \$ 5,442,000 \$ 5,442,000  contember 11, 1991  (Inception) through June 30, 1996	,,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF EAST END OF EAS	Six M Jur 1995	\$ 267  Sep  Months Ended ne 30,	4,000 5,047,000 5,442, 000 395,000  \$ 395,000 \$ 5,442,000 \$ 5,442,000  contember 11, 1991 (Inception) through June 30, 1996 (Unaudited)	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF EAST END OF EAS	Six M Jun  1995  (Un  \$(1,43); sed in)	\$ 267  Sep  Months Ended ne 30,	4,000 5,047,000 5,442, 000 395,000  \$ 395,000 \$ 5,442,000 \$ 5,442,000  \$ 0000 =   Otember 11, 1991  (Inception) through June 30, 1996 (Unaudited)  20,000) \$(10,203,000)	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF EAST END OF EAS	Six M Jur  1995  (Un	\$ 267  Sep  Months Ended ne 30,	4,000 5,047,000 5,442, 000 395,000  \$ 395,000 \$ 5,442,000 \$ 5,442,000  contember 11, 1991 (Inception) through June 30, 1996 (Unaudited)	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF EAST PART OF	Six M Jur 1995 (Un \$(1,432) ased in)	\$ 267  September 2000 \$ (1,3)  56,000	4,000 5,047,000 5,442, 000 395,000  \$ 395,000 \$ 5,442,000 \$ 5,442,000  \$ 1991 (Inception) through June 30, 1996 (Unaudited)  20,000) \$(10,203,000)  57,000 511,000 269,000 554,000	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF EAST PART OF	Six M Jur 1995 (Un \$(1,432) ssed in)	\$ 267  September 1996	4,000 5,047,000 5,442, 000 395,000  \$ 395,000 \$ 5,442,000 \$ 5,442,000  \$ 1000 \$ 5,442,000 \$ 5,442,000  [Constant of the state of	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF EAST PART OF	Six M Jur 1995 (Ur. \$(1,43); ssed in)	\$ 267  Sep  Months Ended ne 30,	4,000 5,047,000 5,442, 000 395,000  \$ 395,000 \$ 5,442,000 \$ 5,442,000  \$ 10,000 \$ 11,1000  \$ 10,000 \$ 11,000  \$ 269,000  \$ 554,000  \$ 16,000  \$ 12,000 205,000	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END O  Supplemental disclosure of cash flow information: Cash paid for interest	Six M  ———————————————————————————————————	\$ 267  September 1996	4,000 5,047,000 5,442, 000 395,000  \$ 395,000 \$ 5,442,000 \$ 5,442,000  \$ 1000 \$ 5,442,000 \$ 5,442,000  [Constant of the state of	,000
NET INCREASE (DECREASE) IN CASH AND Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END OF EAST PART OF	Six M Jur 1995	\$ 267  September 1996  anaudited)  \$ 56,000  106,000  235,000  11,000  1,000	4,000 5,047,000 5,442, 000 395,000  \$ 395,000 \$ 5,442,000 \$ 5,442,000  \$ 10,000 \$ 11,1000  \$ 10,000 \$ 11,000  \$ 269,000  \$ 554,000  \$ 16,000  \$ 12,000 205,000	,000
Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END O  Supplemental disclosure of cash flow information: Cash paid for interest	Six M Jur 1995	\$ 267  September 1996  anaudited)  \$ 56,000  106,000  235,000  11,000  1,000	4,000 5,047,000 5,442, 000 395,000  \$ 395,000 \$ 5,442,000 \$ 5,442,000  \$ 1996  (Unaudited)  20,000) \$ (10,203,000)  57,000 511,000 269,000 554,000 16,000 12,000 205,000 (9,000) (49,000)	,000
Cash and cash equivalents at beginning of period.  CASH AND CASH EQUIVALENTS AT END O  Supplemental disclosure of cash flow information: Cash paid for interest	Six M Jun 1995 (Un \$(1,43) ased in)	\$ 267  September 1996  anaudited)  \$ 56,000  106,000  235,000  11,000  1,000	4,000 5,047,000 5,442, 000 395,000  \$ 395,000 \$ 5,442,000 \$ 5,442,000  \$ 1996  (Unaudited)  20,000) \$ (10,203,000)  57,000 511,000 269,000 554,000 16,000 12,000 205,000 (9,000) (49,000)	,000

September 11,

Cash flows from investing activities:			
Purchase of equipment	(47,000)	(168,000) 233,000)	
Net cash (used in) investing activities	(47,000)	(401,000)	
Cash flows from financing activities:  Net proceeds from sales of preferred and common stock  Proceeds from bridge loans, net of expenses  Deferred registration costs  Repayment of bridge loans.  Principal payments of equipment notes.  Dividends paid	758,000 (203,000)	13,750,000 2,684,000 3,238,000) (76,000)	
Net cash provided by financing activities	555,000	12,998,000	
NET INCREASE (DECREASE) IN CASH AND CASH EQU	UIVALENTS	(144,000) (1,152,000) 4,29	90,000
Cash and cash equivalents at beginning of period	395,000 5	5,442,000	
CASH AND CASH EQUIVALENTS AT END OF PERIOD	\$	251,000 \$ 4,290,000 \$ 4,290,000 = ================================	)
Supplemental disclosure of cash flow information:  Cash paid for interest			

  |  |  ||  |  |  |  |
The accompanying notes to financial statements are an integral part hereof.

F-6

CYTOCLONAL PHARMACEUTICS INC. (a development stage company)

NOTES TO FINANCIAL STATEMENTS (unaudited with respect to the six months ended June 30, 1995 and June 30, 1996)

## (NOTE A) - The Company:

Cytoclonal Pharmaceutics Inc. (the "Company") was incorporated on November 18, 1991. In December 1991, a Texas corporation, Cytoclonal Pharmaceutics Inc. (formerly Bio Pharmaceutics, Inc.) was merged into the Company. The accompanying financial statements include the operations of the Texas corporation from its inception on September 11, 1991. The Company is in the development stage and its efforts are devoted to the research and development of various therapeutic and diagnostic pharmaceutical products for the prevention of cancer, viral and immune diseases.

(NOTE B) - Summary of Significant Accounting Policies:

[1] Equipment:

Equipment is stated at cost. Depreciation is provided using the straight-line method over the estimated useful lives of the assets which range from five to seven years. Leasehold improvements are amortized over the lesser of the economic useful life of the improvement or term of the lease whichever is shorter.

[2] Patent rights and costs:

Purchased patents which were acquired in October 1991 are stated at cost and are being amortized on the straight-line method over 17 years, the life of the patents, and charged to research and development expense. Approximately 90% of these costs were allocated to issued patents. The Company estimates undiscounted future cash flows from future products under development and royalties which are covered by these patents. An impairment in the amount of the shortfall would be recognized if those estimated future cash flows were less than the unamortized costs. See Note C.

[3] Research and development:

Research and development costs are charged to expense as incurred.

(continued)

# CYTOCLONAL PHARMACEUTICS INC. (a development stage company)

#### NOTES TO FINANCIAL STATEMENTS (unaudited with respect to the six months ended June 30, 1995 and June 30, 1996)

(NOTE B) - Summary of Significant Accounting Policies: (continued)

#### [4] Concentration of credit risk:

Financial instruments which potentially subject the Company to concentration of credit risk consist principally of cash and cash equivalents which are at two financial institutions.

## [5] Loss per common share:

Net loss per common share is based on the weighted average number of common shares outstanding during the period as adjusted for the reverse stock split. In accordance with Securities and Exchange Commission requirements, common shares, options and warrants issued during the twelve-month period prior to filing of the initial public offering have been included in the calculation as if they were outstanding for all periods prior to the offering.

#### [6] Cash equivalents:

The Company considers all short-term investments with a maturity of three months or less to be cash equivalents.

## [7] Recently issued accounting pronouncements:

During 1995, the Financial Accounting Standards Board issued Statements of Financial Accounting Standards No. 121 and No. 123, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed of" and "Accounting for Stock-Based Compensation", respectively. These statements are effective for the Company's fiscal year commencing January 1, 1996. The Company believes adoption of these statements will not have a material impact on its financial statements.

#### [8] Interim financial information:

The accompanying financial statements as of June 30, 1996 and for the six-month periods ended June 30, 1995 and June 30, 1996 are unaudited. In the opinion of management, they reflect all adjustments (consisting only of normal and recurring adjustments) necessary for a fair presentation of the Company's financial position and results of operations.

The results of operations and cash flows for the six months ended June 30, 1996 are not necessarily indicative of the results that may be expected for the full year ending December 31, 1996.

(continued)

F-8

CYTOCLONAL PHARMACEUTICS INC. (a development stage company)

NOTES TO FINANCIAL STATEMENTS (unaudited with respect to the six months ended June 30, 1995 and June 30, 1996)

(NOTE C) - Agreement With Wadley Technologies, Inc. ("Wadtech"):

On October 10, 1991 the Company entered into an agreement to acquire certain patent rights, technology and know-how (the "Technology") from Wadtech for the fixed sum of \$1,250,000 and ongoing royalties.

The agreement provides for the payment of royalties of up to 6.25% of gross selling price of products incorporating the Technology and up to 50% of all compensation received by the Company for sales by sublicensees of any products covered by the Technology, which will be applied to reducing the fixed sum of \$1,250,000, until the fixed sum is paid. Thereafter, the agreement provides for the payment of royalties of up to 3.75% of gross selling price of products incorporating the Technology and up to 50% of all compensation received by the Company for sales by sublicensees of any products covered by the Technology. The agreement also provides for minimum royalty payments of \$31,250, \$62,500 and \$125,000 during each twelve-month period beginning October 1, 1996, October 1, 1997 and October 1, 1998, respectively. Thereafter, during each twelve-month period beginning October 1, 1999 the agreement provides for minimum royalty payments of \$125,000. As of December 31, 1995 the Company has not made any payments under the agreement.

The Company granted Wadtech a security interest in the Technology until the fixed sum is paid. The agreement continues for 99 years from October 10,

1991 and the Company has the option to terminate the agreement without cause on three months notice to Wadtech.

(NOTE D) - Collaboration Agreements:

[1] Agreements with Research and Development Institute, Inc. ("RDI"):

During June 1993 the Company entered into a research and license agreement with RDI of Montana State University pursuant to which the Company finances and RDI conducts research and development at Montana State University in the field of taxol producing organisms. In connection with the agreement, RDI has granted the Company an exclusive license and licensing rights to its patents and know-how throughout the world to develop and market products relating to the technology for a payment of \$150,000.

(continued)

F-9

CYTOCLONAL PHARMACEUTICS INC. (a development stage company)

NOTES TO FINANCIAL STATEMENTS (unaudited with respect to the six months ended June 30, 1995 and June 30, 1996)

(NOTE D) - Collaboration Agreements: (continued)

[1] Agreements with Research and Development Institute, Inc. ("RDI"): (continued)

The Company has agreed to finance research to be conducted under the agreement and is obligated to pay RDI an aggregate fixed fee of \$250,000 per annum for four years commencing in 1993. In addition, the Company has agreed to pay RDI for royalties of up to 6% of net sales of products derived under the agreement with minimum royalty payments as follows: \$25,000 in June 1994, \$50,000 in June 1995, \$75,000 in June 1996 and \$100,000 in June 1997 and thereafter. The Company has the option to extend the research under mutually agreeable terms. In connection with the agreement, the Company issued an option to RDI to purchase 20,000 shares of the Company's common stock at \$2.50 per share. The Company valued these options at approximately \$13,000 which was charged to research and development.

[2] Agreements with Pestka Biomedical Laboratories, Inc. ("Pestka"):

In September 1992 the Company formed a corporate joint venture with Pestka for the purpose of developing, manufacturing and marketing a therapeutic drug for blood related cancers such as leukemia and lymphomas. The agreement provided for the Company to contribute \$233,000 (which was paid in 1992 and 1993) and certain technology and for Pestka to grant the joint venture an exclusive, worldwide license to certain patents and proprietary rights. The stockholders of Pestka also agreed to purchase 20,000 shares of the Company's common stock for a purchase price of \$1.65 per share. The corporate stockholders have no further obligations to fund the joint venture. The investment in the joint venture is accounted for on the equity method. The equity in loss of joint venture, included in research and development costs, was approximately \$23,000 for each of the years ended December 31, 1994 and December 31, 1995 and \$11,000 and \$12,000 for the six months ended June 30, 1995 and June 30, 1996, respectively.

Under a related agreement, Pestka agreed to perform certain research and development, as defined, for the joint venture, for \$233,000.

(continued)

F-10

CYTOCLONAL PHARMACEUTICS INC. (a development stage company)

NOTES TO FINANCIAL STATEMENTS (unaudited with respect to the six months ended June 30, 1995 and June 30, 1996)

(NOTE D) - Collaboration Agreements: (continued)

[3] Agreements With Enzon, Inc. ("Enzon"):

In March and July 1992, the Company entered into agreements with Enzon to jointly fund, research, develop, test and market anti-cancer drugs. Terms of

the agreements provide for the Company (i) to undertake research and development using certain technology owned and developed by Enzon; and (ii) to grant Enzon an exclusive, worldwide license to certain technology owned and royalties and/or allocation of profits and losses from the sale of the products. The agreements terminate on a product-by-product basis 15 years from the first approval to market each such product.

In 1992 Enzon paid the Company \$50,000; such payment was recorded as a reduction of research and development costs.

(NOTE E) - Equipment:

Equipment is summarized as follows:

December 31, June 30, 1995 1996

 Office equipment.
 \$ 18,000
 \$ 36,000

 Furniture and fixtures.
 10,000
 15,000

 Computers and laboratory equipment.
 162,000
 186,000

 Leasehold improvements.
 6,000
 6,000

Total...... 196,000 243,000

Less accumulated depreciation and amortization . . . . . . . . . . . . . . . . . 136,000 155,000

Net . . . . . . . . . \$ 60,000 \$ 88,000

(NOTE F) - Stockholders' Equity:

[1] Public offering:

In November 1995, the Company effected an initial public offering of its securities. A total of 2,300,000 units, each comprised of one share of common stock, one redeemable Class C warrant and one redeemable Class D warrant, were sold for \$5.00 a unit, yielding net proceeds of approximately \$9,365,000 after underwriting commissions and other expenses of the offering.

(continued)

F-11

CYTOCLONAL PHARMACEUTICS INC. (a development stage company)

NOTES TO FINANCIAL STATEMENTS (unaudited with respect to the six months ended June 30, 1995 and June 30, 1996)

(NOTE F) - Stockholders' Equity: (continued)

[2] Stock split:

In August 1995 the Company effected a reverse stock split of one share of common stock for 2.5 shares of common stock held and an identical reverse split for the preferred stock. The accompanying financial statements have been adjusted to give retroactive effect to the reverse stock split.

[3] Preferred stock:

On January 6, 1992 the Board of Directors designated 4,000,000 shares of preferred stock as Series A convertible preferred stock. The holders of Series A preferred stock are entitled to (i) convert on a one-for-one basis to common stock subject to adjustment, as defined, (ii) voting rights equivalent to voting rights of common stockholders, (iii) receive dividends equal to \$.25 per share payable on or about January 15 each year in cash or newly-issued shares of Series A preferred or a combination thereof, (iv) liquidation preferences of \$2.50 per preferred share and (v) certain demand and piggyback registration rights with respect to the common shares issuable upon conversion.

The Company, at its option, has the right to redeem all or any portion of the Series A convertible preferred stock at \$2.50 per share plus accrued and unpaid dividends.

[4] Warrants:

At December 31, 1995 and June 30, 1996 shares of common stock were reserved for issuance upon exercise of warrants as follows:

Warrant Exercise Expiration Number of

Type	Price	Date Shares	Reserved
Class A	\$3.75	November 2000	200,000
Class B	\$4.375	November 2000	407,500
Class C	\$6.50	November 2000	4,600,000
Class D	\$8.75	November 2000	2,300,000

The Class A and Class B warrants were issued in connection with two bridge financings completed in August 1994 and April 1995 where the Company issued an aggregate of \$3,037,500 in notes bearing interest at 9% per annum (effective rate 18% to 24%) which were repaid in 1995, including \$400,000 of these notes which were past due, from the net proceeds of the initial public offering.

(continued)

F-12

CYTOCLONAL PHARMACEUTICS INC. (a development stage company)

NOTES TO FINANCIAL STATEMENTS (unaudited with respect to the six months ended June 30, 1995 and June 30, 1996)

(NOTE F) - Stockholders' Equity: (continued)

[4] Warrants: (continued)

Effective November 1996, the Class C and Class D warrants are subject to redemption at \$.05 per warrant on 30 days prior written notice provided the average of the closing bid prices of the common stock for any period of 30 consecutive business days ending within 15 business days of the date on which the notice of redemption is given shall have exceeded \$9.10 per share for redemption of the Class C warrants and \$12.25 per share for redemption of the Class D warrants.

Each Class C warrant entitles the holder to purchase a unit consisting of one share of common stock and one redeemable Class D detachable warrant. Each Class D warrant entitles the holder to purchase one share of common stock.

[5] Stock options:

During 1992 the Board of Directors and the stockholders of the Company approved a Stock Option Plan (the "1992 Plan") which provides for the granting of up to 520,000 shares of common stock, pursuant to which officers, directors, key employees and the Company's Scientific Advisory Board are eligible to receive incentive and/or nonstatutory stock options. Options granted under the 1992 Plan are exercisable for a period of up to 10 years from date of grant at an exercise price which is not less than the fair value on date of grant, except that the exercise period of options granted to a stockholder owning more than 10% of the outstanding capital stock may not exceed five years and their exercise price may not be less than 110% of the fair value of the common stock at date of grant. Options generally vest 40% after six months of employment and, thereafter, 20% annually on anniversary date of grant.

(continued)

F-13

CYTOCLONAL PHARMACEUTICS INC. (a development stage company)

NOTES TO FINANCIAL STATEMENTS (unaudited with respect to the six months ended June 30, 1995 and June 30, 1996)

(NOTE F) - Stockholders' Equity: (continued)

[5] Stock options: (continued)

Stock option activity under the 1992 Plan is summarized as follows:

Number
Number of Option Price of Shares
Shares Per Share Exercisable

Granted. . . . . . 300,000 \$1.65 - \$1.825

Outstanding at

December 31, 1992 300,000 \$1.65 - \$1.825 120,000

```
Granted. . . . . . 164,000 $1.65 - $2.50

Outstanding at

December 31, 1993 464,000 $1.65 - $2.50 245,600

Granted. . . . . . 38,000 $1.65 - $3.75

Outstanding at

December 31, 1994 502,000 $1.65 - $3.75 353,600

Granted. . . . . . 42,000 $3.9375 - $5.00

Cancelled. . . . . (24,000) $1.65 - $1.825

Exercised. . . . (80,000) $1.825

Outstanding at

December 31, 1995 440,000 $1.65 - $5.00 350,000

and

June 30, 1996 . . 440,000 $1.65 - $5.00 405,200
```

As of December 31, 1995, no options are available for future grant under this Plan.

On April 2, 1996 the Board of Directors of the Company approved the 1996 Stock Option Plan (the "1996 Plan") which provides for the granting of incentive and nonstatutory options for up to 750,000 shares of common stock to officers, employees, directors and consultants of the Company. On April 2, 1996 the Company granted 200,000 options exercisable at \$4.125 per share.

(continued)

F-14

CYTOCLONAL PHARMACEUTICS INC. (a development stage company)

NOTES TO FINANCIAL STATEMENTS (unaudited with respect to the six months ended June 30, 1995 and June 30, 1996)

(NOTE F) - Stockholders' Equity: (continued)

[6] Other options and warrants:

In connection with its private offerings to sell preferred and common stock during the year ended December 31, 1992, the placement agent has an option to purchase up to 10 units; each unit consists of 10,000 shares of preferred stock and 20,000 shares of common stock. The option is exercisable through January 29, 1997 at a price of \$50,000 per unit.

In connection with its bridge financings, the placement agent received options to purchase 506,250 warrants at \$.10 per warrant. These warrants are exercisable into an aggregate of 202,500 shares of common stock at a price of \$3.75 per share through November 2000.

In connection with its initial public offering, the Company sold to the underwriter, at a nominal amount, a unit purchase option to purchase up to an aggregate of 200,000 additional units at \$8.25 per unit. The units purchasable upon exercise of the unit purchase option are identical to the units offered in the initial public offering except that the warrants included therein are subject to redemption by the Company if at the time of the call for redemption the unit purchase option has been exercised. These units become exercisable November 1998 for a two-year period.

In July 1996 the Company granted a licensor (Note I[4]) warrants to purchase 36,000 shares of common stock at \$4.25 per share. An aggregate of 12,000 warrants per annum are exercisable commencing July 1999 and expire July 2002.

(NOTE G) - Related Party Transaction:

In connection with certain of the private placements during 1994 and 1995, Janssen-Meyers Associates, L.P., an affiliate of a former officer, acted as placement agent and received \$146,900 and \$118,000, respectively, as compensation.

(continued)

## CYTOCLONAL PHARMACEUTICS INC.

(a development stage company)

## NOTES TO FINANCIAL STATEMENTS

(unaudited with respect to the six months ended June 30, 1995 and June 30, 1996)

(NOTE H) - Income Taxes:

At December 31, 1995, the Company had approximately \$8,400,000 of net operating loss carryforwards for federal income tax purposes which expire through 2010.

At December 31, 1995 the Company has a deferred tax asset of approximately \$2,900,000 representing the benefits of its net operating loss carryforward, the provisions of Internal Revenue Code 382 regarding changes in ownership, notwithstanding, which has been fully reserved by a valuation allowance since realization of its benefit is uncertain. The difference between the statutory tax rate of 34% and the Company's effective tax rate of 0% is substantially due to the increase in the valuation allowance of \$700,000 (1994) and \$1,000,000 (1995).

(NOTE I) - Commitments and Other Matters:

[1] Leases:

The Company is obligated to pay \$103,000 for office and laboratory space under leases expiring through December 31, 1996.

Rent expense was approximately \$117,000 and \$115,000 for the years ended December 31, 1994 and December 31, 1995, respectively, and approximately \$57,000 for each of the six months ended June 30, 1995 and June 30, 1996.

[2] Employment agreements:

The Company has employment agreements with two officers which provide for annual base salaries of \$165,000 and \$75,000 (subject to annual increases of not less than 5% per year and bonuses at the discretion of the Board of Directors) for a period of five years and three years, respectively, commencing November 1995.

[3] Contract research:

The Company has contracted with an institution to conduct research through May 31, 1996 at a cost of approximately \$150,000. As of December 31, 1995 the Company has incurred approximately \$91,000, of such costs. Such costs amounted to \$84,000 and \$20,000 for the six months ended June 30, 1995 and June 30, 1996, respectively. In April 1996 this agreement was extended to May 31, 1998 providing for additional funding of \$90,000 (aggregate \$240,000).

(continued)

F-16

CYTOCLONAL PHARMACEUTICS INC. (a development stage company)

NOTES TO FINANCIAL STATEMENTS (unaudited with respect to the six months ended June 30, 1995 and June 30, 1996)

(NOTE I) - Commitments and Other Matters: (continued)

[4] Other:

In February 1996, the Company entered into two license agreements ("Agreements") with the Regents of the University of California, granting to the Company exclusive rights to certain technology and patent rights. Pursuant to the Agreements, the Company paid license fees of \$10,000 and has agreed to pay \$10,000 upon issuance of each patent. In addition, the Company must pay a yearly license maintenance fee on both licenses until the Company is commercially selling a product based on the technology derived from these License Agreements, at which time a royalty based on net sales will be due.

In July 1996, the Company entered into an agreement with the Washington State University Research Foundation ("WSURF") whereby the Company received an exclusive, world-wide license to use and/or sublicense patented technology or prospective patented technology (the "WSURF Technology"). The Company is required to pay WSURF license fees of \$7,500 per year commencing on July 1, 1997 as well as certain royalties and sublicensing fees. This Agreement shall be in full force and effect until the last to expire of the patents licensed under the WSURF Technology, subject to termination by either party as defined. In conjunction with this agreement the Company granted WSURF 36,000 warrants (Note F[6]).

Preferred stock dividend:

During January 1996, the Board of Directors declared a 10% dividend on Series A preferred stock.

(continued)

F-17

## CYTOCLONAL PHARMACEUTICS INC. (a development stage company)

## NOTES TO FINANCIAL STATEMENTS (unaudited with respect to the six months ended June 30, 1995 and June 30, 1996)

(NOTE K) - Accounts Payable and Accrued Expenses:

Accounts payable and accrued expenses consists of the following:

December 31, June 30, 1995 1996

Professional fees. . . . . \$ 57,000 \$ 19,000

Payroll and related expenses 111,000 114,000

Licensors and contractors. . 39,000 200,000

Others . . . . . . . . . 28,000 57,000

\$235,000 \$390,000

F-18

No dealer, sales representative or any other person has been authorized to give any information or to make any representations in connection with this Offering other than those contained in this Prospectus and, if given or made, such other information and representations must not be relied upon as having been authorized by the Company. Neither the delivery of this Prospectus nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the Company or that the information contained herein is correct as of any time subsequent to the date hereof. This Prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities other than the registered securities to which it relates. This Prospectus does not constitute an offer to sell or a solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful.

## TABLE OF CONTENTS

## Page

Available Information	3
Prospectus Summary	4
Risk Factors	10
Dilution	20
Dividend Policy	21
Use of Proceeds	22
Capitalization	22
Selected Financial Data	23
Plan of Operation	25
Business	26
Management	43
Certain Transactions	49
Principal Stockholders	50
Selling Security Holders	53
Description of Securities	56
Bridge Financings	60
Shares Eligible for Future Sale	61
Plan of Distribution	62
Legal Matters	62
Experts	63
Index to Financial Statements	F-1

## CYTOCLONAL PHARMACEUTICS INC.

Consisting of 500,000 Class A Warrants 1,018,750 Class B Warrants 506,250 Warrants 810,000 Shares of Common Stock

PROSPECTUS

, 1996

#### PART II

## INFORMATION NOT REQUIRED IN PROSPECTUS

#### Item 24. 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 25. 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:

## Amount

 S.E.C. Registration Fee.
 \$ 997.63

 Printing Expenses
 5,000.00

 Accounting Fees and Expenses
 7,500.00

 Legal Fees and Expenses
 35,000.00

 Miscellaneous Expenses
 1,502.37

 Total
 \$50,000.00

II-1

Item 26. Recent Sales of Unregistered Securities

In the three years preceding the filing of this Registration Statement, the Company has issued the following unregistered securities.

In January 1994, the Company issued 104,869 shares of Series A Preferred Stock as full payment of the dividend due on the Series A Preferred Stock for the year ended December 31, 1993 to the 124 holders of such preferred stock

In February and April 1994, pursuant to the Company's 1992 Stock Option Plan, the Company granted options to purchase (i) 20,000 shares of Common Stock at an exercise price of \$2.50 per share to Research & Development Institute, Inc. ("RDI") as partial consideration for RDI's licensing of the Fungal Taxol Technology to the Company, (ii) an aggregate of 24,000 shares of Common Stock at an exercise price of \$1.65 per share to two employees and one consultant of the Company and (iii) options to purchase 10,000 shares of Common Stock at an exercise price of \$3.75 per share to one of the Company's directors.

In August 1994, the Company sold 40 units consisting of (i) an aggregate of \$1,000,000 in principal amount of 9% Subordinated Notes and (ii) warrants to purchase an aggregate of 200,000 shares of Common Stock exercisable at \$3.75 per share for a purchase price of \$25,000 per unit to 33 accredited investors (the "1994 Bridge Financing"). At the same time, the Company issued an option to acquire warrants to purchase 66,667 shares of the Company's stock exercisable at \$3.75 per share to the placement agent for the 1994 Bridge Financing as partial consideration for its services.

In January 1995, the Company issued 115,350 shares of Series A Preferred Stock as full payment of the dividend due on the Series A Preferred Stock for the year ended December 31, 1994 to the 134 holders of such preferred stock.

In April 1995, the Company sold 40 units consisting of (i) an aggregate of \$2,000,000 in principal amount of 9% Subordinated Notes and (ii) warrants to purchase an aggregate of 400,000 shares of Common Stock exercisable at \$4.375 per share for a purchase price of \$50,000 per unit to 44 accredited investors. At the same time, the Company issued an option to acquire warrants to purchase 133,334 shares of the Company's stock exercisable at \$3.75 per share to the placement agent for the 1994 Bridge Financing as consideration for such placement agent's agreement to cancel its rights under a certain merger and acquisition agreement and right of first refusal with respect to offerings of securities of the Company which the Company granted to such placement agent as partial consideration for services in connection with the 1994 Bridge Financing.

Pursuant to the 1992 Plan, in April 1995 the Company granted options to purchase 6,000 and 5,000 shares, respectively, of Common Stock at an exercise price of \$3.75 and \$5.00 per share, respectively, to one of its directors. In July 1995 a former director exercised an option previously granted under the 1992 Plan to acquire 80,000 shares of its Common Stock. In August 1995 the Company granted options under its 1992 Plan to purchase 5,000 shares of its Common Stock at an exercise price of \$5.00 per share to each of two of its directors.

In July 1996, the Company granted warrants to The Washington State University Research Foundation to purchase 36,000 shares of Common Stock at an exercise price of \$4.25 per share.

With the exception of (i) the 1994 Bridge Financing where D.H. Blair Investment Banking Corp. acted as placement agent, and (ii) the 1995 Bridge Financing where JMA acted as placement agent, no underwriters were involved in the foregoing sales of securities. Such sales were made in reliance upon an exemption from the registration provisions of the Securities Act of 1933 (the

II-2

"Securities Act") set forth in Section 4(2) thereof relative to sales by an issuer not involving any public offering or the rules and regulations thereunder, or Rule 701 under the Securities Act, except that the issuances in January 1994 and 1995 of shares of Series A Preferred Stock in satisfaction of dividend payments were made in reliance on the exemption provided in Section 3(a)(9) of the Securities Act relative to exchanges exclusively with existing security holders.

## Item 27. Exhibits

- 1.1 Amended Form of Underwriting Agreement between Registrant and the Underwriter\*
- 1.2 Agreement Among Underwriters\*
- 3.1 Certificate of Incorporation, as amended\*
- 3.2 By-laws\*
- 3.3 Amendment to Certificate of Incorporation\*
- 4.1 Specimen certificates representing Class C Warrants, Class D Warrants and Common Stock\*
- 4.2 Form of Warrant Agreement with warrant certificates between Registrant, the underwriters in the IPO and American Stock Transfer and Trust Company\*
- 4.3 Form of Unit Purchase Option\*
- 4.4 Warrant Certificate granted to The Washington State University Research Foundation
- 4.5 Patent License Agreement Between The University of Texas System And Cytoclonal Pharmaceutics Inc.
- 5.1 Opinion of Bryan Cave regarding legality of securities offered

- 5.2 Opinion of Warren & Perez
- 10.1 Form of Consulting Agreement between the Registrant and the Underwriter\*
- 10.2 Employment Agreement dated March 1, 1992 between the Registrant and Arthur P. Bollon, Ph.D.\*
- 10.3 Employment Agreement dated March 1, 1992 between the Registrant and Bruce Meyers, as amended\*
- 10.4 Employment Agreement effective November 2, 1995 between the Registrant and Daniel Shusterman\*
- 10.5 1992 Stock Option Plan, as amended\*
- 10.6 Form of Stock Option Agreement\*
- 10.7 Lease Agreement dated September 1, 1993 between the Registrant and Mutual Benefit Life Insurance Company In Rehabilitation\*
- 10.8 Lease Agreement dated October 1, 1991 between the Registrant and J.K. and Susie Wadley Research Institute and Blood Bank, as amended\*
- 10.9 Purchase Agreement dated October 10, 1991 between the Registrant and Wadley Technologies, Inc. ("Wadley")\*
- 10.10 Security Agreement dated October 10, 1991 between the Registrant and Wadley\*
- 10.11 License Agreement dated March 15, 1989 between the Registrant and Phillips Petroleum Company, as amended\*
- 10.12 License Agreement dated June 10, 1993 between Registrant and Research & Development Institute, Inc. ("RDI"), as amended, relating to the Fungal Taxol Production System\*
- 10.13 Research and Development Agreement effective June 10, 1993 between Registrant and RDI, as amended\*
- 10.14 License Agreement dated February 22, 1995 between Registrant and RDI, as amended, relating to FTS-2\*
- 10.15 Research, Development and License Agreement dated March 26, 1992 between Registrant and Enzon, Inc. ("Enzon"), as amended\*
- 10.16 Research, Development and License Agreement dated July 13, 1992 between Registrant and Enzon relating to the Registrant's tumor necrosis factor technology\*
- 10.17 Agreement effective June 30, 1992 between Registrant and University of Texas at Dallas ("UTD"), as amended\*

II-3

- 10.18 Research Agreement effective April 8, 1994 between Registrant and Sloan-Kettering Institute for Cancer Research\*
- 10.19 Joint Venture Agreement dated September 17, 1992 between Registrant and Pestka Biomedical Laboratories, Inc. ("Pestka")\*
- 10.20 Stock Purchase Agreement dated September 17, 1992 between Registrant and Pestka\*
- 10.21 License Agreement dated September 17, 1992 between Cytomune, Inc. and Pestka\*
- 10.22  $\,$  Research and Development Agreement dated September 17, 1992 between Cytomune, Inc. and Pestka\*
- 10.23 Marketing Agreement dated as of November 1, 1994 between Helm AG and the Registrant\*
- 10.24 Extension Agreement with RDI dated June 5, 1995\*
- 10.25 Third Amendment to Lease Agreement dated April 30, 1995\*
- 10.26 Form of Subordinated Note Extension\*
- 10.27 Form of Note Extension\*
- 10.28 September 25, 1995 RDI Extension\*
- 10.29 October 25, 1995 RDI Extension\*
- 10.30 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\*
- 10.31 License Agreement No. W960206 effective February 27, 1996 between the Company and The Regents of the University of California\*
- 10.32 License Agreement No. W960207 effective February 27, 1996 between the Company and The Regents of the University of California\*
- 10.33 License Agreement with The Washington State University Research Foundation, dated July 2, 1996\*
- 11.1 Statement re: Computation of per share earnings
- 24.1 Consent of Bryan Cave LLP (included in its opinion filed as Exhibit 5.1 hereto)
- 24.2 Consent of Warren & Perez
- 24.3 Consent of Richard A. Eisner & Company, LLP
- 25.1 Power of Attorney Included on signature page

\* Previously filed

Item 28. Undertakings

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

The undersigned registrant hereby undertakes to:

- (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;

- (ii) Reflect in the prospectus any facts or events which, individually or together, represent a fundamental change in the information in the registration statement; and
- (iii) Include any additional or changed material information on the plan of distribution.
- (2) For determining liability under the Securities Act, treat each post-effective amendment as a new registration statement of the securities offered, and the offering of the securities at that time to be the initial bona fide offering.

II-4

(3) File a post-effective amendment to remove from registration any of the securities that remain unsold at the end of the offering.

Undertaking Required by Regulation S-B, Item 512(h).

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or controlling persons of the registrant pursuant to any arrangement, provision or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

II-5

#### SIGNATURES

In accordance with 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 SB-2 and authorized this Registration Statement or post-effective amendment thereto to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Dallas, State of Texas on October 1, 1996.

## CYTOCLONAL PHARMACEUTICS INC.

By:/s/ Arthur P. Bollon

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

## POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below under the heading "Signature" constitutes and appoints Arthur P. Bollon or Daniel M. Shusterman, or either of them, his true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities to sign any or all amendments to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, each acting alone, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

In accordance with the requirements of the Securities Act of 1933, this Registration Statement or post-effective amendment thereto has been signed by the following persons in the capacities and on the dates indicated.

Signature Title Date
----/s/ Arthur P. Bollon Chairman, President, Chief October 1, 1996
------ Executive Officer and Arthur P. Bollon, Ph.D. Director (principal executive officer)

/s/ Ira Gelb Director October 1, 1996 Ira Gelb, M.D. /s/ Irwin C. Gerson Director October 1, 1996 Irwin C. Gerson /s/ Walter M. Lovenberg October 1, 1996 Director Walter M. Lovenberg, Ph.D. /s/ Daniel M. Shusterman Vice President Operations, October 1, 1996 -- Treasurer and Chief Financial Daniel M. Shusterman, J.D. Officer (principal financial

EXHIBIT INDEX

and accounting officer)

Page No.

- 4.4 Warrant Certificate issued to the Washington State University Research Foundation
- 4.5 Patent License Agreement Between The University of Texas System And Cytoclonal Pharmaceutics Inc.
- Opinion of Bryan Cave regarding legality of securities offered
- 5.2 Opinion of Warren & Perez
- 11.1 Statement re: Computation of per share earnings
- 24.1 Consent of Bryan Cave LLP. (included in its opinion filed as Exhibit 5.1 hereto)
- 24.2 Consent of Warren & Perez
- 24.3 Consent of Richard A. Eisner & Company, LLP

#### **EXHIBIT 4.4**

THIS WARRANT AND ANY SHARES OF COMMON STOCK ISSUABLE UPON ITS EXERCISE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 AND MAY NOT BE TRANSFERRED UNTIL (1) A REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933 (THE "ACT") SHALL HAVE BECOME EFFECTIVE WITH RESPECT THERETO, OR (2) RECEIPT BY THE ISSUER OF AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER TO THE EFFECT THAT REGISTRATION UNDER THE ACT IS NOT REQUIRED IN CONNECTION WITH SUCH PROPOSED TRANSFER NOR IS IN VIOLATION OF ANY APPLICABLE STATE SECURITIES LAWS.

36,000 Warrants

VOID AFTER JULY 7, 2002

# WARRANT CERTIFICATE FOR PURCHASE OF COMMON STOCK

## CYTOCLONAL PHARMACEUTICS INC.

This certifies that FOR VALUE RECEIVED The Washington State University Research Foundation, or registered assigns (the "Registered Holder"), is the owner of an aggregate of 36,000 Warrants ("Warrants"). The Warrants may be exercised after the times set forth below, and shall remain exercisable until July 7, 2002 (the "Expiration Date"), when the right to exercise shall terminate absolutely:

- (i) an aggregate of Twelve Thousand (12,000) Warrants may be exercised after July 7, 1999;
- (ii) an aggregate of Twenty-Four Thousand (24,000) Warrants may be exercised after July 7, 2000; and
- (iii) an aggregate of Thirty-Six Thousand (36,000) Warrants may be exercised after July 7, 2001. Each Warrant entitles the Registered Holder to purchase, subject to the terms and conditions set forth in this Certificate, one fully paid and nonassessable share of Common Stock, \$.01 par value ("Common Stock"), of Cytoclonal Pharmaceutics Inc., a Delaware corporation (the "Company"), upon the presentation and surrender of this Warrant Certificate with the Subscription Form on the reverse hereof duly executed, at the corporate office of American Stock Transfer & Trust Company, as Warrant Agent, or its successor (the "Warrant Agent"), accompanied by payment of an amount equal to \$4.25 for each Warrant (the "Purchase Price") in lawful money of the United States of America

in cash or by official bank or certified check made payable to Cytoclonal Pharmaceutics Inc. The Company may, at its election, reduce the Purchase Price.

Each Warrant represented hereby is exercisable at the option of the Registered Holder, but no fractional shares of Common Stock will be issued. In the case of the exercise of less than all the Warrants represented hereby, the Company shall cancel this Warrant Certificate upon the surrender hereof and shall execute and deliver a new Warrant Certificate or Warrant Certificates of like tenor, which the Warrant Agent shall countersign, for the balance of such Warrants.

The exercise price in effect at any time and the number and kind of securities purchasable upon the exercise of the Warrants shall be subject to adjustment from time to time upon the happening of certain events. In case the Company shall (i) declare a dividend or make a distribution on its outstanding shares of Common Stock in shares of Common Stock, (ii) subdivide or reclassify its outstanding shares of Common Stock into a greater number of shares, or (iii) combine or reclassify its outstanding shares of Common Stock into a smaller number of shares, the exercise price in effect at the time of the record date for such dividend or distribution or of the effective date of such subdivision, combination or reclassification shall be adjusted so that it shall equal the price determined by multiplying the exercise price by a fraction, the denominator of which shall be the number of shares of Common Stock outstanding

after giving effect to such action, and the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such action. Such adjustment shall be made successively whenever any event listed above shall occur

Upon each adjustment of the exercise price pursuant hereto, the number of shares of Common Stock specified in this Warrant shall thereupon evidence

2

the right to purchase that number of shares of Common Stock (calculated to the nearest hundredth of a share of Common Stock) obtained by multiplying the exercise price in effect immediately prior to such adjustment by the number of shares of Common Stock purchasable immediately prior to such adjustment upon exercise of this Warrant and dividing the product so obtained by the exercise price in effect after such adjustment.

If subsequent to July 7, 1999 the Company shall determine to proceed with the actual preparation and filing of a registration statement under the Securities Act of 1933, as amended, in connection with the proposed offer and sale of any of its securities by it or any of its security holders (other than a registration statement on Form S-4, S-8 or other limited purpose form), the Company will give written notice of its determination to the Registered Holders. The Company will, except as herein provided, cause all the shares of Common Stock underlying the Warrants (the "Registrable Securities") to be included in such registration statement, all to the extent requisite to permit the sale or other disposition by the prospective seller or sellers of the Registrable Securities to be so registered; provided, further, that nothing herein shall prevent the Company from, at any time, abandoning or delaying any registration. If any registration pursuant to this section shall be underwritten in whole or in part, the Company may require that the Registrable Securities requested for inclusion pursuant to this section be included in the underwriting on the same terms and conditions as the securities otherwise being sold through the underwriters. In the event that the Registrable Securities requested for inclusion pursuant to this section together with any other shares which have similar piggyback registration rights (such shares and the Registrable Securities being collectively referred to as the "Requested Stock") would constitute more than 15% of the total number of shares to be included in a proposed underwritten public offering, and if in the good faith judgment of the managing underwriter of such public offering the inclusion of all of the Requested Stock originally covered by a request for registration

3

would reduce the number of securities to be offered by the Company or interfere with the successful marketing of the securities offered by the Company, the number of shares of Requested Stock otherwise to be included in the underwritten public offering may be reduced pro rata (by number of shares) among the holders thereof requesting such registration or excluded in their entirety if so required by the underwritter. To the extent only a portion of the Requested Stock is included in the underwritten public offering, those shares of Requested Stock which are thus excluded from the underwritten public offering shall be withheld from the market by the holders thereof for a period, not to exceed 120 days, which the managing underwriter reasonably determines is necessary in order to effect the underwritten public offering.

The term "Expiration Date" shall mean 5:00 P.M. (New York time) on July 7, 2002. If such date shall in the State of New York be a holiday or a day on which the banks are authorized to close, then the Expiration Date shall mean 5:00 P.M. (New York time) the next following day which in the State of New York is not a holiday or a day on which banks are authorized to close. The Company may, at its election, extend the Expiration Date.

This Warrant Certificate is exchangeable, upon the surrender hereof by the Registered Holder at the corporate office of the Warrant Agent, for a new Warrant Certificate or Warrant Certificates of like tenor representing an equal aggregate number of Warrants, each of such new Warrant Certificates to represent such number of Warrants as shall be designated by such Registered Holder at the time of such surrender. The Warrants are not transferable, other than by will or pursuant to the laws of descent and distribution, and may not be assigned or hypothecated.

Prior to the exercise of any Warrant represented hereby, the Registered Holder shall not be entitled to any rights of a stockholder of the Company, including, without limitation, the right to vote or to receive dividends or

4

other distributions, and shall not be entitled to receive any notice of any proceedings of the Company.

Prior to due presentment for registration of transfer hereof, the Company may deem and treat the Registered Holder as the absolute owner hereof and of each Warrant represented hereby (notwithstanding any notations of ownership or writing hereon made by anyone other than a duly authorized officer of the Company) for all purposes and shall not be affected by any notice to the contrary.

This Warrant Certificate shall be governed by and construed in accordance with the laws of the State of New York.

IN WITNESS WHEREOF, the Company has caused this Warrant Certificate to be duly executed manually or in facsimile by two of its officers thereunto duly authorized and a facsimile of its corporate seal to be imprinted hereon.

## CYTOCLONAL PHARMACEUTICS INC.

Dated: July 8, 1996 By	
Presid	ent
By	retary
	[seal]
5	
SUBSCRIPTION FO	DRM
To Be Executed by the Reg in Order to Exercise Wa	
The undersigned Registered Holder h Warrants represer purchase the securities issuable upon the requests that certificates for such securiti	ated by this Warrant Certificate, and to exercise of such Warrants, and
PLEASE INSERT SOCIAL SEC	URITY OR OTHER IDENTIFYING NUMBER

[please print or type name and address]

nd be delivered to	
	-
	-
	-
[ulassa mint automa nama and address]	-
[please print or type name and address]	
nd if such number of Warrants shall not be all the Warrants Varrant Certificate, that a new Warrant Certificate for the ba Varrants be registered in the name of, and delivered to, the lette address stated below.	alance of such
ASSIGNMENT  To Be Executed by the Registered Holder	
in Order to Assign Warrants	
OR VALUE RECEIVED,ansfers unto	hereby sells, assigns and
PLEASE INSERT SOCIAL SECURITY OR OTHER	IDENTIFYING NUMBER
	-
	-
	_
[please print or type name and address]	-
of the warrants represented by the	nis Warrant
ertificate, and hereby irrevocably constitutes and appoints	uo mantant
Attorney to transfer this War	
ated: xSignature Guaranteed	
Signature Guaranteed	

THE SIGNATURE TO THE ASSIGNMENT OR THE SUBSCRIPTION FORM MUST CORRESPOND TO THE NAME AS WRITTEN UPON THE FACE OF THIS WARRANT CERTIFICATE IN EVERY PARTICULAR, WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATSOEVER, AND MUST BE GUARANTEED BY A COMMERCIAL BANK OR TRUST COMPANY OR A MEMBER FIRM OF THE AMERICAN STOCK EXCHANGE, NEW YORK STOCK EXCHANGE, PACIFIC STOCK EXCHANGE OR MIDWEST STOCK EXCHANGE.

#### **EXHIBIT 4.5**

## PATENT LICENSE AGREEMENT

#### BETWEEN THE UNIVERSITY OF TEXAS SYSTEM

AND

#### CYTOCLONAL PHARMACEUTICS INC.

THIS AGREEMENT is made by and between the BOARD OF REGENTS (BOARD) OF THE UNIVERSITY OF TEXAS SYSTEM (SYSTEM), an agency of the State of Texas, whose address is 201 West 7th Street, Austin, Texas 78710, on behalf of THE UNIVERSITY OF TEXAS AT DALLAS (UNIVERSITY) and CYTOCLONAL PHARMACEUTICS INC., (LICENSEE), a corporation organized and existing under the laws of the State of Texas and having a principal place of business located at 9000 Harry Hines Blvd, Dallas, Texas 75235.

## WITNESETH:

Whereas BOARD owns certain PATENT RIGHTS and TECHNOLOGY RIGHTS related to LICENSED SUBJECT MATTER, which were developed at UNIVERSITY, a component institution of SYSTEM, whose address is P.O. Box 830688, Richardson, Texas 75083-0688, including without limitation PATENT RIGHTS and TECHNOLOGY RIGHTS that may be developed pursuant to a Sponsored Research Agreement (SRA) between BOARD, UNIVERSITY, and LICENSEE to be performed under the direction of Dr. Donald M. Gray or his/her successors and described in Article XV;

Whereas, BOARD desires to have the LICENSED SUBJECT MATTER developed and used for the benefit of LICENSEE, the investors, BOARD, UNIVERSITY and the public as outlined in the Intellectual Property Policy promulgated by the BOARD; and

Whereas LICENSEE wishes to obtain a license from BOARD to practice LICENSED SUBJECT MATTER;

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

## I. EFFECTIVE DATE

EFFECTIVE DATE shall mean that date of the last party to execute this AGREEMENT, as shown on the execution page.

## II. DEFINITIONS

As used in this AGREEMENT, the following terms shall have the meanings indicated:

- 2.1 LICENSED SUBJECT MATTER shall mean inventions and discoveries covered by PATENT RIGHTS or TECHNOLOGY RIGHTS within LICENSED FIELD.
- 2.2 PATENT RIGHTS shall mean BOARD's rights in information or discoveries covered by (a) U.S. Patent Application Serial No. 08/320,507 filed October 7, 1994, entitled "A Method for Ranking Sequences to Select Target Sequence Zones of Nucleic Acids" filed October 7, 1994, naming Dr. Donald M. Gray as inventor (hereinafter INVENTOR), corresponding to The University of Texas at Dallas Sponsor Number UTD-92-29; and its foreign counterparts; (b) all divisionals, continuations, reissues, reexaminations or extensions of patent applications of (a) above; (c) all continuations-in-part of patent applications of (a) above, the research for which was directly supported by LICENSEE through sponsored research and future supported research; (d) to the

applications of (a) above even though not directly supported by LICENSEE through sponsored research, said right of first refusal to be exercisable within sixty (60) days of written notice by BOARD; (e) all letters patent that issue on such continuation-in-part application or applications or any such divisional, continuation, reissue, reexamination or extension thereof. Inventor named in (a) through (e) above shall be referred to as INVENTOR.

- 2.3 TECHNOLOGY RIGHTS shall mean BOARD'S rights in any technical information, know-how, process, procedure, composition, device, method, formula, protocol, technique, software, design, drawing, data or non-patentable invention directly relating to PATENT RIGHTS and/or LICENSED SUBJECT MATTER that is not covered by PATENT RIGHTS but which is necessary for practicing the invention at any time covered by PATENT RIGHTS.
- 2.4 LICENSED FIELD shall mean all areas of antigene, gene-targeting, and antisense technology.
  - 2.5 LICENSED TERRITORY shall mean worldwide.
- 2.6 AFFILIATE and SUBSIDIARY shall mean any business entity more than 50% owned by LICENSEE, any business entity which owns more than 50% of LICENSEE, or any business entity that is more than 50% owned by a business entity that owns more than 50% of LICENSEE.
- 2.7 COMPOSITE PRODUCTS shall mean any product SOLD by LICENSEE with active ingredients comprising both LICENSED SUBJECT MATTER within PATENT RIGHTS and active ingredients other than LICENSED SUBJECT MATTER.
- 2.8 SALE or SOLD shall mean the transfer or disposition of a LICENSED PRODUCT for value to a party other than LICENSEE or a SUBSIDIARY.
- 2.9 LICENSED PRODUCT shall mean any product comprising LICENSED SUBJECT MATTER pursuant to this AGREEMENT, including Composite Products.
- 2.10 NET SALES shall mean the gross revenues (whether or not in cash) actually received by LICENSEE from the SALE of LICENSED PRODUCTS less sales, V.A.T. and/or use taxes, duties and similar governmental assessments actually paid, transportation, packing, shipping insurance and amounts allowed or credited due to returns (not to exceed the original billing or invoice amount). NET SALES also shall include user fees, wherein a user fee is payment for use of LICENSED SUBJECT MATTER whether or not a product is sold.

## III. WARRANTY; SUPERIOR-RIGHTS

- 3.1 Except for the rights, if any, of the Government of the United States, as set forth hereinbelow, BOARD, represents and warrants its belief that (a) it is the owner of the entire right, title, and interest in and to LICENSED SUBJECT MATTER, and that it has the right to grant licenses thereunder and (b) it has no knowledge that the practice of any PATENT RIGHTS or the manufacture, sale or use of any LICENSED SUBJECT MATTER infringes or violates the patent or any other intellectual property rights of any third party.
- 3.2 LICENSEE understands that the LICENSED SUBJECT MATTER may have been developed under a funding agreement with the Government of the United States of America and, if so, that the Government may have certain rights relative thereto. This AGREEMENT is explicitly made subject to the Government's rights under any such agreement and any applicable law or regulation. To the extent that there is a conflict between any such

agreement, applicable law or regulation and this AGREEMENT, the terms of such Government agreement, applicable law or regulation shall prevail. The BOARD shall use its best efforts to obtain a waiver of all rights of the Government with respect to the PATENT RIGHTS and the LICENSED SUBJECT MATTER.

3.3 BOARD makes no representations other than those specified in this AGREEMENT, and specifically, MAKES NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

- 4.1 BOARD hereby grants to LICENSEE an exclusive royalty-bearing license under LICENSED SUBJECT MATTER to manufacture, have manufactured, use, and/or sell LICENSED PRODUCTS within LICENSED TERRITORY for use within LICENSED FIELD. This grant shall be subject to the payment or transfer by LICENSEE to BOARD of all consideration as provided in this AGREEMENT, and shall be further subject to rights retained by BOARD to:
  - (a) Publish the general scientific findings from research related to LICENSED SUBJECT MATTER provided that the BOARD shall provide LICENSEE with a right to review all such publications at least sixty (60) days in advance of publication in order to protect any patent or intellectual property rights; and
  - (b) Use LICENSED SUBJECT MATTER for research, teaching and other educationally-related non-commercial purposes at any component institution of the SYSTEM, provided BOARD may transfer outside the SYSTEM for educationally-related, non-commercial purposes with the prior written approval of LICENSEE, which shall not be unreasonably withheld.
- 4.2 LICENSEE shall have the right to extend the license granted herein to any AFFILIATE provided that such AFFILIATE consents to be bound by this AGREEMENT to the same extent as LICENSEE.
- 4.3 LICENSEE shall have the right to grant sublicenses consistent with this AGREEMENT provided that LICENSEE shall be responsible for the operations of its sublicensees relevant to this AGREEMENT as if such operations were carried out by LICENSEE, including the payment of royalties whether or not paid to LICENSEE by a sublicensee. LICENSEE further agrees to deliver to BOARD a true and correct copy of each sublicense granted by LICENSEE, and any modification, or termination thereof, within thirty (30) days after execution, modification, or termination. Upon termination of this AGREEMENT, any and all existing sublicenses granted by LICENSEE shall be assigned to BOARD.
- 4.4 BOARD shall have the right at any time after three (3) years from the date of this AGREEMENT, to terminate the exclusivity of the license granted herein in any national jurisdiction within LICENSED TERRITORY if LICENSEE, within ninety (90) days after written notice from BOARD as to such intended termination of exclusivity, fails to provide written evidence that it has commercialized or is actively attempting to commercialize LICENSED SUBJECT MATTER within such jurisdiction. BOARD agrees to negotiate in good faith with LICENSEE for adjusting terms under such a non-exclusive arrangement. BOARD shall have the right at any time after five (5) years from the date of this AGREEMENT to terminate the license completely in any national jurisdiction if LICENSEE, within ninety (90) days after written notice from BOARD of such intended termination, fails to provide written evidence that it has commercialized or is actively attempting to commercialize LICENSED SUBJECT MATTER within such jurisdiction. Evidence provided by LICENSEE that it has an ongoing and active research, development, manufacturing, marketing or licensing program as appropriate, directed toward production and sale of LICENSED SUBJECT MATTER within such jurisdiction shall be deemed satisfactory evidence.

## V. PAYMENTS AND REPORTS

- 5.1 Subject to the other terms of this Article V and in consideration of rights granted by BOARD to LICENSEE under this AGREEMENT, LICENSEE agrees to pay BOARD the following:
  - (a) A running royalty as provided in paragraph 5.2 in the case of SALES by LICENSEE or its SUBSIDIARIES; and
  - (b) One quarter of the gross revenues or other consideration received by LICENSEE from any sublicensee but in no event less than the amount due pursuant to Section 5.2 if the Sublicensee's SALES were deemed made by LICENSEE.

- 5.2 Subject to Section 5.3, royalty on NET SALES by LICENSEE and any SUBSIDIARY shall be four percent (4%) of NET SALES in respect of LICENSED PRODUCTS SOLD.
- 5.3 In the case of COMPOSITE PRODUCTS prior to the calculation of royalty due thereon NET SALES shall be multiplied by a fraction whose numerator is the cost of active ingredients within LICENSED SUBJECT MATTER and whose denominator is the cost of all active ingredients within such COMPOSITE PRODUCT. The resulting number shall represent the NET SALES price basis for calculation of royalties due on COMPOSITE PRODUCTS.
- 5.4 Upon the request of BOARD but not more than once per calendar year, LICENSEE shall deliver to BOARD a written report as to LICENSEE'S efforts and accomplishments during the preceding year in commercializing LICENSED SUBJECT MATTER in various parts of the LICENSED TERRITORY and its commercialization plans for the upcoming year.
- 5.5 During the term of this AGREEMENT, and for one (1) year thereafter LICENSEE shall keep complete and accurate records of its NET SALES and (as reported to it) its sublicensee's NET SALES of LICENSED PRODUCTS and COMPOSITE PRODUCTS under the license granted in this AGREEMENT in sufficient detail to enable the royalties payable hereunder to be determined. LICENSEE shall permit an independent certified public accountant (hired by the BOARD and reasonably acceptable to LICENSEE), at BOARD'S expense, to periodically examine its books, ledgers, and records during regular business hours for the purpose of and to the extent necessary to verify any report required under this AGREEMENT; provided such accountant is bound in confidence and may not disclose any such information except to BOARD as necessary to show underpayment. In the event that the amounts due to BOARD have been underpaid, LICENSEE shall pay the cost of such examination, the due amount, and accrued interest thereon at the prevailing prime rate for commercial loans.
- 5.6 Within forty-five (45) days after March 31, June 30, September 30 and December 31, LICENSEE shall deliver to BOARD at the addresses listed in section 16.2 a true and accurate report, giving such particulars of the business conducted by LICENSEE during the preceding calendar quarter under this AGREEMENT as are pertinent to an account for payments hereunder. Such report shall include at least (a) the quantifies of LICENSED SUBJECT MATTER that it has SOLD; (b) the total SALES; (c) the calculation of royalties thereon; and (d) the total royalties so computed due BOARD. Simultaneously with the delivery of each such report LICENSEE shall pay to BOARD the amount, if any, due for the period of such report. If no payments are due, it shall be so reported. LICENSEE shall impose on sublicensees similar reporting and payment obligations and shall provide BOARD similar reports from sublicensees as they relate to BOARD'S entitlements under section 5.1(b) to the extent received during such quarter or thereafter up until fifteen (15) business days prior to the due date for the report on LICENSEE'S SALES. Simultaneously with

its report on such sublicensee activity, LICENSEE shall pay to BOARD amounts due under section 5.1(b).

5.7 All amounts payable hereunder by LICENSEE shall be payable in United States funds without deductions for taxes, assessments, fees, or charges of any kind. Checks for amounts due to BOARD shall be made payable to The University of Texas at Dallas and mailed to: Office of Sponsored Projects, The University of Texas at Dallas, P.O. Box 830688, Richardson, Texas, 75083-0688, Attention: Dr. Marianne Woods.

#### VI. TERM AND TERMINATION

6.1 The Term of this AGREEMENT shall extend from the Effective Date set forth hereinabove to the full end of the term or terms for which PATENT RIGHTS have not expired and if only TECHNOLOGY RIGHTS are licensed and no PATENT RIGHTS are applicable, for a term of twenty (20) years.

- (a) automatically if any payment obligation of LICENSEE in Section V of the present Agreement is not received by BOARD within thirty (30) days after LICENSEE receives written notice of its failure to make such payment. In this circumstance, LICENSEE may petition BOARD for reinstatement of this AGREEMENT within ninety (90) days after this thirty (30) day period has elapsed. Reinstatement of this AGREEMENT shall be at the discretion of BOARD and contingent upon payment of all past due payments and accrued interest at the prime rate plus two percent (2%), unless such interest is greater than the highest allowable rate by law in which the interest shall be the highest allowable rate by law; or
- (b) upon ninety (90) days written notice if LICENSEE or BOARD shall breach or default on any obligation under this License AGREEMENT; provided, however, LICENSEE or BOARD may avoid such termination if before the end of such period LICENSEE or BOARD notifies the other party that such breach has been cured and states the manner of such cure, and in fact the breach has been cured; or
  - (c) Under the provisions of Paragraph 4.4 if invoked; or
  - (d) Upon sixty (60) days written notice by LICENSEE.
- 6.3 Upon termination of this AGREEMENT for any cause, nothing herein shall be construed to release either party of any obligation matured prior to the effective date of such termination. LICENSEE may, after the effective date of such termination, sell all LICENSED PRODUCT and parts therefor that it may have on hand at the date of termination provided that it makes all payments to BOARD required by this AGREEMENT.

## VII. INFRINGEMENT BY THIRD PARTIES

7.1 LICENSEE shall have the obligation of enforcing at its expense any patent exclusively licensed hereunder against infringement by third parties. In the event that LICENSEE is awarded a recovery from an infringer or misappropriating party in excess of the reasonable costs and expenses for bringing such infringement or misappropriation action, LICENSEE shall pay to BOARD twenty-five percent (25%) of any such excess recovery. In the event that LICENSEE does not file suit against a substantial infringer of such patents within six (6) months of receipt of a written demand from BOARD to bring suit, BOARD and LICENSEE will consult with one another in an effort to determine whether a reasonably prudent licensee would institute litigation to enforce the patent in question in light of all relevant business and economic

factors (including, but not limited to, the projected costs of such litigation, the likelihood of success on the merits, the probable amount of any damage award, the prospects for satisfaction of any judgment against the alleged infringer, the possibility of counterclaims against LICENSEE and BOARD, the diversion of LICENSEE'S human and economic resources, the impact of any possible adverse outcome on LICENSEE'S and BOARD'S respective reputations and goodwill). After such consultation, if BOARD and LICENSEE have not reached agreement and LICENSEE does not file suit forthwith against the substantial infringer, then BOARD shall have the right to convert the previously licensed exclusive rights to non-exclusive provided that a reasonably prudent licensee would have brought such suit in light of the above-mentioned circumstances.

7.2 In any suit or dispute involving an infringer, the parties shall cooperate fully, and upon the request and at the expense of the party bringing suit, the other party shall make available to the party bringing suit at reasonable times and under appropriate conditions all relevant personnel, records, papers, information, samples, specimens, and the like which are in its possession.

#### VIII. ASSIGNMENT

This AGREEMENT may not be assigned by LICENSEE without the prior written consent of BOARD, which consent will not be unreasonably denied or withheld.

#### XI. PATENT MARKING

LICENSEE agrees to mark permanently and legibly all products and documentation manufactured or sold by it under this AGREEMENT with such patent notice as may be permitted or required under Title 35, United States

#### X. INDEMNIFICATION

LICENSEE shall hold harmless and indemnify BOARD, SYSTEM, UNIVERSITY, its Regents, officers, employees and agents (hereinafter referred to collectively as "INDEMNITEES") from and against any claims, demands, or causes of action whatsoever (hereinafter collectively referred to as "CLAIMS"), including without limitation those arising on account of any injury or death of persons or damage to property caused by, or arising out of or resulting from, the exercise or practice of the license granted hereunder by LICENSEE or its officers, employees, agents or representatives except to the extent that any such CLAIM arises out of the result of the negligence or misconduct of the INDEMNITEES.

#### XI. USE OF NAME

LICENSEE shall not use the name of UNIVERSITY, SYSTEM, BOARD, INVENTORS, Regents or employees without express prior written consent.

#### XII. CONFIDENTIAL INFORMATION

12.1 BOARD and LICENSEE each agree that all trade secrets and/or information contained in documents or otherwise disclosed (i.e. oral) which are forwarded to one by the other shall be received in strict confidence, used only for the purposes of this AGREEMENT, and not disclosed by the recipient party (except as required by law or court order), its agents or employees without the prior written consent of the other party, unless such information (a) was in the public domain at the time of disclosure; (b) later became part of the public domain through no act or omission of the recipient party, its employees, agents, successors or assigns; (c) was lawfully disclosed to the recipient party by third party having the right to disclose it; (d) was

already known by the recipient party at the time of disclosure, the burden of proof being upon the recipient party; (e) was independently developed; or (f) is required to be submitted to a government agency pursuant to any preexisting obligation.

12.2 Each party's obligation of confidence hereunder shall be fulfilled by using at least the same degree of care with the other party's confidential information it uses to protect its own confidential information. This obligation shall exist while this AGREEMENT is in force and for a period of three (3) years thereafter.

## XIII. PATENTS AND INVENTIONS

13.1 LICENSEE shall reimburse UNIVERSITY for all past, present, and future expenses incurred in searching, preparing, filing, prosecuting and maintaining patent applications and patents relating to PATENT RIGHTS. If after consultation with LICENSEE it is agreed by UNIVERSITY, as appropriate, and LICENSEE concurs that another patent application should be filed for LICENSED SUBJECT MATTER, UNIVERSITY, as appropriate, will prepare and file appropriate patent applications, and LICENSEE shall pay or promptly reimburse UNIVERSITY for the cost of searching, preparing, filing, prosecuting and maintaining same. If LICENSEE notified UNIVERSITY, as appropriate, that it does not intend to pay such costs, or if LICENSEE does not respond or make an effort to reach agreement, then UNIVERSITY, as appropriate, may file such application at its own expense and LICENSEE shall have no rights to such invention under this AGREEMENT or otherwise. UNIVERSITY, as appropriate, shall provide LICENSEE with a copy of the application filed for which LICENSEE has paid the cost of filing, as well as copies of any documents received or filed during prosecution thereof.

expense, may prepare and file appropriate foreign patent applications to be owned by BOARD on LICENSED SUBJECT MATTER, or any portion thereof, subject to BOARD'S approval of the content of the application(s) and any amendments thereto. In addition, LICENSEE agrees to:

- (a) Notify BOARD and UNIVERSITY of its intent to file for patent(s) related to LICENSED SUBJECT MATTER at least thirty (30) days prior to applying for patent(s);
- (b) Inform BOARD and UNIVERSITY of LICENSEE'S choice of patent counsel to prepare and prosecute said patent application(s). Final approval of patent counsel shall rest with BOARD, whose approval shall not be unreasonably withheld;
- (c) Subject to BOARD approval, prepare, file and prosecute appropriate patent application(s) on the invention(s) and bear all such costs;
  - (d) Assign such patent application(s) to BOARD; and
- (e) Provide BOARD and UNIVERSITY with a copy (or copies) of all patent applications, as well as copies of any documents received or filed during prosecution thereof. LICENSEE will provide BOARD with the opportunity to review, approve and comment thereon.

### XIV. CONSULTATION

- 14.1 LICENSEE'S DESIGNATED REPRESENTATIVE (hereinafter so called) for consultation and communications with INVENTORS shall be Dr. Arthur P. Bollon or such other person as LICENSEE may from time to time designate in writing to UNIVERSITY.
- 14.2 Individual INVENTORS may act as consultants and advisors to LICENSEE on matters pertaining to transfer of LICENSED SUBJECT MATTER to LICENSEE under this AGREEMENT pursuant to UNIVERSITY'S normal rules and policies relating to consulting. Such consultation shall be carried out at times, locations and in a manner mutually agreed upon by individual INVENTORS

and LICENSEE'S DESIGNATED REPRESENTATIVE. For such services, LICENSEE will enter into payment arrangements with each INVENTOR, such payments to be made in cash, subject to approval by UNIVERSITY, as appropriate, in accordance with internal rules, regulations and procedures, which approval will not be unreasonably withheld.

- 14.3 Any invention conceived and reduced to practice by INVENTORS during such consultation shall be the property of BOARD and shall fall within the option rights below.
- 14.4 Any invention conceived and reduced to practice jointly by LICENSEE'S employees or agents and INVENTORS shall be jointly owned by LICENSEE and BOARD and shall, respectively, fall within the option rights described below.
- 14.5 BOARD grants to LICENSEE an option to negotiate a worldwide, exclusive license to practice and use any and all inventions and know-how which fall under these option rights as described in Section 14.3 and 14.4. Such option shall be exercisable at any time by LICENSEE within one hundred- twenty (120) days after UNIVERSITY, as appropriate, notifies LICENSEE in writing of such invention. LICENSEE must exercise its option in writing according to the provisions in Section 16.2, identify the invention and/or know-how, and provide a written statement of its intention to develop the invention and/or know-how for public use as soon as practicable, consistent with sound and reasonable business practices and judgment. Upon exercise of each such option, BOARD and LICENSEE shall enter into negotiations of a license agreement based on the foregoing rights, which agreement shall include at least the following terms and conditions or terms and conditions similar to those set forth in this AGREEMENT:

reasonable amount of equity and/or running royalty on net sales;

law;

- (b) a commitment by LICENSEE to diligently develop and commercialize the licensed invention and know-how. In the event LICENSEE does not achieve its commitment, its license shall terminate upon written notice by BOARD;
  - (c) a term that does not exceed any limits imposed by
- (d) retention by BOARD of the complete royalty-free right to make and use any invention and know-how for teaching, research, or other educationally-related or academically-related purposes based on terms in 4.1(a) and 4.1(b);
- (e) reservation of the rights of the government of the United States of America, as set forth in Public Law 96-517, if applicable; and
- (f) an indemnification by LICENSEE of UNIVERSITY (including BOARD and SYSTEM) and their regents, officers, employees, and agents from all liability arising from LICENSEE'S development, marketing, manufacturing, use or sale of any invention or know-how.
- 14.6 In the event that an invention is conceived or reduced to practice during the consultation set out herein, UNIVERSITY, as appropriate, agrees to report such invention to LICENSEE within sixty (60) days of the identification of such invention. BOARD and LICENSEE shall thereupon exert their best efforts in cooperation with each other to investigate, evaluate and determine to the mutual satisfaction of both BOARD and LICENSEE whether any patent application(s) are to be filed.
- 14.7 Both parties agree to negotiate in good faith to enter into a license agreement as soon as reasonably practicable after the exercise of such option.
- 14.8 If after discussion on any invention of which UNIVERSITY employee is sole or joint inventor, it is agreed by BOARD and LICENSEE that a patent application(s) should be filed, BOARD and LICENSEE will cooperate with each other in determining whether BOARD or LICENSEE should prepare, file, and prosecute patent application(s). If BOARD prepares, files and prosecutes patent application(s) on the invention, LICENSEE shall reimburse BOARD for such costs of such preparation, filing, prosecution and maintenance thereof. If LICENSEE notifies BOARD that it does not intend to pay such costs, or if LICENSEE does not respond within thirty (30) days of written notice from BOARD, then BOARD may file such application(s) at its own expense and LICENSEE shall have no rights, option or otherwise to such invention. BOARD shall provide LICENSEE with a copy of any application(s) filed for which LICENSEE has paid such costs, as well as copies of any documents received or filed during prosecution thereof.

## XV. SPONSORED RESEARCH

LICENSEE and BOARD agree to begin diligently negotiating a Sponsored Research Agreement within ninety (90) days of the EFFECTIVE DATE of this AGREEMENT with the intent of concluding negotiations within six (6) months following the EFFECTIVE DATE of this AGREEMENT.

# XVI. GENERAL

- 16.1 This AGREEMENT constitutes the entire and only agreement between the parties for LICENSED SUBJECT MATTER and all other prior negotiations, representations, agreements, and understandings are superseded hereby. No agreements altering or supplementing the terms hereof may be made except by means of a written document signed by the duly authorized representatives of the parties.
- 16.2 Any notice required by this License AGREEMENT shall be given by prepaid, first class, certified mail, return receipt requested, addressed in the case of BOARD TO:

BOARD OF REGENTS The University of Texas System 201 West Seventh Street Austin, TX 78701

Attn: Intellectual Property Section Office of General Counsel

with a copy to:

University of Texas at Dallas Marianne R. Woods, Ph.D. Office of Sponsored Projects P.O. Box 830688, M/S EC37 Richardson, TX 75083-0688

and

Mr. Robert L. Lovitt Vice President for Business Affairs University of Texas at Dallas P.O. Box 830688 Richardson, TX 75083-0688

or such other address as may be given from time to time under the terms of this notice provision.

16.3 LICENSEE shall comply with all applicable federal, state and local laws, regulations, and ordinances in connection with its activities pursuant to this AGREEMENT.

16.4 This License AGREEMENT shall be governed by and construed and enforced in accordance with the laws of the United States of America and the State of Texas.

16.5 Failure of the BOARD to enforce a right under this AGREEMENT shall not act as a waiver of that right or the ability to later assert that right relative to the particular situation involved.

 $16.6~{\rm Headings}$  included herein are for convenience only and not be used to construe this AGREEMENT.

16.7 If any provision of this AGREEMENT shall be found by a court to be void, invalid, or unenforceable, the same shall be reformed to comply with applicable law or stricken if not so conformable, so as not to affect the validity or enforceability of this AGREEMENT.

IN WITNESS WHEREOF, parties hereto have caused their duly authorized representatives to execute this AGREEMENT.

BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS

Date: 6/10/96

CYTOCLONAL PHARMACEUTICS, INC.

/s/ Ray Farabee	/s/ Arthur P. Bollon				
Ray Farabee Vice Chancellor and Counsel	Arthur P. Bollon Chief Executive Officer				
Date: 6/10/96	Date: 5-28-96				
APPROVED AS TO FORM:	APPROVED AS TO CONTENT				
By: /Dudley R. Dobie Jr.	By: /s/ Robert L. Lovitt				
Dudley R. Dobie, Jr. Office of General Counsel	Robert L. Lovitt  Vice President for Business  Affairs				

-----

#### EXHIBIT 5.1

Bryan Cave LLP 245 Park Ave New York, NY 10167

October 3, 1996

Cytoclonal Pharmaceutics Inc. 9000 Harry Hines Boulevard Dallas, Texas 11040

Dear Sirs:

We refer to the Registration Statement on Form SB-2 (the "Registration Statement") filed by you with the Securities and Exchange Commission relating to 500,000 Class A Warrants of Cytoclonal Pharmaceutics Inc. (the "Company") issued to certain investors in connection with the Company's bridge financing completed in August 1994 (the "1994 Bridge Financing"), 1,018,750 Class B Warrants ("Class B Warrants") of the Company issued to certain investors in connection with the Company's bridge financing completed in April 1995 (the "1995 Bridge Financing"), 506,250 warrants (the "Blair Warrants") issued to D.H. Blair Investment Banking Corp. ("Blair") as part of its compensation for services as placement agent in the 1994 Bridge Financing and for rendering advice and assistance in structuring the 1995 Bridge Financing and 810,000 shares of Common Stock \$.01 par value, underlying the Warrants. The Class A Warrants, Class B Warrants and the Blair Warrants are hereinafter referred to collectively as the "Warrants" and the shares of Common Stock issuable upon exercise of the Warrants are hereinafter referred to as the "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 Warrants have been duly and validly authorized and when sold, paid for and issued as contemplated by the Registration Statement will be duly and validly issued and fully paid and nonassessable.
- The Warrant Shares have been duly and validly authorized and when sold, paid for, and issued upon exercise of the Warrants in accordance with the terms of the Warrants will be duly and validly issued and 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 such Registration Statement.

Very truly yours,

/s/ Bryan Cave -----BRYAN CAVE LLP

#### EXHIBIT 5.2

WARREN & PEREZ Berkshire Court 8411 Preston Road Suite 710 Dallas, Texas 75225

October 2, 1996

Cytoclonal Pharmaceutics Inc. 9000 Harry Hines Boulevard, Suite 330 Dallas, TX 75235 Selling Security Holders referenced in the Registration Statement

Re: Opinion of Counsel

Ladies and Gentlemen:

We are and have acted as special patent and regulatory counsel to CYTOCLONAL PHARMACEUTICS INC. (the "Company"). We refer to the Registration Statement on Form SB-2 (the "Registration Statement") filed by Cytoclonal Pharmaceutics Inc. (the "Company") with the Securities and Exchange Commission relating to 500,00 class A Warrants of the Company issued to certain investors in connection with the Company's bridge financing completed in August 1994 (the "1994 Bridge Financing"). 1,018,750 Class B Warrants ("Class B Warrants") of the Company issued to certain investors in connection with the Company's bridge financing completed in April 1995 (the "1995 Bridge Financing"), 506,250 warrants (the "Blair Warrants") issued to D.H. Blair Investment Banking Corp. ("Blair") as part of its compensation for services as placement agent in the 1994 Bridge Financing and for rendering advice and assistance in structuring the 1995 Bridge Financing and 810,000 shares of Common Stock \$.01 par value, underlying the Class A Warrants, Class B Warrants and Blair Warrant. We have reviewed and given careful consideration to the following (collectively, the "Documents"):

- (i) the Registration Statement;
- (ii) an on-line database search conducted October 17, 1995 and updated to October 2, 1996 designed to uncover potential prior art relating to the various technologies and, in particular, a

Cytoclonal Pharmaceutics Inc. Selling Security Holders referenced in the Registration Statement October 2, 1996 Page 2

> thorough search relating to the taxol technology of both the patents that have issued and technologies that are in the public domain.

(iii) 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 and subject to the foregoing, and a review of such matters of law as we deem appropriate, it is our opinion that:

1. The material set forth in the Registration Statement under "Risk - Factors Royalty Obligations; Possible Loss of Patents and other Proprietary

Rights," "Uncertain Ability to Protect Proprietary Technology" and "Business - Patents, Licenses and Proprietary Rights", accurately and adequately discloses the Company's patent position and does not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

- 2. The patent applications referred to in the Registration Statement were properly filed and the Patent and Trademark Office has not taken substantive action with respect thereto. There has not been any inappropriate public use or sale by the Company prior to the filing of any of the patents or patent applications which would affect their validity and the claims contained in the applications represent valid patent claims. We have no reason to believe that patents will not issue with respect thereto or that the claims contained in the applications conflict with the rights of others.
- 3. There are no facts which would preclude the Company from having clear title to the United States patents and United States patent applications owned by the Company. The Company has not received any notice challenging the validity or enforceability of any of the United States patents owned by, or licensed to, the Company. The Company does not lack or will not be unable to obtain any rights or license to use United States patents necessary to its business as currently conducted.
- 4. There are no material legal or governmental proceedings pending or threatened with respect to any patents of the Company. There have been no claims asserted against the Company relating to the potential infringement of or conflict with any patents, trademarks, copyrights or trade secrets of others. Based on the searches referred to above for existing United States patens with

Cytoclonal Pharmaceutics Inc. Selling Security Holders referenced in the Registration Statement October 2, 1996 Page 3

claims that might cover the Company's technology, the Company's technology does not infringe any United States patents.

- 5. To these best of our knowledge, the Company is in compliance in all material respects with the material provisions of all applicable rules and regulations of the U.S. Food and Drug Administration ("FDA"), compliance with which is necessary to its business as currently conducted. The statements of federal law or regulation contained under the captions "Risk Factors No Assurance of FDA Approval; Government Regulation" and "Business Government Regulation" and other references in the Registration Statement to FDA regulatory matters (collectively, the "Regulatory Portion") are, in all material respects correct and accurate statements or summaries of applicable federal law and regulation, subject to the qualifications set forth therein; and
- 6. To the best of our knowledge, the Regulatory Portion does not contain any untrue statement of a material fact, or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

Sincerely,

/S/Warren & Perez

WARREN & PEREZ

## EXHIBIT 11

# CYTOCLONAL PHARMACEUTICS, INC.

# COMPUTATION OF NET (LOSS) PER COMMON SHARE (2)

<table> <caption></caption></table>	Year Ended December 31,		Six Months Ended		June 30,	
Primary	1994	1995	1995			
<del></del>		(	Unaudited)			
<s> Net (loss)</s>	<c> \$(2,265,000)</c>	<c> \$(2,691,0</c>	<c> (1,43)</c>	32,000) \$(	(1,320,000)	
Add cumulative preferred dividend	(	(288,000)	(317,000)	(159,000	(160,000)	)
NET (LOSS) USED FOR COMPUTA	гіоn ======	\$(2,5 ======	53,000) \$	(3,008,000)	\$(1,591,000) ======	\$(1,480,000)
Weighted average number of common	shares outstandir	ng 5,22	0,000 5	,621,292	5,220,000	7,603,193
Shares issuable upon exercise of stock warrants, net of shares assumed to be		147,415	73,70	08 147	,415 -	
Shares used for computation	5,36	7,415 5	,695,000	5,367,415	7,603,193	==
Net (loss) per common share	\$(	(.48) \$	(.53)	\$(.30)	\$(.19)	

 ===== | ===== |  |  | = |  |

# Notes and Assumptions:

(1) The Company issued common stock and common stock equivalents for consideration below the initial public offering price of \$5.00. Consequently, in accordance with Staff Accounting Bulletin 83 (during the periods covered by statements of operation included in the registration statement) the following methodology was used in determining weighted average shares outstanding:

Stock issued in a one year period immediately prior to the offering was treated as outstanding for the entire period and repurchase of shares using the treasury stock method at an offering price of \$5.00.

(2) Adjusted to reflect retroactively, a 1 for 2.5 reverse stock split effected on August 2, 1995.

# EXHIBIT 24.2

# 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 the Registration Statement.

WARREN & PEREZ

By: /S/ Daniel F. Perez

Daniel F. Perez

#### EXHIBIT 24.3

# CONSENT OF INDEPENDENT ACCOUNTANTS

We consent to inclusion in this Registration Statement on Form SB-2 of our report dated February 2, 1996 on our audits of the financial statements of Cytoclonal Pharmaceutics Inc. We also consent to the reference of our firm under the captions "Experts" and "Selected Financial Data" in the Prospectus.

Richard A. Eisner & Company, LLP

New York, New York September 30, 1996

> BRYAN CAVE LLP 245 Park Avenue New York, N.Y. 10167

ROBERT H. COHEN

(212) 692-1843

October 2, 1996

Securities and Exchange Commission 450 Fifth Street, N.W. Washington, D.C. 20549

Attn: Division of Corporate Finance

Re: Cytoclonal Pharmaceutics Inc. Form SB-2

\_\_\_\_\_

Ladies and Gentlemen:

Enclosed herewith for filing on behalf of Cytoclonal Pharmaceutics Inc. (the "Company") pursuant to the Securities Act of 1933, as amended, is a complete copy of the Company's Registration Statement on Form SB-2, including all exhibits. Originally executed and dated signature pages and consent of independent accountants have been maintained by the Company.

We are desirous of circulating a prospectus to shareholders as soon as possible; therefore, we would appreciate the Staff's comments, if any, communicated to our attention as early as possible.

Very truly yours,

BRYAN CAVE LLP

By:\_\_\_\_\_\_Robert H. Cohen

RHC:DY

Enclosure

cc: Daniel M. Shusterman, Esq.