
SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

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

TECHNICLONE CORPORATION (Exact name of registrant as specified in its charter)

DELAWARE (State or other jurisdiction of incorporation or organization) 95-3698422 (I.R.S. Employer Identification No.)

14282 FRANKLIN AVENUE, TUSTIN, CALIFORNIA 92780-7017 (714) 508-6000

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

LARRY 0. BYMASTER
14282 FRANKLIN AVENUE,
TUSTIN, CALIFORNIA 92780-7017
(714) 508-6000
(Name, address, including zip code, and telephone number, including area code, of agent for service)

WITH COPIES TO: THOMAS J. CRANE, ESQ. KENT M. CLAYTON, ESQ. RUTAN & TUCKER, LLP 611 ANTON BLVD. SUITE 1400 COSTA MESA, CA 92626 (714) 641-5100

APPROXIMATE DATE OF PROPOSED SALE TO THE PUBLIC:

From time to time after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. $\mid \ \mid$

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

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) 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. $\mid \ \mid$

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

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. $|\ |$

The aggregate market value of the voting stock held by non-affiliates of the Registrant was approximately \$95,032,000 as of February 24, 1999, based upon the price at which such stock was last sold in the principal market for such stock as of such date.

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED(1)	PROPOSED MAXIMUM OFFERING PRICE PER SHARE(2)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(2)	AMOUNT OF REGIS- TRATION FEE
Common Stock, \$.001 par value (3)	525,020	\$1.17	\$614,274	\$182
Shares of Common Stock, \$.001 par value, Issuable Upon Exercise of Warrants to Purchase Common Stock (4)	25,454	\$1.375	\$35,000	\$11
Shares of Common Stock, \$.001 par value, Issuable Upon Exercise of Warrants to Purchase Common Stock (4)	26, 086	\$1.17	\$30,521	\$9
Common Stock, \$.001 par value (5)	95, 454	\$1.17	\$111,682	\$33
Common Stock, \$.001 par value (6)	1,781,250	\$1.17	\$2,084,063	\$615
Shares of Common Stock, \$.001 par value, Issuable Upon Exercise of Warrants to Purchase Common Stock (7)	178, 125	\$1.17	\$208,407	\$62

- (1) In the event of a stock split, stock dividend or similar transaction involving the Company's Common Stock, in order to prevent dilution, the number of shares registered shall automatically be increased to cover the additional shares in accordance with Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act").
- (2) In accordance with Rule 457(c), the aggregate offering price of shares of Common Stock of the Registrant (sometimes referred to herein as the "Company") is estimated solely for purposes of calculating the registration fees payable pursuant hereto, as determined in accordance with Rule 457(c), using the average of the high and low sales price reported by the Nasdaq SmallCap Market for the Common Stock on February 26, 1999, which was \$1.17 per share and, with respect to shares of Common Stock of the Company issuable upon exercise of outstanding warrants, the higher of (i) such average sales price or (ii) the exercise price of such warrants.
- average sales price or (ii) the exercise price of such warrants.

 (3) Represents shares of Common Stock issued to Dunwoody Brokerage Services, Inc. (the "Registered Stockholder").
- (4) Represents shares of Common Stock issuable to the Registered Stockholder upon exercise of outstanding warrants issued to the Registered Stockholder pursuant to the terms of a Placement Agent Agreement dated as of June 16, 1998 by and between the Company and the Registered Stockholder, as successor in interest to Swartz Investments LLC, a Georgia limited liability company d/b/a Swartz Institutional Finance (the "Placement Agent Agreement"), in connection with the issuance of shares of Common Stock to two institutional investors (the "Institutional Investors") pursuant to the terms of a Regulation D Common Stock Equity Line Subscription Agreement dated as of June 16,1998 (as amended, supplemented and otherwise modified, the "Equity Line Agreement"), by and between the Company and the Institutional Investors.
- (5) Represents shares of Common Stock that may be issued to the Registered Stockholder on April 15, 1999 and July 15, 1999 (each such date, an "Adjustment Date") pursuant to the terms of the Equity Line Agreement upon adjustment of the purchase price for the initial shares of Common Stock purchased by the Institutional Investors in June 1998 (the "Adjustment Shares"), based on a reasonable estimate of a potential 10-day low closing bid price immediately preceding such Adjustment Date (estimated solely for purposes of this registration statement to be not less than \$1.00 per share of Common Stock, which allows the Company to sell the maximum number of shares to the Institutional Investors under the terms of the Equity Line Agreement). In the event the number of shares registered hereby to be issued to the Registered Stockholder in connection with the issuance of the Adjustment Shares to the Institutional Investors is insufficient, the Company will use other shares registered hereby for the purpose of satisfying its obligations under the Placement Agent Agreement and the Equity Line Agreement to deliver registered shares to the Registered Stockholder in connection with the issuance of the Adjustment Shares to the Institutional Investors.
- (6) Represents shares of Common Stock issuable to the Registered Stockholder pursuant to the Placement Agent Agreement and the Equity Line Agreement equal to 10% of the number of shares issuable to the Institutional Investors pursuant to the Equity Line Agreement. Upon written notice given by the Company to the Institutional Investors (the "Notice Date"), no more than one time during any monthly period until June 16, 2001, the Company may sell to the Institutional Investors a number of shares equal to up to \$2,250,000 (which amount may be increased up to \$5,000,000 by mutual agreement of the parties), less the aggregate dollar amount of any shares sold to the Institutional Investors during the three month period immediately preceding such Notice Date, divided by (i) 82.5% of the lowest closing bid price during the ten trading days (the "10-day low closing bid price") immediately preceding such Notice Date (estimated solely for purposes of this registration statement to be not less than \$1.00 per share

of Common Stock, which allows the Company to sell the maximum number of shares to the Institutional Investors under the terms of the Equity Line Agreement), or (ii) if 82.5% of such 10-day low closing bid price results in a discount of less than twenty cents (\$0.20) per share from such 10-day low closing bid price, such 10-day low closing bid price minus twenty cents (\$0.20) (the "Purchase Price"), at a purchase price equal to the Purchase Price immediately preceding the date on which such shares are sold to the Institutional Investors; provided, that the number of such shares is limited to the same number of shares of restricted securities that the Institutional Investors would otherwise be able to sell pursuant to Rule 144(e) promulgated under the Securities Act, subject to a maximum remaining dollar amount of \$14,250,000 of shares of Common Stock and to certain other limitations and restrictions (the "Equity Line Shares").

Represents shares of Common Stock issuable to the Placement Agent upon exercise of outstanding warrants issuable to the Registered Stockholder pursuant to the Placement Agent Agreement and the Equity Line Agreement. equal to 10% of the number of shares issuable upon exercise of warrants issuable to the Institutional Investors pursuant to the Equity Line Agreement. Pursuant to the terms of the Equity Line Agreement, the Company is required to issue to the Institutional Investors warrants to purchase a number of shares of Common Stock equal to 10% of the number of Equity Line Shares sold to the Institutional Investors at exercise prices equal to the respective prices per share at which the Equity Line Shares were sold to the Institutional Investors (the "Equity Line Warrants") and, to the extent that the relevant minimum aggregate commitment amount under the Equity Line Agreement is not fully utilized by the Company, shares of Common Stock issuable to the Institutional Investors upon exercise of warrants to be issued to the Equity Line Investors on each of June 16, 1999, June 16, 2000 and June 16, 2001, to purchase a number of shares of Common Stock equal to 10% of an amount equal to the difference of the relevant minimum aggregate commitment amount (\$6,666,666.66 for 1999, \$13,333,333.32 for 2000 and \$20,000,000 for 2001) minus the aggregate amount of Common Stock sold to the Institutional Investors during all years preceding such date, divided by the 10-day low closing bid price of the Common Stock immediately preceding such date (estimated solely for purposes of this registration statement to be not less than \$1.00 per share of Common Stock, which allows the Company to sell the maximum number of Equity Line Shares to the Institutional Investors under the terms of the Equity Line Agreement), at an exercise price equal to the 10-day low closing bid price of the Common Stock immediately preceding such date (the "Anniversary Warrants").

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 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

2,631,389 SHARES

[Techniclone Logo Here] TECHNICLONE CORPORATION

COMMON STOCK

This Prospectus relates to the resale, from time to time, of up to 2,631,389 shares of Common Stock of Techniclone by the Registered Stockholder named under "The Registered Stockholder." This Prospectus has been prepared for the purposes of registering the shares offered by this Prospectus under the Securities Act of 1933, as amended, to allow for future sales by the Registered Stockholder to the public without restriction. All or a portion of the shares offered by this Prospectus may be offered for sale, from time to time, by the Registered Stockholder for its own benefit, pursuant to this Prospectus, in one or more private or negotiated transactions, in open market transactions on The Nasdaq SmallCap Market, in settlement of short sale transactions, in settlement of options transactions, or otherwise, or by a combination of these methods, at fixed prices that may be changed, at market prices prevailing at the time of the sale, at prices related to such market prices, at negotiated prices, or otherwise. See "Plan of Distribution."

Of the 2,631,389 shares of Common Stock offered hereby:

- 525,020 shares are currently issued and outstanding;
 up to 1,781,250 shares may be issued to the Registered
 Stockholder pursuant to the terms of a Placement Agent
 Agreement dated as of June 16, 1998 with the Registered
 Stockholder, as successor in interest to Swartz Investments
 LLC, a Georgia limited liability company d/b/a Swartz
 Institutional Finance, in connection with the issuance of
 shares of Common Stock to two institutional investors pursuant
 to the terms of a Regulation D Common Stock Equity Line
 Subscription Agreement dated as of June 16, 1998;
 up to an aggregate of 95,454 shares may be issued to the
 Registered Stockholder on April 15, 1999 and July 15, 1999
- o up to an aggregate of 95,454 shares may be issued to the Registered Stockholder on April 15, 1999 and July 15, 1999 upon adjustment of the purchase price for the initial shares of Common Stock purchased by the institutional investors in June 1998, pursuant to the terms of the Equity Line Agreement; and
- o up to 25,454 shares may be issued to the Registered Stockholder upon exercise of outstanding warrants at an exercise price of \$1.375 per share, up to 26,086 shares may be issued to the Registered Stockholder upon exercise of outstanding warrants at an exercise price of \$0.8625 per share, and up to an additional 178,125 shares may be issued to the Registered Stockholder upon exercise of warrants issuable to the Registered Stockholder pursuant to the Placement Agent Agreement. See "The Equity Line Agreement."

The Registered Stockholder is an "underwriter" within the meaning of the Securities Act of 1933, as amended, in connection with the sale of the shares of Common Stock offered hereby. The Registered Stockholder will pay all commissions, transfer taxes and other expenses associated with the sales of the shares by it. Techniclone will pay the expenses of the preparation of this Prospectus. Techniclone has agreed to indemnify the Registered Stockholder against certain liabilities, including liabilities arising under the Securities Act of 1933, as amended. Techniclone will not receive any of the proceeds from the sale of the shares of Common Stock sold by the Registered Stockholder. Techniclone will not receive any proceeds from the exercise of the warrants issued or issuable to the Registered Stockholder, which may only be exercised pursuant to a cashless exercise by the Registered Stockholder. See "Plan of Distribution"

Techniclone's Common Stock is registered pursuant to Section 12(g) of the Securities Exchange Act of 1934, as amended, and is listed on The Nasdaq SmallCap Market under the symbol "TCLN". On February 26, 1999, the last reported sale price of the Common Stock on The Nasdaq SmallCap Market was \$1.16 per share.

INVESTING IN THE COMMON STOCK INVOLVES CERTAIN RISKS. SEE "RISK FACTORS OF OUR COMPANY" BEGINNING ON PAGE 6.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

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You should rely only on the information contained in this document or to which we have referred you. We have not authorized anyone to provide you with information that is different. This document may only be used where it is legal to sell these securities. The information in this document may only be accurate on the date of this document.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

- O Annual Report on Form 10-K for the fiscal year ended April 30, 1998, as filed with the SEC on July 29, 1998 pursuant to Section 13(a) of the Securities Exchange Act of 1934, as amended ("Exchange Act");
- O Definitive Proxy Statement with respect to the Annual Meeting of Stockholders held on October 13, 1998, as filed with the SEC on August 27, 1998;
- Quarterly Report on Form 10-Q for the quarter ended July 31, 1998, as filed with the SEC on September 14, 1998;
- Quarterly Report on Form 10-Q for the quarter ended October 31, 1998, as filed with the SEC on December 15, 1998;
- Quarterly Report on Form 10-Q for the quarter ended January 31, 1999, as filed with the SEC on March ____, 1999;
- O Current Report on Form 8-K, as filed with the SEC on January 7, 1999;
- O Current Report on Form 8-K, as filed with the SEC on June 29, 1998;
- O Current Report on Form 8-K, as filed with the SEC on March 9, 1998;

- o Current Report on Form 8-K, as filed with the SEC on November 24, 1997;
- O Current Report on Form 8-K, as filed with the SEC on May 12, 1997, as amended by Form 8-K/A Amendment No. 1 to such Form 8-K as filed with the SEC on October 2, 1997, and as further amended by Form 8-K/A Amendment No. 2 to such Form 8-K as filed with the SEC on October 14, 1997;
- o Definitive Proxy Statement with respect to the Annual Meeting of Stockholders held on April 23, 1998, as filed with the SEC on March 17, 1998;
- O The description of the Company's Common Stock contained in the Company's Registration Statement on Form 8-A and Form 8-B (Registration of Successor Issuers) filed under the Exchange Act, including any amendment or report filed for the purpose of updating such description; and
- o All other reports filed by the Company pursuant to Section 13 (a) or 15(d) of the Exchange Act since the end of the Company's fiscal year ended April 30, 1998.

All documents we have filed with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of this Prospectus and prior to the filing of a post-effective amendment indicating that all securities offered have been sold (or which re-registers all securities then remaining unsold), are deemed to be incorporated herein by this reference and to be made a part hereof from the date of filing of such documents. Any statement in a document incorporated or deemed to be incorporated by reference is deemed to be modified or superseded to the extent that any statement contained in this Prospectus, or in any other document we subsequently file with the SEC, modifies or supersedes such statement. If any statement is so modified or superseded, it does not constitute a part of this Prospectus, except as so modified or superseded.

We will provide, without charge, upon written or oral request of any person to whom a copy of this Prospectus is delivered, a copy of any or all of the foregoing documents and information that has been or may be incorporated by reference herein (other than exhibits to such documents). Requests for such documents and information should be directed to Techniclone Corporation, Attention: Steven C. Burke, Chief Financial Officer, 14282 Franklin Avenue, Tustin, California 92780-7017, telephone number (714) 508-6000.

OUR DATE OF INCORPORATION AND COMPANY STRUCTURE

Techniclone Corporation was incorporated in the State of Delaware on September 25, 1996. On March 24, 1997, Techniclone International Corporation, a California corporation (a predecessor company incorporated in June 1981), was merged with and into Techniclone Corporation, a Delaware corporation. This merger was effected for the purpose of effecting a change in our state of incorporation from California to Delaware and making certain changes in our charter documents. As used in this Prospectus, the terms "we," "us," "our" and "the Company" refers to Techniclone Corporation, Techniclone International Corporation, its former subsidiary, Cancer Biologics Incorporated, which was merged into the Company on July 26, 1994 and its wholly-owned subsidiary Peregrine Pharmaceuticals, Inc., a Delaware corporation.

Our principal executive offices are located at 14282 Franklin Avenue, Tustin, California 92780-7017 and our telephone number is (714) 508-6000.

OUR PRODUCT CANDIDATES

We are engaged in the research, development and commercialization of novel cancer therapeutics in two principal areas - direct tumor targeting agents for the treatment of refractory malignant lymphoma and collateral tumor targeting agents for the treatment of solid tumors.

DIRECT TUMOR TARGETING AGENTS. Our most advanced direct tumor targeting agent candidate, Oncolym(R), is an investigational murine monoclonal antibody radiolabeled with I131 which is being studied in a Phase II/III trial for the treatment of intermediate and high-grade relapsed or refractory B-cell non-Hodgkins lymphoma ("NHL"). The clinical trials for Oncolym(R) are currently being held at participating medical centers, including M.D. Anderson Cancer Center, George Washington University Medical Center, Iowa City VA Medical Center, Queen's Medical Center-Hawaii, University of Illinois at Chicago Medical Center, The Medical University of South Carolina, Beth Israel Deaconess Medical Center-Boston, Cleveland Clinic and University of Miami Hospital. We currently anticipate adding up to eight additional clinical trial sites for Oncolym(R). Following the completion of the clinical trials, we expect to file an application with the United States Food and Drug Administration ("FDA") to market Oncolym(R) in the United States.

COLLATERAL TUMOR TARGETING AGENTS. Collateral tumor targeting may be described as the therapeutic strategy of targeting peripheral structures and cell types, other than the viable cancer cells directly, as a means to treat solid tumors. Our three leading advanced collateral targeting agents for solid tumors are Tumor Necrosis Therapy ("TNT"), Vascular Targeting Agents ("VTAs"), and Vasopermeation Enhancement Agents ("VEAs").

TNT is a universal tumor targeting therapy potentially capable of treating a wide range of solid tumors. Radiolabeled TNT agents are believed to act by binding to dead or dying cells at the core of the tumor and irradiating the tumor from the inside out. TNT is potentially capable of carrying a wide variety of therapeutic agents to the interior of solid tumors. Our first TNT- based product is an investigational, chimeric monoclonal antibody radiolabeled with the I131 isotope. During March 1998, we began enrolling patients into a Phase I study of TNT for the treatment of malignant glioma (brain cancer). We have since filed a protocol with the FDA for a Phase II study of TNT for the treatment of malignant glioma, which commenced in December 1998. The clinical trials are currently being conducted at The Medical University of South Carolina with additional clinical sites underway. We have also received an unrestricted grant to conduct Phase I/II systemic trials of TNT for prostate, pancreatic and liver cancers at a clinical site in Mexico City.

- VTAs are believed to act by destroying the vasculature of solid tumors. VTAs are multi- functional molecules that target the capillaries and blood vessels of solid tumors. Once there, these agents block the flow of oxygen and nutrients to the underlying tissue by creating a blood clot in the tumor. In preclinical trials, VTAs have caused clots in animals and within hours of the clot's formation, the tumor begins to die and necrotic regions are formed. Since every tumor in excess of 2mm in size forms an expanding vascular network during tumor growth, VTAs could be effective against all types of solid tumors. Our scientists are doing preliminary studies on VTAs. The VTA technology was acquired in April of 1997 through our acquisition of Peregrine Pharmaceuticals, Inc.
- VEAs use vasoactive compounds (molecules that cause tissues to become more permeable) linked to monoclonal antibodies, such as the TNT antibody, to increase the vasoactive permeability at the tumor site and are believed to act by increasing the concentration of killing agents at the core of the tumor. In pre-clinical studies, our scientists were able to increase the uptake of drugs or isotopes within a tumor by between 150% and 420% if a vasoactive agent was given several hours prior to the therapeutic treatment. The therapeutic drug can be a chemotherapy drug, a radioactive isotope or other cancer fighting agent. This enhancement of toxic drug dosing is achieved by altering the physiology and, in particular, the permeability of the blood vessels and capillaries that serve the tumor. As the tumor vessels become more permeable, the amount of therapeutic treatment reaching the tumor cells increases.

RISK FACTORS OF OUR COMPANY

INVESTMENT IN OUR COMMON STOCK INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD CONSIDER THE FOLLOWING DISCUSSION OF RISKS AS WELL AS OTHER INFORMATION IN THIS PROSPECTUS BEFORE PURCHASING ANY OF OUR COMMON STOCK, TOGETHER WITH ALL OF THE OTHER INFORMATION SET FORTH HEREIN OR INCORPORATED HEREIN BY REFERENCE IN THIS PROSPECTUS.

EXCEPT FOR HISTORICAL INFORMATION, THE INFORMATION CONTAINED IN THIS PROSPECTUS AND IN OUR REPORTS FILED WITH THE SEC ARE "FORWARD LOOKING" STATEMENTS ABOUT OUR EXPECTED FUTURE BUSINESS AND FINANCIAL PERFORMANCE. OUR ACTUAL OPERATING RESULTS AND FINANCIAL PERFORMANCE MAY PROVE TO BE VERY DIFFERENT FROM WHAT WE MIGHT HAVE PREDICTED AS OF THE DATE OF THIS PROSPECTUS DUE TO CERTAIN RISKS AND UNCERTAINTIES. SOME OF THESE RISKS AND UNCERTAINTIES INCLUDE, AMONG OTHERS, ACCURATELY FORECASTING OPERATING AND CAPITAL EXPENDITURES AND CLINICAL TRIAL COSTS, GENERAL ECONOMIC CONDITIONS, PRICING PRESSURES AND UNCERTAINTIES OF LITIGATION. THE RISKS DESCRIBED BELOW SPECIFICALLY ADDRESS SOME OF THE FACTORS THAT MAY AFFECT OUR FUTURE OPERATING RESULTS AND FINANCIAL PERFORMANCE.

OUR OPERATING RESULTS MAY FLUCTUATE SIGNIFICANTLY

Our actual operating results may fluctuate significantly in the future. Many factors may cause these fluctuations, including worldwide economic and political conditions and industry specific factors. If we are to remain competitive, we must develop and produce commercially viable products at competitive prices in a timely manner, and must maintain access to external financing sources until we can generate revenue from licensing transactions or sales of products. Our ability to obtain financing and to manage expenses and our cash depletion rate ("burn rate") is the key to the continued development of product candidates and the completion of ongoing clinical trials. Our burn rate will vary substantially from quarter to quarter as we fund non-recurring items associated with clinical trials, product development, antibody manufacturing and radiolabeling expansion and scale-up, patent legal fees and various consulting fees. We have limited experience with clinical trials and if we encounter unexpected difficulties with our operations or clinical trials, we may have to expend additional funds, which would increase our burn rate.

WE ARE IN THE EARLY STAGES OF PRODUCT DEVELOPMENT

Since our inception, we have been engaged in the development of drugs and related therapies for the treatment of people with cancer. Our product candidates are generally in the early stages of development, with only two product candidates currently in clinical trials. Revenues from product sales have been insignificant and throughout our history there have been minimal revenues from product royalties. If the initial results from any of the clinical trials are poor, those results will adversely effect our ability to raise additional capital, which will affect our ability to continue full-scale research and development for our antibody technologies. In addition, product candidates resulting from our research and development efforts, if any, are not expected to be available commercially for at least the next year. We cannot guarantee that our product development efforts, including clinical trials, will be successful, that required regulatory approvals for the indications being studied can be obtained, that our product candidates can be manufactured and radiolabeled at an acceptable cost and with appropriate quality or that any approved products can be successfully marketed.

WE WILL REQUIRE ADDITIONAL CAPITAL IN THE FUTURE

We have expended, and will continue to expend, substantial funds on the development of our product candidates and for clinical trials. As a result, we have experienced negative cash flows from operations since inception and expect the negative cash flow from operations to continue for the foreseeable future. We currently have commitments to expend additional funds for facilities

construction, clinical trials, radiolabeling contracts, license contracts, severance arrangements, employment agreements, consulting agreements, and for the repurchase of Oncolym(R) marketing rights from Alpha Therapeutic Corporation and Biotechnology Development, Ltd. We expect operating expenditures related to clinical trials to increase in the future as clinical trial activity increases and scale-up for clinical trial production continues. As activities in connection with the Phase II/III clinical trials for Oncolym(R) and the Phase II clinical trials for TNT increase and the development costs associated with VEAs and VTAs increase, we expect that the monthly negative cash flow will continue. Without obtaining additional financing and/or negotiating additional licensing or collaboration agreements with other companies, we expect that current sources of financing available to us will be sufficient to fund our operations and to Our ability to meet our obligations on a timely basis through access funds under our Regulation D Common Stock Equity Line Subscription Agreement with two institutional investors is subject to the satisfaction of certain conditions and the failure to satisfy these conditions may limit or preclude our ability to access such funds, which could negatively affect our financial position unless additional financing sources are available. See "The Equity Line Agreement.

We will require additional funds to sustain our research and development efforts, provide for future clinical trials, expand our manufacturing and radiolabeling capabilities, and continue our operations until we able to generate sufficient revenue from the sale and/or licensing of our products. We will need to obtain additional funding through one or more methods including obtaining additional equity or debt financing and/or negotiating a licensing or collaboration agreement with another company. We cannot be certain whether we can obtain the required additional funding on terms satisfactory to us, if at all. If we do raise additional funds through the issuance of equity or convertible debt securities, your stock ownership will be diluted. Further, these new securities may have rights, preferences or privileges senior to yours. If we are unable to raise additional funds when necessary, we may have to reduce or discontinue development or clinical testing of some or all of our product candidates or enter into financing arrangements on terms which we would not otherwise accept.

WE HAVE HAD SIGNIFICANT LOSSES AND ANTICIPATE FUTURE LOSSES

We have experienced significant losses since inception. As of January 31, 1999, our accumulated deficit was approximately \$84,429,000. We expect to incur significant additional operating losses in the future and expect cumulative losses to increase substantially due to expanded research and development efforts, preclinical studies and clinical trials, and scale-up of manufacturing and radiolabeling capabilities. We expect losses to fluctuate substantially from quarter to quarter. All of our products are currently in development, preclinical studies or clinical trials, and no significant revenues have been generated from product sales. To achieve and sustain profitable operations, we must successfully develop and obtain regulatory approval for our products, either alone or with others, and must also manufacture, introduce, market and sell our products. The time frame necessary to achieve market success for our products is long and uncertain. We do not expect to generate significant product revenues for the next year. There can be no guarantee that we will ever generate product revenues sufficient to become profitable or to sustain profitability.

THE VIABILITY OF OUR TECHNOLOGY AND PRODUCTS IS UNCERTAIN

Our future success is significantly dependent on our ability to develop and test workable products for which we will seek FDA approval to market to certain defined patient groups. There is a significant risk as to the performance and commercial success of our technology and products. The products we are currently developing will require significant additional laboratory and clinical testing and investment over the foreseeable future. Although we are optimistic that we will be able to complete development of one or more products, there are many risk and uncertainties inherent in developing pharmaceutical products. For example:

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- o Our research and development activities may not be successful:
- Our proposed products may not prove to be effective in clinical trials;
- o Patient enrollment in the clinical trials may be delayed or prolonged significantly, thus delaying the trials;
- Our product candidates may cause harmful side effects during clinical trials;
- Our product candidates may take longer than anticipated to progress through clinical trials;
- Our product candidates may prove impracticable to manufacture in commercial quantities at a reasonable cost and/or with acceptable quality;
- Our competitors may produce products which are superior to our products;
- o We may not be able to obtain all necessary governmental clearances and approvals to market our products;
- Our product candidates may not prove to be commercially viable or successfully marketed; and
- We may encounter unanticipated problems, including development, manufacturing, distribution, financing and marketing difficulties.

Any of these factors could negatively affect our financial position and results of operations.

WE HAVE LIMITED DATA TO DATE WITH RESPECT TO OUR PRODUCT CANDIDATES

The results of initial preclinical and clinical testing of the products we are currently developing are not necessarily indicative of results that will be obtained from subsequent or more extensive preclinical studies and clinical testing. The clinical data gathered to date with respect to Oncolym(R) are primarily from a Phase II dose escalation trial, which was designed to develop and refine the therapeutic protocol to determine the maximum tolerated dose of total body radiation and to assess the safety and efficacy profile of a treatment with a radiolabeled antibody. Further, the data from this Phase II dose escalation trial was compiled from testing conducted at a single site and with a relatively small number of patients. We will need to do substantial additional development and clinical testing prior to seeking any regulatory approval for commercialization of Oncolym(R). There can be no guarantee that clinical trials of Oncolym(R), TNT or other product candidates under development will demonstrate the safety and efficacy of such products to the extent necessary to obtain regulatory approvals for the indications being studied, or at all. Companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical trials, even after obtaining promising results in earlier trials. The failure to adequately demonstrate the safety and efficacy of Oncolym(R), TNT or any other therapeutic product under development could delay or prevent regulatory approval of the product, which would negatively affect our financial position and results of operations.

THERE ARE MANY RISKS ASSOCIATED WITH OBTAINING REGULATORY APPROVALS

Testing, manufacturing, radiolabeling, advertising, promotion, export and marketing, among other things, of our proposed products are subject to extensive regulation by governmental authorities in the United States and other countries. In the United States, pharmaceutical products are regulated by the FDA under the Federal Food, Drug, and Cosmetic Act and other laws, including, in the case of biologics, the Public Health Service Act. We presently believe that our products will be regulated by the FDA as biologics. Manufacturers of biologics may also be subject to state regulation.

There are numerous steps required before a biologic may be approved for marketing in the United States, generally including:

o preclinical laboratory tests and animal tests;

- o submission to the FDA of an Investigational New Drug ("IND") application for human clinical testing, which must become effective before human clinical trials may commence;
- adequate and well-controlled human clinical trials to establish the safety and efficacy of the product;
- o submission to the FDA of a Product License Application ("PLA") or a Biologics License Application ("BLA");
- o submission to the FDA of an Establishment License Application ("ELA");
- o FDA review of the ELA and the PLA or BLA; and
- o satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is made to assess compliance with Current Good Manufacturing Practices ("CGMP").

The testing and approval process requires substantial time, effort and financial resources and we cannot guarantee that any approval will be granted on a timely basis, if at all. We cannot guarantee that Phase I, Phase II or Phase III testing will be completed successfully within any specific time period, if at all, with respect to any of our product candidates. Furthermore, the FDA may suspend clinical trials at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk.

The results of preclinical and clinical studies, together with detailed information on the manufacture and composition of a product candidate, are submitted to the FDA as a PLA or BLA requesting approval to market the product candidate. Before approving a PLA or BLA, the FDA will inspect the facilities at which the product is manufactured, and will not approve the marketing of the product candidate unless CGMP compliance is satisfactory. The FDA may deny a PLA or BLA if applicable regulatory criteria are not satisfied, require additional testing or information and/or require post-marketing testing and surveillance to monitor the safety or efficacy of a product. There can be no assurance that approval of any PLA or BLA we submit will be granted by the FDA on a timely basis or at all. Also, if regulatory approval of a product is granted, such approval may entail limitations on the indicated uses for which it may be marketed.

Both before and after FDA approval is obtained, violations of regulatory requirements, including the preclinical and clinical testing process, or the PLA or BLA review process may result in various adverse consequences, including the FDA's delay in approving or refusing to approve a product, withdrawal of an approved product from the market and/or the imposition of criminal penalties against the manufacturer and/or license holder. For example, license holders are required to report certain adverse reactions to the FDA, and to comply with certain requirements concerning advertising and promotional labeling for their products. Also, quality control and manufacturing procedures must continue to conform to CGMP regulations after approval, and the FDA periodically inspects manufacturing facilities to assess compliance with CGMP. Accordingly, manufacturers must continue to expend time, monies and effort in the area of production and quality control to maintain CGMP compliance. In addition, discovery of problems may result in restrictions on a product and/or its manufacturer, including withdrawal of the product from the market. Also, new government requirements may be established that could delay or prevent regulatory approval of our product candidates.

We will also be subject to a variety of foreign regulations governing clinical trials and sales of our products. Whether or not FDA approval has been obtained, approval of a product candidate by the comparable regulatory authorities of foreign countries must be obtained prior to the commencement of marketing of the product in those countries. The approval process varies from country to country and the time may be longer or shorter than that required for FDA approval. At least initially, we intend, to the extent possible, to

rely on licensees to obtain regulatory approval for marketing our products in foreign countries.

THERE ARE MANY RISKS ASSOCIATED WITH THE COMMERCIAL PRODUCTION OF OUR PRODUCTS

In order to conduct clinical trials on a timely basis, obtain regulatory approval and be commercially successful, we must scale-up our manufacturing and radiolabeling processes so that those product candidates can be manufactured and radiolabeled in commercial quantities. To date, we have expended significant funds for the scale-up of our antibody manufacturing capabilities for clinical trial requirements for our Oncolym(R) and TNT product candidates and for refinement of the radiolabeling processes. We intend to use existing antibody manufacturing capacity to meet the clinical trial requirements for our ${\tt Oncolym(R)} \ \, {\tt and} \ \, {\tt TNT} \ \, {\tt product} \ \, {\tt candidates} \ \, {\tt and} \ \, {\tt to} \ \, {\tt support} \ \, {\tt the} \ \, {\tt initial}$ commercialization of Oncolym(R). In order to provide additional capacity, we must successfully negotiate an agreement with contract antibody manufacturers to have these products produced, the cost of which is estimated to be approximately one to three million dollars in start-up costs and additional production costs on a "per run basis". We believe we can successfully negotiate an agreement with one or more contract radiolabeling companies to provide radiolabeling services to meet commercial demands. Such a contract would, however, require a substantial investment (estimated at five to nine million dollars over the next two years) for equipment and related production area enhancements required by these vendors, and for vendor services associated with technology transfer assistance, scale-up and production start-up, and for regulatory assistance. We anticipate that production of our products in commercial quantities will create technical and financial challenges. We have limited manufacturing experience, and cannot make any guarantee as to our ability to scale-up our manufacturing operations, the suitability of our present facility for clinical trial production or commercial production, our ability to make a successful transition to commercial production and radiolabeling or our ability to reach an acceptable agreement with one or more contract manufacturers to produce and radiolabel Oncolym(R), TNT, or any of our other product candidates, in clinical or commercial quantities. Our failure to scale-up manufacturing and radiolabeling for clinical trial or commercial production or to obtain contract manufacturers, could negatively affect our financial position and results of operations.

THERE ARE SUBSTANTIAL SHARES ELIGIBLE FOR FUTURE SALE; THE SALE OF SUCH SHARES MAY DEPRESS OUR STOCK PRICE

As of February 28, 1999, we had 70,898,581 shares of Common Stock outstanding. We will issue additional shares of Common Stock and/or warrants to purchase shares of Common Stock under the following agreements:

- o 5% Adjustable Convertible Class C Preferred Stock ("Class C Stock");
- Regulation D Common Stock Equity Line Subscription Agreement and a related Placement Agent Agreement; and
- o other Option and Warrant Agreements.

CLASS C STOCK. Of the 70,898,581 shares of Common Stock outstanding as of February 28, 1999, from September 26, 1997 (the date the Class C Stock became convertible into Common Stock) through February 28, 1999, we issued 30,865,164 shares of Common Stock in conjunction with the conversion of the Class C Stock (including shares of Class C Stock issued as dividends shares and penalty shares) and the exercise of warrants to purchase shares of Common Stock (the "Class C Warrants") for gross proceeds of approximately \$15,641,000. The Class C Warrants were issued to holders of Class C Stock in conjunction with the conversion of the Class C Stock pursuant to the terms of the Company's agreement with the holders of the Class C Stock. From September 26, 1997, the date on which the Class C Stock was first convertible, through March 1998, the price of the Common Stock steadily declined while the average trading volume increased significantly. As of February 28, 1999, there were 121 shares of Class C Stock outstanding and Class C Warrants outstanding to purchase up to 35,244 shares of Common Stock. If the 121 shares of Class C Stock outstanding as of February 28,

1999 were converted, we would be required to issue approximately 203,000 shares of Common Stock (based on a conversion price of \$0.5958 per share of Common Stock) and Class C Warrants to purchase up to an aggregate of approximately 51,000 shares of Common Stock at an exercise price of \$0.6554 per share.

EQUITY LINE AGREEMENT. As of February 28, 1999, we have issued an aggregate of 5,789,506 shares of Common Stock and warrants to purchase up to an additional 632,496 shares of Common Stock at an average exercise price of \$1.23 per share to two institutional investors pursuant to the terms of a Regulation D Common Stock Equity Line Subscription Agreement and to the Registered Stockholder pursuant to the terms of a related Placement Agent Agreement for gross proceeds of \$5.75 million. Pursuant to the Regulation D Common Stock Equity Line Subscription Agreement, and assuming a 10-day low closing bid price of \$1.00 per share (which allows us to sell the maximum number of shares of Common Stock), we may, at our option, sell to the institutional investors up to an additional 17,812,500 shares of Common Stock and warrants to purchase up to an additional 1,781,250 shares of Common Stock and may be obligated to issue to the Registered Stockholder for no additional consideration up to 1,876,704 shares of Common Stock and warrants to purchase up to an 178,125 shares of Common Stock pursuant to the Placement Agent Agreement. The shares of Common Stock will be issued and sold to the institutional investors at a discount to the 10-day low closing bid price of the Common Stock prior to the sale equal to the greater of twenty cents (\$0.20) per share or a 17.5% discount to the 10-day low closing bid price of the Common Stock. In addition, we may be obligated to issue to the institutional investors an aggregate of up to 954,545 shares of Common Stock on April 15, 1999 and July 15, 1999 upon adjustment of the purchase price of the shares of Common Stock sold to the institutional investors. We will not receive any proceeds from the exercise by the institutional investors or the Registered Stockholder of warrants to purchase shares of Common Stock, which may only be exercised pursuant to a cashless exercise. See "The Equity Line Agreement," "Use of Proceeds" and "Plan of Distribution."

OTHER OPTION AND WARRANT AGREEMENTS. In addition to the Class C Warrants and the warrants issued and to be issued to the institutional investors and the Registered Stockholder, at February 28, 1999, there were outstanding warrants and options to employees, directors, consultants and other parties to issue approximately 8,453,000 shares of Common Stock at an average exercise price of \$1.17 per share.

The sale and issuance of shares of Common Stock to the institutional investors pursuant to the Equity Line Agreement may cause the market price of the Common Stock to fall and might also make it more difficult for us to sell equity or equity- related securities in the future, whether pursuant to the Equity Line Agreement or otherwise. The issuance of shares of Common Stock to the Registered Stockholder and the issuance of shares of Common Stock upon conversion of the remaining Class C Stock and upon exercise of the Class C Warrants, the warrants issued and issuable to the institutional investors and the Registered Stockholder, and such other outstanding warrants and options, as well as subsequent sales of shares of Common Stock in the open market, could also cause the market price of the Common Stock to fall and impair our ability to raise additional capital.

OUR STOCK PRICE AND TRADING VOLUME HAVE BEEN HIGHLY VOLATILE

The market price of the Common Stock, and the market prices of securities of companies in the biotechnology industry generally, have been highly volatile and is likely to continue to be highly volatile. Also, the trading volume in the Common Stock has been highly volatile, ranging from as few as 89,000 shares per day to as many as 19 million shares per day over the past year, and is likely to continue to be highly volatile. The market price of the Common Stock may be significantly impacted by, for example:

- Announcements of technological innovations or new commercial products by us or our competitors;
- o Developments or disputes concerning patent or proprietary rights;
- Publicity regarding actual or potential medical results relating to products under development by us or our competitors;
- Regulatory developments in both the United States and foreign countries;
- o Public concern as to the safety of biotechnology products;
- o Economic and other external factors; and
- o Period-to-period fluctuations in financial results.

THERE ARE RISKS RELATED TO SECURITIES LISTED ON THE NASDAQ SMALLCAP MARKET AND LOW-PRICED SECURITIES

The Common Stock is presently traded on The Nasdaq SmallCap Market. To maintain inclusion on The Nasdaq SmallCap Market, the Common Stock must continue to be registered under Section 12(g) of the Exchange Act, and we must continue to have either net tangible assets of at least \$2,000,000, market capitalization of at least \$35,000,000, or net income (in either our latest fiscal year or in two of our last three fiscal years) of at least \$500,000. In addition, we must meet other requirements, including, but not limited to, having a public float of at least 500,000 shares and \$1,000,000, a minimum closing bid price of \$1.00 per share of Common Stock (without falling below this minimum bid price for a period of 30 consecutive business days), at least two market makers and at least 300 stockholders, each holding at least 100 shares of Common Stock. For the period of January 29, 1998 through May 4, 1998, we failed to maintain a \$1.00 minimum closing bid price. From May 5, 1998, through September 2, 1998, we met this requirement. However, at various times since September 2, 1998, we have failed to maintain a \$1.00 minimum closing bid price and expect the closing bid price of the Common Stock to fall below the \$1.00 minimum bid requirement from time to time in the future. If we fail to meet the minimum closing bid price of \$1.00 for a period of 30 consecutive business days, we will be notified by The Nasdaq Stock Market and will then have a period of 90 calendar days from such notification to achieve compliance with the applicable standard by meeting the minimum closing bid price requirement for at least 10 consecutive business days during such 90 day period. We cannot guarantee that we will be able to maintain these requirements in the future. If we fail to meet The Nasdag SmallCap Market listing requirements, the market value of the Common Stock could fall and holders of Common Stock would likely find it more difficult to dispose of and to obtain accurate quotations as to the market value of the Common Stock. In addition, if the minimum closing bid price of the Common Stock is not at least \$1.00 per share for 10 consecutive business days before we make a call for proceeds under our Regulation D Common Stock Equity Line Subscription Agreement with two institutional investors or if the Common Stock ceases to be included on The Nasdaq SmallCap Market, we would have limited or no access to funds under the Regulation D Common Stock Equity Line Subscription Agreement.

If the Common Stock ceases to be included on The Nasdaq SmallCap Market, the Common Stock could become subject to rules adopted by the SEC regulating broker-dealer practices in connection with transactions in "penny stocks." Penny stocks generally are equity securities with a price per share of less than \$5.00 (other than securities registered on certain national securities exchanges or quoted on The Nasdaq Stock Market, provided that current price and volume information with respect to transactions in these securities is provided). The penny stock rules require a broker-dealer, prior to a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document in a form prepared by the SEC which provides information about penny stocks and the nature and level of risks in the penny stock market. The broker-dealer also must provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and its

sales person in the transaction and monthly account statements showing the market value of each penny stock held in the customer's account. The bid and offer quotations, and the broker-dealer and salesperson compensation information, must be given to the customer orally or in writing prior to effecting the transaction and must be given to the customer in writing before or with the customer's confirmation. In addition, the penny stock rules require that prior to a transaction in a penny stock not otherwise exempt from these rules, the broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser's written agreement to the transaction. These disclosure requirements may have the effect of reducing the level of trading activity in the secondary market for a stock that becomes subject to these penny stock rules. If the Common Stock becomes subject to the penny stock rules, investors may be unable to readily sell their shares of Common Stock.

OUR INDUSTRY IS HIGHLY COMPETITIVE

The biotechnology industry is intensely competitive. It is also subject to rapid change and sensitive to new product introductions or enhancements. We expect to continue to experience significant and increasing levels of competition in the future. Virtually all of our existing competitors have greater financial resources, larger technical staffs, and larger research budgets than we have and greater experience in developing products and running clinical trials. Two of our competitors, Idec Pharmaceuticals Corporation and Coulter Pharmaceuticals, Inc., each has a lymphoma antibody that may compete with our Oncolym(R) product. Idec Pharmaceuticals Corporation is currently marketing its lymphoma product for low grade non-Hodgkins Lymphoma and we believe that Coulter Pharmaceuticals, Inc. will be marketing its respective lymphoma product prior to the time our Oncolym(R) product will be submitted to the FDA for marketing approval. Coulter Pharmaceuticals, Inc. has also announced that it intends to seek to conduct clinical trials of its antibody treatment for intermediate and/or high grade non-Hodgkins lymphomas. There are several companies in preclinical studies with angiogenesis technologies which may compete with our VTA technology. In addition, there may be other companies which are currently developing competitive technologies and products or which may in the future develop technologies and products which are comparable or superior to our technologies and products. Some or all of these companies may also have greater financial and technical resources than we have. Accordingly, we cannot assure you that we will be able to compete successfully or that competition will not negatively affect our financial position or results of operations. In addition, we cannot assure you that our existing and future competitors will not develop products which compete with our other product candidates.

THERE ARE MANY RISKS AND UNCERTAINTIES ASSOCIATED WITH CLINICAL TRIALS

We have limited experience in conducting clinical trials. The rate of completion of our clinical trials will depend on, among other factors, the rate of patient enrollment. Patient enrollment is a function of many factors, including the nature of clinical trial protocols, the existence of competing protocols, the size of the patient population, the proximity of patients to clinical sites and the eligibility criteria for the study. Delays in patient enrollment will result in increased costs and delays, which could negatively affect our financial position and results of operations. We cannot assure you that patients enrolled in our clinical trials will respond to our product candidates. In fact, setbacks are to be expected in conducting human clinical trials. In addition, our failure to comply with FDA regulations applicable to this testing could result in substantial delays, suspension or cancellation of the testing, or refusal by the FDA to accept the results of the testing. The FDA may suspend clinical trials at any time if it concludes that the subjects or patients participating in such trials are being exposed to unacceptable health risks. We also cannot assure you that human clinical testing will show any current or future product candidates to be safe or effective or that data derived from the testing will be suitable for submission to the FDA. Any suspension or delay of any of the clinical trials could negatively affect our financial position and results of operations.

Even if our products are approved for marketing by the FDA and other regulatory authorities, we cannot guarantee that our products will be commercially successful. If our products currently in clinical trials, Oncolym(R) and TNT, are approved, they would represent a departure from more commonly used methods for cancer treatment. Accordingly, Oncolym(R) and TNT may experience under-utilization by oncologists and hematologists who are unfamiliar with the application of Oncolym(R) and TNT in the treatment of cancer. As with any new drug, doctors may be inclined to continue to treat patients with conventional therapies, in most cases chemotherapy, rather than new alternative therapies. We or our marketing partner will be required to implement an aggressive education and promotion plan with doctors in order to gain market recognition, understanding and acceptance of our products. Market acceptance also could be affected by the availability of third party reimbursement. Failure of Oncolym(R) or TNT to achieve market acceptance would negatively affect our financial position and results of operations.

WE ARE DEPENDENT ON A LIMITED NUMBER OF PROVIDERS OF RADIOLABELING SERVICES

We currently procure, and intend in the future to procure, our radiolabeling services pursuant to negotiated contracts with two domestic entities and one European entity. We cannot guarantee that these suppliers will be able to qualify their facilities or label and supply antibody in a timely manner, if at all, or that governmental clearances will be provided in a timely manner, if at all, or that clinical trials will not be delayed or disrupted. Prior to commercial distribution, we will be required to identify and contract with a commercial radiolabeling company for commercial services. We are presently in discussions with a few companies to provide commercial radiolabeling services. A commercial radiolabeling service agreement will require us to make a substantial investment of funds. We currently rely on, and expect in the future to rely on, our current suppliers for all or a significant portion of our requirements for the Oncolym(R) and TNT antibody products. Radiolabeled antibody cannot be stockpiled against future shortages due to the eight- day half-life of the I131 radioisotope. Accordingly, any change in our existing or future contractual relationships with, or an interruption in supply from, any third-party supplier could negatively impact our ability to complete ongoing clinical trials and to market the Oncolym(R) and TNT antibodies, if approved, which would negatively affect our financial position and results of operations.

THERE ARE RISKS ASSOCIATED WITH THE MANUFACTURING AND USE OF HAZARDOUS AND RADIOACTIVE MATERIALS

The manufacturing and use of Oncolym(R) and TNT require the handling and disposal of the radioactive isotope I131. We currently rely on, and intend in the future to rely on, our current contract manufacturers to radiolabel antibodies with I131 and to comply with various local, state and or national and international regulations regarding the handling and use of radioactive materials. Violation of these local, state, national or international regulations by these radiolabeling companies or a clinical trial site could significantly delay completion of the trials. Violations of safety regulations could occur with these manufacturers, so there is also a risk of accidental contamination or injury. Accordingly, we could be held liable for any damages that result from an accident, contamination or injury caused by the handling and disposal of these materials, as well as for unexpected remedial costs and penalties that may result from any violation of applicable regulations, which could negatively affect our financial position and results of operations. In addition, we may incur substantial costs to comply with environmental regulations. In the event of any noncompliance or accident, the supply of Oncolym(R) and TNT for use in clinical trials or commercially could be interrupted, which could negatively impact our financial position and results of operations.

WE ARE DEPENDENT ON THIRD PARTIES FOR COMMERCIALIZATION

We intend to sell our products in the United States and internationally in collaboration with one or more marketing partners. At the present time, we do not have a sales force to market Oncolym(R) or INT, or any other product. If and

when the FDA approves Oncolym(R) or TNT, the marketing of Oncolym(R) and TNT will be contingent upon our ability to either license or enter into a marketing agreement with a large company or our ability to recruit, develop, train and deploy our own sales force. We do not presently possess the resources or experience necessary to market Oncolym(R), TNT or any other product candidates. Other than an agreement with Biotechnology Development, Ltd. with respect to the marketing of Oncolym(R), we presently have no agreements for the licensing or marketing of our product candidates, and we cannot assure you that we will be able to enter into any such agreements in a timely manner or on commercially favorable terms, if at all. Development of an effective sales force requires significant financial resources, time and expertise. We cannot assure you that we will be able to obtain the financing necessary or to establish such a sales force in a timely or cost effective manner, if at all, or that such a sales force will be capable of generating demand for our product candidates.

OUR SUCCESS IS DEPENDENT ON OBTAINING AND MAINTAINING PATENTS AND LICENSES TO PATENTS

Our success depends, in large part, on our ability to obtain or maintain a proprietary position in our products through patents, trade secrets and orphan drug designations. We have been granted several United States patents and have submitted several United States patent applications and numerous corresponding foreign patent applications, and have also obtained licenses to patents or patent applications owned by other entities. However, we cannot assure you that any of these patent applications will be granted or that our patent licensors will not terminate any of our patent licenses. We also cannot guarantee that any issued patents will provide competitive advantages for our products or that any issued patents will not be successfully challenged or circumvented by our competitors. The patent position worldwide of biotechnology companies in relation to proprietary products is highly uncertain and involves complex legal and factual questions. Moreover, any patents we or our licensors are granted may be infringed by others or may not be enforceable against others. We cannot assure you that any of our or our licensors' patents would be held valid or enforceable by a court of competent jurisdiction. Although we believe that our patents and our licensors' patents do not infringe on any third party's patents, we cannot be certain that we will not become involved in litigation involving patents or other proprietary rights. Patent and proprietary rights litigation entails substantial legal and other costs, and we do not know if we will have the necessary financial resources to defend or prosecute our rights in connection with any litigation. Responding to, defending or bringing claims related to patents and other intellectual property rights may require our management to redirect our human and monetary resources to address these claims and may take several years to resolve.

A substantial number of patents have already been issued to other biotechnology and biopharmaceutical companies. Particularly in the monoclonal antibody and angiogenesis fields, our competitors may have filed applications for or have been issued patents and may obtain additional patents and proprietary rights relating to similar or competitive products or processes. To date, we are not aware of any consistent policy regarding the breadth of claims allowed in biopharmaceutical patents. We cannot assure you that there are no existing patents in the United States or in foreign countries or that no future patents will be issued that would have a negative impact on our ability to market any of our existing or future products or product candidates. We expect that commercializing monoclonal antibody-based products may require licensing and/or cross-licensing of patents with other companies in this field. We cannot guarantee that any licenses which might be required for our processes or products, will be available, if at all, on commercially acceptable terms. If we are required to acquire rights to valid and enforceable patents but cannot do so at a reasonable cost, our ability to manufacture our products would be negatively impacted. Moreover, the likelihood of successfully contesting the scope or validity of such patents is uncertain and the costs associated therewith may be significant.

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We also rely on trade secrets and proprietary know-how, which we attempt to protect, in part, by confidentiality agreements with our employees and consultants. We cannot be certain that these agreements will not be breached, that we will have adequate remedies for any breach, or that our trade secrets will not otherwise become known or be independently developed by our competitors.

WE ARE EXPOSED TO PRODUCT LIABILITY CLAIMS

The manufacture and sale of human therapeutic products involve an inherent risk of product liability claims. We maintain only limited product liability insurance. However, we cannot assure you that we will be able to maintain existing insurance or obtain additional product liability insurance on acceptable terms or with adequate coverage against potential liabilities. Product liability insurance is expensive, difficult to obtain and may not be available in the future on acceptable terms, if at all. Our inability to obtain sufficient insurance coverage on reasonable terms or to otherwise protect against potential product liability claims in excess of our insurance coverage, if any, or a product recall could negatively impact our financial position and results of operations.

THERE ARE RISKS ASSOCIATED WITH HEALTH CARE REFORM AND THIRD-PARTY REIMBURSEMENT

Political, economic and regulatory influences are subjecting the health care industry in the United States to fundamental change. Recent initiatives to reduce the federal deficit and to reform health care delivery are increasing cost-containment efforts. We anticipate that Congress, state legislatures and the private sector will continue to review and assess alternative benefits, controls on health care spending through limitations on the growth of private health insurance premiums and Medicare and Medicaid spending, the creation of large insurance purchasing groups, price controls on pharmaceuticals and other fundamental changes to the health care delivery system. Any such changes could negatively impact our ultimate profitability. Legislative debate is expected to continue in the future, and market forces are expected to drive reductions of health care costs. We cannot predict what impact the adoption of any federal or state health care reform measures or future private sector reforms may have on our business.

Our ability to successfully commercialize our product candidates will depend in part on the extent to which appropriate reimbursement codes and authorized cost reimbursement levels of such products and related treatment are obtained from governmental authorities, private health insurers and other organizations, such as health maintenance organizations ("HMOs"). The Health Care Financing Administration ("HCFA"), the agency responsible for administering the Medicare program, sets requirements for coverage and reimbursement under the program, pursuant to the Medicare law. In addition, each state Medicaid program has individual requirements that affect coverage and reimbursement decisions under state Medicaid programs for certain health care providers and recipients. Private insurance companies and state Medicaid programs are influenced, however, by the HCFA requirements.

There can be no assurance that any of our product candidates, once available, will be included within the then current Medicare coverage determination. In the absence of national Medicare coverage determination, local contractors that administer the Medicare program, within certain guidelines, can make their own coverage decisions. Favorable coverage determinations are made in those situations where a procedure falls within allowable Medicare benefits and a review concludes that the service is safe, effective and not experimental. Under HCFA coverage requirements, FDA approval for marketing will not necessarily lead to a favorable coverage decision. A determination will still need to be made as to whether the product is reasonable and necessary for the purpose used. In addition, HCFA has proposed adopting regulations that would add cost- effectiveness as a criterion in determining Medicare coverage. Changes in HCFA's coverage policy, including adoption of a cost-effective criterion, could negatively impact our financial position and results of operations.

Third-party payers are increasingly challenging the prices charged for medical products and services. Also, the trend toward managed health care in the United States and the concurrent growth of organizations such as HMOs, which

could control or significantly influence the purchase of health care services and products, as well as legislative proposals to reform health care or reduce government insurance programs, may all result in lower prices for our product candidates than we currently expect. The cost containment measures that health care payers and providers are instituting and the effect of any health care reform could negatively affect our ability to operate profitably.

WE ARE DEPENDENT ON KEY PERSONNEL

Our success is dependent, in part, upon a limited number of key executive officers and technical personnel remaining employed with us, including Larry O. Bymaster, our President and Chief Executive Officer, Steven C. Burke, our Chief Financial Officer, Dr. John Bonfiglio, our Vice President of Business Development, and Dr. Jamie Oliver, our Vice President of Clinical and Regulatory Affairs. We also believe that our future success will depend largely upon our ability to attract and retain highly-skilled research and development and technical personnel. We face intense competition in our recruiting activities, including larger companies. We do not know if we will be successful in attracting or retaining skilled personnel. Further, the loss of certain key employees or our inability to attract and retain other qualified employees could negatively affect our financial position and results of operation.

YEAR 2000 ISSUE RISKS MAY RESULT IN A MATERIAL ADVERSE EFFECT ON OUR BUSINESS

We are aware of the issues associated with the programming code in existing computer systems as the year 2000 approaches. The year 2000 problem is pervasive and complex. Virtually every computer operation will be affected in some way by the rollover of the two digit year value to "00". The issue is whether computer systems will properly recognize date-sensitive information when the year changes to 2000. Systems that do not properly recognize such information could generate erroneous data or cause a system to fail. We have identified substantially all of our major hardware and software platforms in use and are continually modifying and upgrading our software and information technology and other systems. We have modified our current financial software to be year 2000 compliant and expect all of our internal computer systems to be year 2000 compliant by April 30, 1999 through the use of internal and external resources. Although we do not presently believe that, with upgrades of existing software and/or conversion to new software, the year 2000 problem will pose significant operational problems for our internal computer systems or have a negative affect on our financial position or results of operations, we cannot assure you that any year 2000 compliance problems of our suppliers will not negatively affect our financial position or results of operation. Because uncertainty exists concerning the potential costs and effects associated with any year 2000 compliance, we intend to continue to make efforts to ensure that third parties with whom we have relationships are year 2000 compliant. We have not incurred significant costs to date associated with year 2000 compliance and presently believe estimated future costs will not be material. However, actual results could differ materially from our expectations due to unanticipated technological difficulties or project delays. If we or any third parties upon which we rely are unable to address the year 2000 issue in a timely manner, it could have an adverse impact on our financial position and results of operations. In order to assure that this does not occur, we are in the process of developing a contingency plan intend to devote all resources required to attempt to resolve any significant year 2000 issues in a timely manner.

THERE ARE RISKS ASSOCIATED WITH EARTHQUAKES

Our corporate and research facilities, where the majority of our research and development activities are conducted, are located near major earthquake faults which have experienced earthquakes in the past. Although we carry limited earthquake insurance, in the event of a major earthquake or other disaster affecting our facilities, our operations, financial position and results of operations will be negatively affected.

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THE EQUITY LINE AGREEMENT

On June 16, 1998, the Company entered into a Regulation D Common Stock Equity Line Subscription Agreement (the "Equity Line Agreement") with two institutional investors (the "Institutional Investors"), pursuant to which the Company may issue and sell, from time to time, shares of its Common Stock for cash consideration up to an aggregate of \$20 million. The Company also entered into a Placement Agent Agreement (the "Placement Agent Agreement") with Swartz Investments, LLC, a Georgia limited liability company doing business as Swartz Institutional Finance ("Swartz"), whereby the Company engaged the services of Swartz as placement agent in connection with the placement of securities of the Company with the Institutional Investors pursuant to the Equity Line Agreement. Swartz subsequently assigned and conveyed all of its rights under the Placement Agent Agreement and a related Registration Rights Agreement (as defined below) to the Registered Stockholder and also transferred to the Registered Stockholder all of the shares of Common Stock and warrants to purchase shares of Common Stock previously issued to Swartz. The Registered Stockholder is a broker-dealer registered with the SEC and the National Association of Securities Dealers, Inc. with respect to which Swartz is an Office of Supervisory Jurisdiction (OSJ).

Pursuant to the Equity Line Agreement, on or about June 16, 1998, the Company received immediate funding of \$3,500,000 in exchange for an aggregate of 2,545,454 shares of Common Stock (the "Initial Institutional Investor Shares") and warrants to purchase an aggregate of up to 254,454 shares of Common Stock at an exercise price of \$1.375 per share (the "Initial Institutional Investor Warrants"). Pursuant to the terms of the Equity Line Agreement, one-half of the number of Initial Institutional Investor Shares is subject to adjustment on April 15, 1999, with the other half subject to adjustment on July 15, 1999 (each such date, an "Adjustment Date"). At each Adjustment Date, if the 10-day low closing bid price immediately preceding such Adjustment Date (the "Adjustment Price") is less than the initial price per share paid for the shares of Common Stock purchased by the Institutional Investors on or about June 16, 1998 (\$1.375 per Share), the Company will be obligated to issue a number of Adjustment Shares equal to the difference between the amount of shares which would have been issued if the price had been the Adjustment Price for \$1,750,000 and one-half of the amount of shares actually issued (1,272,727 shares). In December 1998, the Company issued an additional 96,055 shares of Common Stock to the Institutional Investors pursuant to a separate agreement between the Company and the Institutional Investors (the "Additional Shares").

Pursuant to the terms of the Equity Line Agreement, the Company may from time to time until June 16, 2001, in its sole discretion and subject to certain restrictions and limitations set forth in the Equity Line Agreement, sell ("put") to the Institutional Investors, no more than one time during any monthly period upon written notice given by the Company to the Institutional Investors (the "Notice Date"), a number of shares of Common Stock equal to up to \$2,250,000 (which amount may be increased up to \$5,000,000 by mutual agreement of the parties) less the aggregate dollar amount of any shares sold to the Institutional Investors during the three month period immediately preceding such Notice Date, divided by (i) 82.5% of the 10-day low closing bid price immediately preceding such Notice Date, or (ii) if 82.5% of such 10-day low closing bid price results in a discount of less than twenty cents (\$0.20) per share from such 10-day low closing bid price, such 10-day low closing bid price minus twenty cents (\$0.20) (the "Purchase Price"), at a purchase price equal to the Purchase Price immediately preceding the date on which such shares are sold; provided, that the number of such shares shall be limited to the same number of shares of restricted securities that the Institutional Investors would otherwise be able to sell pursuant to Rule 144(e) promulgated under the Securities Act of 1933, as amended (the "Securities Act"), and subject to a maximum dollar amount of \$20,000,000 less the aggregate dollar amount of all shares of Common Stock already issued and sold by the Company to the Institutional Investors). At the time of each sale of shares of Common Stock, the Institutional Investors will be issued warrants, expiring on December 31, 2004, to purchase a number of shares of Common Stock equal to 10% of the number of shares of Common Stock sold in such sale at an exercise price equal to the price per share at which such shares were sold to the Institutional Investors. To the extent that the Company has not fully utilized the relevant commitment amount under the Equity Line Agreement, the Company may also be obligated to issue to the Institutional Investors on June 16, 1999, June 16, 2000 and June 16, 2001, warrants to purchase a number of shares of Common Stock equal to 10% of an amount equal to the difference of the relevant minimum commitment amount (\$6,666,666.66 for 1999, \$13,333,333.32 for 2000 and \$20,000,000 for 2001) minus the aggregate amount of Common Stock sold to the Institutional Investors during all years preceding such date, divided by the 10-day low closing bid price of the Common Stock immediately preceding such date, at an exercise price equal to the 10-day low closing bid price of the Common Stock immediately preceding such date.

The Company's ability to put shares of its Common Stock under the Equity Line Agreement, and the Institutional Investors' obligations to purchase shares of Common Stock, is conditioned upon the satisfaction of certain conditions and subject to certain limitations. These conditions and limitations include: (i) the representations and warranties of the Company set forth in the Equity Line Agreement must be true and correct in all material respects as of the date of each put, (ii) the Company shall have performed and complied with all obligations under the Equity Line Agreement, the Registration Rights Agreement and the warrants issued to the Institutional Investors required to be performed as of the date of each put, (iii) no statute, rule, regulation, executive order, decree, ruling or injunction shall be in effect which prohibits or directly and adversely affects any of the transactions contemplated by the Equity Line Agreement, (iv) at the time of a put, there shall have been no material adverse change in the Company's business prospects or financial condition, except as disclosed in the Company's most recent periodic reports filed since June 16, 1998 with the SEC pursuant to the Exchange Act, (v) the Company's Common Stock shall not have been delisted from The Nasdaq SmallCap Market nor suspended from trading, (vi) the closing bid price of the Common Stock on any trading during the ten days preceding the date of the put cannot be less than or equal to \$0.50, and (vii) if the closing bid price of the Common Stock on any trading day during the ten trading days preceding the date of the put is less than \$1.00 but greater than \$0.50, the Company may only exercise the put for an amount of shares not greater than 15% of the amount that would otherwise be available to the Company pursuant to the terms of the Equity Line Agreement.

On February 2, 1999, the Company exercised a put under the Equity Line Agreement (the "February 1999 Put") and sold an aggregate of 2,608,695 shares of Common Stock to the Institutional Investors for an aggregate purchase price of \$2,250,000 (\$0.8625 per share). In accordance with the terms of the Equity Line Agreement, the Company also issued to the Institutional Investors warrants to purchase an aggregate of up to 260,868 shares of Common Stock at a purchase price of \$0.8625 per share. As of the date of this Prospectus, there is a maximum aggregate dollar amount of \$14,250,000 remaining available to the Company under the Equity Line Agreement.

Pursuant to the terms of the Placement Agreement, the Registered Stockholder is entitled to receive (i) a cash placement fee equal to seven percent (7%) of the purchase price of any and all securities placed pursuant to the Equity Line Agreement; (ii) a non-accountable expense allowance equal to one percent (1%) of the purchase price of any and all securities placed up to the aggregate purchase price of the first \$10 million of securities placed pursuant to the Equity Line Agreement; (iii) a one time non-accountable expenses allowance equal to one hundred thousand dollars for any and all securities placed in excess of the aggregate purchase price of the first \$10 million of securities placed pursuant to the Equity Line Agreement (such non-accountable expenses allowance to be paid upon placement of any securities resulting in an aggregate purchase price in excess of \$10,100,000 placed pursuant to the Equity Line Agreement); and (iv) an amount of securities equal to ten percent (10%) of all Common Stock issued pursuant to the Equity Line Agreement and an amount of securities equal to ten percent (10%) of all warrants issued pursuant to the Equity Line Agreement. To date, in connection with the placement of the Initial Institutional Investor Shares, the Initial Institutional Investor Warrants, the

Additional Shares and the February 1999 Put, the Company has issued to the Registered Stockholder an aggregate of 525,020 shares of Common Stock, warrants to purchase up to 25,454 Shares of Common Stock at an exercise price of \$1.375 per share and warrants to purchase up to 26,086 Shares of Common Stock at an exercise price of \$0.8625 per share.

Pursuant to the requirements of the Placement Agent Agreement and a related Registration Rights Agreement dated as of June 16, 1998, between the Company, the Institutional Investors and the Registered Stockholder, as successor in interest to Swartz (the "Registration Rights Agreement"), the Company has filed a registration statement, of which this Prospectus forms a part, in order to permit the Registered Stockholder to resell to the public the shares of Common Stock issued and issuable to the Registered Stockholder pursuant to the Placement Agent Agreement and any shares of Common Stock that the Registered Stockholder may acquire upon exercise of warrants issued and issuable to the Registered Stockholder pursuant to the Placement Agent Agreement (the "Registered Stockholder Warrants").

The Institutional Investors and the Registered Stockholder have agreed that they will not create or increase a net short position with respect to the Common Stock during the ten trading days prior to any put date or during the thirty calendar days prior to April 15, 1999 and the thirty calendar days prior to July 15, 1999. The Institutional Investors and the Registered Stockholder have further agreed that they will not engage in any trading practice or activity for the purpose of manipulating the price of the Common Stock or otherwise engage in any trading practice or activity that violates the rules and regulations of the SEC.

USE OF PROCEEDS

The proceeds from the sale of the shares of Common Stock offered hereby will be received directly by the Registered Stockholder. The Company will not receive any proceeds from the sale of the shares of Common Stock offered hereby. The Company will not receive any proceeds from the exercise of the Registered Stockholder Warrants, which may only be exercised pursuant to a cashless exercise by the Registered Stockholder.

THE REGISTERED STOCKHOLDER

The following table sets forth certain information as of February 28, 1999, with respect to the Registered Stockholder. The Company will not receive any of the proceeds from the sale of the Shares by the Registered Stockholder.

NAME OF	SHARES BENEFICIALLY OWNED PRIOR TO OFFERING(1)		MAXIMUM NUMBER OF SHARES TO BE SOLD PURSUANT TO THIS PROSPECTUS	SHARES BENEFICIALLY OWNED AFTER OFFERING(2)	
NAME OF REGISTERED STOCKHOLDER	NUMBER	PERCENT		NUMBER	PERCENT
Dunwoody Brokerage Services, Inc.(3) 8309 Dunwoody Place Atlanta, GA 30350	2,631,389	3.7 %	2,631,389	0	0.0%

- Except as otherwise indicated below, beneficial ownership for purposes (1) of this table is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Except as indicated by footnote, the Registered Stockholder has sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by it. Includes (solely for purposes of this Prospectus, and assuming a 10-day low closing bid price of not less than \$1.00 per share, which allows the Company to sell the maximum number of shares of Common Stock to the Institutional Investors under the terms of the Equity Line Agreement) up to an aggregate of 2,054,829 shares of Common Stock that may be acquired by the Registered Stockholder pursuant to the Placement Agent Agreement in connection with the issuance and sale of shares of $\operatorname{\mathsf{Common}}\nolimits$ Stock to the Institutional Investors pursuant to the Equity Line Agreement (including up to 178,125 shares of Common Stock issuable upon the exercise of warrants that may be issued to the Registered Stockholder), which shares would not be deemed beneficially owned within the meaning of Sections 13(d) and 13(g) of the Exchange Act prior to their acquisition by the Registered Stockholder. See "The Equity Line Agreement." Based on an aggregate of 70,898,581 shares of Common Stock issued and outstanding as of February 28, 1999.
- Assumes that all of the Shares are sold pursuant to this Prospectus.
- (2) (3) As of the date of this Prospectus, the Registered Stockholder owns 576,560 shares of Common Stock of the Company, including 51,540 shares of Common Stock issuable upon exercise of outstanding warrants which are currently exercisable, which represents less than 1% of the issued outstanding Common Stock of the Company as of February 28, 1999. Also includes (solely for purposes of this Prospectus, and assuming a 10-day low closing bid price of not less than \$1.00 per share, which allows the Company to sell the maximum number of shares of Common Stock to the Institutional Investors under the terms of the Equity Line Agreement) up to an aggregate of 2,054,829 shares of Common Stock that may be acquired by the Registered Stockholder pursuant to the Placement Agent Agreement in connection with the issuance and sale of shares of Common Stock to the Institutional Investors pursuant to the Equity Line Agreement (including up to 178,125 shares of Common Stock issuable upon the exercise of warrants that may be issued to the Registered Stockholder), which shares would not be deemed beneficially owned within the meaning of Sections 13(d) and 13(g) of the Exchange Act prior to their acquisition by the Registered Stockholder. See "The Equity Line Agreement.'

The Registered Stockholder has not had any material relationship with the Company or any of its affiliates within the past three years other than as a result of the ownership of securities of the Company, through the placement by the Registered Stockholder or its affiliates of securities of the Company or as a result of the negotiation and the execution of the Placement Agent Agreement and the Equity Line Agreement. The natural persons controlling the Registered Stockholder are Robert L. Hopkins and Dwight B. Bronnum.

The shares of Common Stock offered hereby by the Registered Stockholder were or will be acquired pursuant to the Placement Agreement or upon exercise of the Registered Stockholder Warrants. Under the Placement Agent Agreement and the Registration Rights Agreement, the Company agreed to register the shares of Common Stock offered hereby under the Securities Act, for resale by the Registered Stockholder to permit their resale by the Registered Stockholder from time to time to the public without restriction. The Company will prepare and file such amendments and supplements to the registration statement as may be necessary in accordance with the rules and regulations of the Securities Act to keep it effective until the earlier to occur of (i) the date as of which all of the shares of Common Stock may be resold in a public transaction without volume limitations or other material restrictions without registration under the Securities Act, including without limitation, pursuant to Rule 144 under the Securities Act or (ii) the date as of which all of the shares of Common Stock offered hereby have been resold.

The Company has agreed to pay the expenses (other than broker discounts and commissions, if any) in connection with this Prospectus.

PLAN OF DISTRIBUTION

The Company has been advised by the Registered Stockholder that all or a portion of the shares of Common Stock offered by this Prospectus may be offered for sale, from time to time, by the Registered Stockholder in one or more private or negotiated transactions, in open market transactions on the Nasdaq SmallCap Market, in settlement of short sale transactions, in settlement of option transactions, or otherwise, or a combination of these methods, at prices and terms then obtainable, at fixed prices, at prices then prevailing at the time of sale, at prices related to such prevailing prices, or at negotiated prices or otherwise. The Registered Stockholder may effect these transactions by selling the shares of Common Stock offered hereby directly to one or more purchasers or to or through other broker-dealers or agents including: (a) in a block trade in which the broker or dealer so engaged will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction; (b) in purchases by another broker or dealer and resale by such broker or dealer as a principal for its account pursuant to this Prospectus; (c) in ordinary brokerage transactions and (d) in transactions in which the broker solicits purchasers. The compensation to a particular underwriter, broker-dealer or agent may be in excess of customary commissions.

To the knowledge of the Company, the Registered Stockholder has made no arrangement with any brokerage firm (other than itself) for the sale of the shares of Common Stock offered hereby. The Company has been advised by the Registered Stockholder that it presently intends to dispose of the shares of Common Stock offered hereby through itself or through other broker-dealers in ordinary brokerage transactions at market prices prevailing at the time of the sale. However, depending on market conditions and other factors, the Registered Stockholder may also dispose of the shares through one or more of the other methods described above. Concurrently with sales under this Prospectus, the Registered Stockholder may effect other sales of the shares of Common Stock offered hereby under Rule 144 or other exempt resale transactions. There can be no assurance that the Registered Stockholder will sell any or all of the shares of Common Stock offered hereby.

The Registered Stockholder is an "underwriter" within the meaning of the Securities Act, in connection with the sale of the Shares offered hereby. Any other broker-dealers or agents who act in connection with the sale of the Shares may also be deemed to be underwriters. Profits on any resale of the Shares by the Registered Stockholder and any discounts, commissions or concessions received by any such broker-dealers or agents may be deemed to be underwriting discounts and commissions under the Securities Act.

Any broker-dealer participating in such transactions as agent may receive commissions from the Registered Stockholder (and, if they act as agent for the purchaser of such shares, from such purchaser). Broker-dealers may agree with the Registered Stockholder to sell a specified number of shares of Common Stock offered hereby at a stipulated price per share and, to the extent such a broker-dealer is unable to do so acting as agent for the Registered Stockholder, to purchase as principal any unsold shares of Common Stock at the price required to fulfill the broker-dealer commitment to the Registered Stockholder. Broker-dealers who acquire shares of Common Stock offered hereby as principal may thereafter resell such shares from time to time in transactions (which may involve crosses and block transactions and which may involve sales to and through other broker-dealers, including transactions of the nature described above) in the over-the-counter market, in negotiated transactions or otherwise at market prices prevailing at the time of sale or at negotiated prices, and in connection with such resales may pay to or receive from the purchasers of such shares commissions computed as described above. To the extent required under the Securities Act, a supplemental prospectus will be filed, disclosing (a) the name of any such broker-dealers; (b) the number of shares of Common Stock involved; (c) the price at which such shares are to be sold; (d) the commissions paid or discounts or concessions allowed to such broker-dealers, where applicable; (e) that such broker-dealers did not conduct any investigation to verify the information set out or incorporated by reference in this Prospectus, as supplemented; and (f) other facts material to the transaction.

Under applicable rules and regulations under the Exchange Act, any person engaged in a distribution of the shares of Common Stock offered hereby may not simultaneously engage in market making activities with respect to the shares for a period beginning when such person becomes a distribution participant and ending upon such person's completion of participation in the distribution, including stabilization activities in the Common Stock to effect covering transactions, to impose penalty bids or to effect passive marketing making bids. In addition to and without limiting the foregoing, in connection with transactions in the shares of Common Stock offered hereby, the Company and the Registered Stockholder may be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, Rule 10b-5 thereof and, insofar as the Company and the Registered Stockholder are distribution participants, Regulation M and Rules 100, 101, 102, 103, 104 and 105 thereof. All of the foregoing may affect the marketability of the shares of Common Stock offered hereby.

The Registered Stockholder has agreed that it will not create or increase a net short position with respect to the Common Stock during the ten trading days prior to any put date or during the thirty calendar days prior to April 15, 1999 and the thirty calendar days prior to July 15, 1999. The Registered Stockholder has further agreed that it will not engage in any trading practice or activity for the purpose of manipulating the price of the Common Stock or otherwise engage in any trading practice or activity that violates the rules and regulations of the SEC.

The Registered Stockholder will pay all commissions, transfer taxes and other expenses associated with the sales of shares of Common Stock by the Registered Stockholder. The shares offered hereby are being registered pursuant to contractual obligations of the Company, and the Company has agreed to pay the expenses of the preparation of this prospectus. The Company has also agreed to indemnify the Registered Stockholder against certain liabilities, including, without limitation, liabilities arising under the Securities Act.

The Company will not receive any proceeds from the exercise of the Registered Stockholder Warrants, which may only be exercised pursuant to a cashless exercise by the Registered Stockholder. The Company will not receive any of the proceeds from the sale of the shares of Common Stock offered hereby by the Registered Shareholder.

Pursuant to the terms of the Placement Agent Agreement, the Registered Stockholder is entitled to receive (i) a cash placement fee equal to seven percent (7%) of the purchase price of any and all securities placed pursuant to the Equity Line Agreement; (ii) a non-accountable expense allowance equal to one

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percent (1%) of the purchase price of any and all securities placed up to the aggregate purchase price of the first \$10 million of securities placed pursuant to the Equity Line Agreement; (iii) a one time non-accountable expenses allowance equal to one hundred thousand dollars for any and all securities placed in excess of the aggregate purchase price of the first \$10 million of securities placed pursuant to the Equity Line Agreement (such non-accountable expenses allowance to be paid upon placement of any securities resulting in an aggregate purchase price in excess of \$10,100,000 placed pursuant to the Equity Line Agreement); and (iv) an amount of securities equal to ten percent (10%) of all Common Stock issued pursuant to the Equity Line Agreement and an amount of securities equal to ten percent (10%) of all warrants issued pursuant to the Equity Line Agreement.

In order to comply with the securities laws of certain states, if applicable, the shares of Common Stock offered hereby may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the shares of Common Stock offered hereby may not be sold unless such shares have been registered or qualified for sale in these states or an exemption from registration or qualification is available and complied with.

The Common Stock of the Company is currently traded on the Nasdaq SmallCap Market under the symbol "TCLN".

DESCRIPTION OF SECURITIES

As of the date of this Prospectus, the authorized capital stock of the Company consists of 120,000,000 shares of Common Stock, par value \$.001 per share, and 5,000,000 shares of Preferred Stock, par value \$.001 per share, of which 10,000 shares are designated as Series B Convertible Preferred Stock ("Class B Stock") and 17,200 shares are designated as 5% Adjustable Convertible Class C Preferred Stock ("Class C Stock"). As of February 28, 1999, there were 70,898,581 shares of Common Stock outstanding held by 5,863 stockholders of record, 121 shares of Class C Stock outstanding held by 3 holders of record and no shares of Class B Stock outstanding.

Holders of Common Stock are entitled to one vote per share on all matters to be voted upon by the stockholders. Subject to preferences that may be applicable to the holders of outstanding shares of Preferred Stock, if any, the holders of Common Stock are entitled to receive such lawful dividends as may be declared by the Board of Directors. In the event of liquidation, dissolution or winding up of the Company, and subject to the rights of the holders of outstanding shares of Preferred Stock, if any, the holders of shares of Common Stock shall be entitled to receive pro rata all of the remaining assets of the Company available for distribution to its stockholders. There are no redemption or sinking fund provisions applicable to the Common Stock. All outstanding shares of Common Stock are fully paid and nonassessable, and shares of Common Stock to be issued pursuant to this offering shall be fully paid and nonassessable.

The Registered Stockholder Warrants are exercisable at any time beginning on the date of issuance thereof and ending on December 31, 2004. The shares of Common Stock underlying the Registered Stockholder Warrants, when issued upon exercise in whole or in part, will be fully paid and nonassessable, and the Company will pay any transfer tax incurred as a result of the issuance of the Common Stock to the holder upon its exercise.

Each of the Registered Stockholder Warrants contain provisions that protect the holder against dilution by adjustment of the exercise price. Such adjustments will occur in the event, among others, of a merger, stock split or reverse stock split, stock dividend or recapitalization. The Company is not required to issue fractional shares upon the exercise of any Registered Stockholder Warrants. The holder of the Registered Stockholder Warrants will not possess any rights as a stockholder of the Company until such holder exercises the Registered Stockholder Warrants. The Registered Stockholder Warrants may be exercised upon surrender on or before the expiration date of the relevant Registered Stockholder Warrant at the offices of the Company, with an exercise form completed and executed as indicated, accompanied by payment of the exercise price for the number of shares with respect to which the Registered Stockholder Warrant is being exercised. The exercise price is payable only pursuant to a

"cashless exercise," in which that number of shares of Common Stock underlying the Registered Stockholder Warrant having a fair market value equal to the aggregate exercise price are canceled as payment of the exercise price.

For the life of each of the Registered Stockholder Warrants, the holder thereof has the opportunity to profit from a rise in the market price of the Common Stock without assuming the risk of ownership of the shares of Common Stock issuable upon the exercise of the Registered Stockholder Warrant. The Registered Stockholder Warrant holder may be expected to exercise the Registered Stockholder Warrant at a time when the Company would, in all likelihood, be able to obtain any needed capital by an offering of Common Stock on terms more favorable than those provided for by the Registered Stockholder Warrants. Furthermore, the terms on which the Company could obtain additional capital during the life of the Registered Stockholder Warrants may be adversely affected.

This Prospectus does not cover any shares of Common Stock issued or issuable to the Institutional Investors or shares of Common Stock issuable upon exercise of warrants issued or issuable to the Institutional Investors pursuant to the Equity Line Agreement, which shares have been separately registered for resale under the Securities Act and are the subject of a separate Prospectus.

LEGAL MATTERS

The validity of the Shares offered hereby will be passed upon for the Company by Rutan & Tucker, LLP, Costa Mesa, California.

EXPERTS

The consolidated financial statements and related consolidated financial statement schedule, incorporated in this Prospectus by reference from Techniclone Corporation's Annual Report on Form 10-K for the year ended April 30, 1998, have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report (which expresses an unqualified opinion and includes an explanatory paragraph regarding substantial doubt about the Company's ability to continue as a going concern), which is incorporated herein by reference, and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

INDEMNIFICATION OF DIRECTORS AND OFFICERS

The Company's Bylaws provide that the Company will indemnify its directors and officers and may indemnify its employees and other agents to the fullest extent permitted by law. The Company believes that indemnification under its Bylaws covers at least negligence and gross negligence by indemnified parties, and permits the Company to advance litigation expenses in the case of stockholder derivative actions or other actions, against an undertaking by the indemnified party to repay such advances if it is ultimately determined that the indemnified party is not entitled to indemnification. The Company has liability insurance for its officers and directors.

In addition, the Company's Certificate of Incorporation provides that, pursuant to Delaware law, its directors shall not be liable for monetary damages for breach of the directors' fiduciary duty as a director to the Company and its stockholders. This provision in the Certificate of Incorporation does not eliminate the directors' fiduciary duty, and in appropriate circumstances equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to the Company for acts or omissions not in good faith or involving intentional misconduct, for knowing violations of law, for actions leading to improper personal benefit to the director, and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The

provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws.

Provisions of the Company's Bylaws require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers (other than liabilities arising from actions not taken in good faith or in a manner the indemnitee believed to be opposed to the best interests of the Company) to advance their expenses incurred as a result of any proceeding against them as to which they could be indemnified and to obtain directors' insurance if available on reasonable terms. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the Company pursuant to the foregoing provisions, the Company has been informed that in the opinion of the SEC, such indemnification is against public policy as expressed in the Act and is therefore unenforceable. The Company believes that its Certificate of Incorporation and Bylaw provisions are necessary to attract and retain qualified persons as directors and officers.

The Company has in place a directors' and officers' liability insurance policy that, subject to the terms and conditions of the policy, insures the directors and officers of the Company against loses arising from any wrongful act (as defined by the policy) in his or her capacity as a director of officer. The policy reimburses the Company for amounts which the Company lawfully indemnifies or is required or permitted by law to indemnify its directors and officers.

ADDITIONAL INFORMATION

The Company has filed with the SEC a registration statement on Form S-3 $\,$ (herein, together with all amendments and exhibits, referred to as the "Registration Statement") under the Securities Act relating to the Shares being offered pursuant to this Prospectus. For further information pertaining to the Common Stock and the Shares to which this Prospectus relates, reference is made to such Registration Statement. This Prospectus constitutes the prospectus of the Company filed as a part of the Registration Statement and it does not contain all information set forth in the Registration Statement, certain portions of which have been omitted in accordance with the rules and regulations of the SEC. In addition, the Company is subject to the informational requirements of the Exchange Act and, in accordance therewith, files reports, proxy statements and other information with the SEC relating to its business, financial statements and other matters. Reports and proxy and information statements filed pursuant to Section 14(a) and 14(c) of the Exchange Act and other information filed with the SEC as well as copies of the Registration Statement can be inspected and copied at the public reference facilities maintained by the SEC at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549, and at the SEC's Midwest Regional Offices at 500 West Madison Street, Chicago, Illinois 60606 and Northeast Regional Office at 7 World Trade Center, New York, New York 10048. Copies of such material can also be obtained at prescribed rates from the Public Reference Section of the SEC at its principal office at Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549. Such material may also be obtained electronically by visiting the SEC's web site on the Internet at http://www.sec.gov. The Common Stock of the Company is traded on the Nasdaq SmallCap Market under the symbol "TCLN". Reports, proxy statements and other information concerning the Company may be inspected at the National Association of Securities Dealers, Inc., at 1735 K Street, N.W., Washington D.C. 20006.

GLOSSARY OF TERMS

Adjustment Date April 15, 1999 and July 15, 1999.

Adjustment Price	The 10-day low closing bid price immediately preceding an Adjustment Date.
BLA	Biologics License Application, which is submitted to the FDA. $ \label{eq:FDA} % \begin{subarray}{ll} \end{submitted} % \begin{submitted} \e$
burn rate	Cash depletion rate.
CGMP	Current Good Manufacturing Practices, an industry standard protocol applicable to manufacturing practices and processes.
Class B Stock	Series B Convertible Preferred Stock of the Company.
Class C Stock	5% Adjustable Convertible Class C Preferred Stock of the Company.
Class C Warrants	Warrants to purchase shares of Common Stock at an exercise price of \$0.6554, which are issuable upon conversion of shares of Class C Stock and which expire in April 2002.
ELA	Establishment License Application, which is submitted to the FDA. $ \label{eq:fda} % \begin{center} cen$
Equity Line Agreement	Regulation D Common Stock Equity Line Subscription Agreement dated as of June 16, 1998, between the Company and the Institutional Investors, as amended.
Exchange Act	Securities Exchange Act of 1934, as amended.
FDA	United States Food and Drug Administration.
HCFA	Health Care Financing Administration.
HMOs	Health maintenance organizations.
IND	Investigational new drug application for human clinical testing, which is submitted to the FDA.
NHL	Non-Hodgkin's lymphoma.
Notice Date	The date on which written notice of a put is given by the Company to the Institutional Investors pursuant to the Equity Line Agreement
PLA	Product License Application, which is submitted to the FDA
Placement Agent Agreement	Placement Agent Agreement dated as of June 16, 1998, between the Company and the Registered Stockholder, as successor in interest to Swartz.

A sale of shares of Common Stock by the Company to put the Institutional Investors pursuant to the Equity Line Agreement Purchase Price The price per share for the shares of Common Stock to be put by the Company to the Institutional Investors determined by dividing the total dollar amount of the put (up to \$2,250,000, which amount may be increased up to \$5,000,000 by mutual agreement of the Company and the Institutional Investors) less the aggregate dollar amount of any shares sold to the Institutional Investors during the three month period immediately preceding such Notice Date, divided by (i) 82.5% of the 10-day low closing bid price immediately preceding such Notice Date, or (ii) if 82.5% of such 10-day low closing bid price results in a discount of less than twenty cents (\$0.20) per share from such 10-day low closing bid price, such 10-day low closing bid price minus twenty cents (\$0.20). Registered Dunwoody Brokerage Services, Inc. Stockholder Registered Stockholder Warrants . . . Warrants issued and issuable to the Registered Stockholder pursuant to the Placement Agent Agreement. Registration Rights Registration Rights Agreement dated as of June 16, Agreement 1998, by and among the Company, the Institutional Investors and the Registered Stockholder, as successor in interest to Swartz. SEC Securities and Exchange Commission. Securities Act Securities Act of 1933, as amended. Swartz Investments, LLC, a Georgia limited liability Swartz company doing business as Swartz Institutional Finance. Tumor Necrosis Therapy, a universal tumor targeting therapy potentially capable of treating a wide range of solid tumors. VEAs Vasopermeation Enhancement Agents, which use vasoactive compounds (molecules that cause tissues to become more permeable) linked to monoclonal antibodies, such as the TNT antibody, to increase the vasoactive permeability at the tumor site and which are believed to act by increasing the concentration of killing agents at the core of the tumor. Vascular Targeting Agents, which are multi-functional molecules that target the capillaries and blood VTAs

vessels of solid tumors and are believed to act by destroying the vasculature of solid tumors.

YOU SHOULD RELY ONLY ON THE INFORMATION CONTAINED IN THIS DOCUMENT OR TO WHICH WE HAVE REFERRED YOU. WE HAVE NOT AUTHORIZED ANYONE TO PROVIDE YOU WITH INFORMATION THAT IS DIFFERENT. THIS DOCUMENT MAY ONLY BE USED WHERE IT IS LEGAL TO SELL THESE SECURITIES. THE INFORMATION IN THIS DOCUMENT MAY ONLY BE ACCURATE ON THE DATE OF THIS DOCUMENT.

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2,631,389 Shares

(Techniclone Logo Here) TECHNICLONE CORPORATION

COMMON STOCK

PROSPECTUS

March , 1999

PART II. INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCES AND DISTRIBUTION

SEC registration fee	\$ 912
Printing and engraving expenses	2,500
Legal fees and expenses	20,000
Blue Sky fees and expenses	2,500
Accounting fees and expenses	15,000
Miscellaneous	5,000
Total	\$ 45,912
	======

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

The Company's Certificate of Incorporation (the "Certificate") and Bylaws include provisions that eliminate the directors' personal liability for monetary damages to the fullest extend possible under Delaware Law or other applicable law (the "Director Liability Provision"). The Director Liability Provision eliminates the liability of Directors to the Company and its stockholders for monetary damages arising out of any violation by a director of his fiduciary duty of due care. However, the Director Liability Provision does not eliminate the personal liability of a director for (i) breach of the director's duty of loyalty, (ii) acts or omissions not in good faith or involving intentional misconduct or knowing violation of law, (iii) payment of dividends or repurchases or redemption of stock other than from lawfully available funds, or (iv) any transactions from which the director derived an improper benefit. The Director Liability Provision also does not affect a director's liability under the federal securities laws or the recovery of damages by third parties. Furthermore, pursuant to Delaware Law, the limitation liability afforded by the Director Liability Provision does not eliminate a director's personal liability for breach of the director's duty of due care. Although the directors would not be liable for monetary damages to the corporation or its stockholders for negligent acts or commissions in exercising their duty of due care, the directors remain subject to equitable remedies, such as actions for injunction or rescission, although these remedies, whether as a result of timeliness or otherwise, may not be effective in all situations. With regard to directors who also are officers of the Company, these persons would be insulated from liability only with respect to their conduct as directors and would not be insulated from liability for acts or omissions in their capacity as officers. These provisions may cover actions undertaken by the Board of Directors, which may serve as the basis for a claim against the Company under the federal and state securities laws. The Company has been advised that it is the position of the SEC that insofar as the foregoing provisions may be involved to disclaim liability for damages arising under the Securities Act, such provisions are against public policy as expressed in the Act and are therefore unenforceable.

Delaware Law provides a detailed statutory framework covering indemnification of directors, officers, employees or agents of the Company against liabilities and expenses arising out of legal proceedings brought against them by reason of their status or service as directors, officers, employees or agents. Section 145 of the Delaware General Corporation Law ("Section 145") provides that a director, officer, employee or agent of a corporation (i) shall be indemnified by the corporation for expenses actually and reasonably incurred in defense of any action or proceeding if such person is sued by reason of his service to the corporation, to the extent that such person has been successful in defense of such action or proceeding, or in defense of any claim, issue or matter raised in such litigation, (ii) may, in actions other than actions by or in the right of the corporation (such as derivative actions),

be indemnified for expenses actually and reasonably incurred, judgments, fines and amounts paid in settlement of such litigation, even if he is not successful on the merits, if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation (and in a criminal proceeding, if he did not have reasonable cause to believe his conduct was unlawful), and (iii) may be indemnified by the corporation for expenses actually and reasonably incurred (but not judgments or settlements) of any action by the Corporation or of a derivative action (such as a suit by a stockholder alleging a breach by the director or officer of a duty owed to the corporation), even if he is not successful, provided that he acted in good faith and in a manner reasonably believed to be in or not opposed to the best interests of the corporation, provided that no indemnification is permitted without court approval if the director has been adjudged liable to the corporation.

Delaware Law also permits a corporation to elect to indemnify its officers, directors, employees and agents under a broader range of circumstances than that provided under Section 145. The Certificate contains a provision that takes full advantage of the permissive Delaware indemnification laws (the "Indemnification Provision") and provides that the Company is required to indemnify its officers, directors, employees and agents to the fullest extent permitted by law, including those circumstances in which indemnification would otherwise be discretionary, provided, however, that prior to making such discretionary indemnification, the Company must determine that the person acted in good faith and in a manner he or she believed to be in the best interests of the Company and, in the case of any criminal action or proceeding, the person had no reason to believe his or her conduct was unlawful.

In furtherance of the objectives of the Indemnification Provision, the Company has also entered into agreements to indemnify its directors and executive officers, in addition to the indemnification provided for in the Company's Certificate and Bylaws (the "Indemnification Agreements"). The Company believes that the Indemnification Agreements are necessary to attract and retain qualified directors and executive officers. Pursuant to the Indemnification Agreements, an indemnitee will be entitled to indemnification to the extent permitted by Section 145 or other applicable law. In addition, to the maximum extent permitted by applicable law, an indemnitee will be entitled to indemnification for any amount or expense which the indemnitee actually and reasonably incurs as a result of or in connection with prosecuting, defending, preparing to prosecute or defend, investigating, preparing to be a witness, or otherwise participating in any threatened, pending or completed claim, suit, arbitration, inquiry or other proceeding (a "Proceeding") in which the indemnitee is threatened to be made or is made a party or participant as a result of his or her position with the Company, provided that the indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company and had no reasonable cause to believe his or her conduct was unlawful. If the Proceeding is brought by or in the right of the Company and applicable law so provides, the Indemnification Agreement provides that no indemnification against expenses shall be made in respect of any claim, issue or matter in the Proceeding as to which the indemnitee shall have been adjudged liable to the Company.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended (the "Securities Act"), may be permitted to directors, officers or persons controlling the Company pursuant to the foregoing provisions, the Company has been advised 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.

EXHIBIT NO.	DESCRIPTION
3.1	Certificate of Incorporation of Techniclone Corporation, a Delaware corporation (Incorporated by reference to Exhibit B to the Company's 1996 Proxy Statement as filed with the SEC on or about August 20, 1996)
3.2	Bylaws of Techniclone Corporation, a Delaware corporation (Incorporated by reference to Exhibit C to the Company's 1996 Proxy Statement as filed with the SEC on or about August 20, 1996)
3.3	Certificate of Designation of 5% Adjustable Convertible Class C Preferred Stock as filed with the Delaware Secretary of State on April 23, 1997. (Incorporated by reference to Exhibit 3.1 contained in Registrant's Current Report on Form 8-K as filed with the SEC on or about May 12, 1997)
4.1	Form of Certificate for Common Stock (Incorporated by reference to the exhibit of the same number contained in the Registrants' Annual Report on Form 10-K for the fiscal year ended April 30, 1988)
4.4	Form of Subscription Agreement entered into with Series B Convertible Preferred Stock Subscribers (Incorporated by reference to Exhibit 4.1 contained in Registrant's Report on Form 8-K dated December 27, 1995, as filed with the SEC on or about January 24, 1996)
4.5	Registration Rights Agreement dated December 27, 1995, by and among Swartz Investments, Inc. and the holders of the Registrant's Series B Convertible Preferred Stock (incorporated by reference to Exhibit 4.2 contained in Registrant's Current Report on Form 8-K dated December 27, 1995 as filed with the SEC on or about January 24, 1996)
4.6	Warrant to Purchase Common Stock of Registrant issued to Swartz Investments, Inc. (Incorporated by reference to Exhibit 4.3 contained in Registrant's Current Report on Form 8-K dated December 27, 1995 as filed with the SEC on or about January 24, 1996)

4.7	5% Preferred Stock Investment Agreement between Registrant and the Investors named therein (Incorporated by reference to Exhibit 4.1 contained in Registrant's Current Report on Form 8-K as filed with the SEC on or about May 12, 1997)
4.8	Registration Rights Agreement between the Registrant and the holders of the Class C Preferred Stock (Incorporated by reference to Exhibit 4.2 contained in Registrant's Current Report on Form 8-K as filed with the SEC on or about May 12, 1997)
4.9	Form of Stock Purchase Warrant to be issued to the holders of the Class C Preferred Stock upon conversion of the Class C Preferred Stock (Incorporated by reference to Exhibit 4.3 contained in Registrant's Current Report on Form 8-K as filed with the SEC on or about May 12, 1997)
4.10	Regulation D Common Equity Line Subscription Agreement dated as of June 16, 1998 between the Registrant and the Subscribers named therein (the "Equity Line Subscribers") (Incorporated by reference to Exhibit 4.4 contained in Registrant's Report on Form 8-K dated as filed with the SEC on or about June 29, 1998)
4.11	Form of Amendment to Regulation D Common Stock Equity Line Subscription Agreement (incorporated by reference to Exhibit 4.5 contained in Registrant's Current Report on Form 8-K filed with the SEC on or about June 29, 1998)
4.12	Registration Rights Agreement dated as of June 16, 1998 between the Registrant and the Equity Line Subscribers (Incorporated by reference to Exhibit 4.6 contained in Registrant's Current Report on Form 8-K as filed with the SEC on or about June 29, 1998)
4.13	Form of Stock Purchase Warrant to be issued to the Equity Line Subscribers pursuant to the Regulation D Common Stock Equity Subscription Agreement (Incorporated by reference to Exhibit 4.7 contained in Registrant's Current Report on Form 8-K as filed with the SEC on or about June 29, 1998)

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4.14	Placement Agent Agreement dated as of June 16, 1998, by and between the Registrant and Swartz Investments LLC, a Georgia limited liability company d/b/a Swartz Institutional Finance (Incorporated by reference to the exhibit contained in Registration's Registration Statement on Form S-3 (File No. 333-63773)
4.15	Second Amendment to Regulation D Common Stock Equity Line Subscription Agreement dated as of September 16, 1998, by and among the Registrant, The Tail Wind Fund, Ltd. and Resonance Limited (Incorporated by reference to the exhibit contained in Registration's Registration Statement on Form S-3 (File No. 333-63773)
5	Opinion of Rutan & Tucker, LLP*
10.22	1982 Stock Option Plan (Incorporated by reference to the exhibit contained in Registrant's Registration Statement on Form S-8 (File No. 2-85628))
10.23	Incentive Stock Option, Nonqualified Stock Option and Restricted Stock Purchase Plan - 1986 (Incorporated by reference to the exhibit contained in Registrant's Registration Statement on Form S-8 (File No. 33-15102))
10.24	Cancer Biologics Incorporated Incentive Stock Option, Nonqualified Stock Option and Restricted Stock Purchase Plan - 1987 (Incorporated by reference to the exhibit contained in Registrant's Registration Statement on Form S-8 (File No. 33-8664))
10.25	Amendment to 1982 Stock Option Plan dated March 1, 1988 (Incorporated by reference to the exhibit of the same number contained in Registrants' Annual Report on Form 10-K for the year ended April 30, 1988)
10.26	Amendment to 1986 Stock Option Plan dated March 1, 1988 (Incorporated by reference to the exhibit of the same number contained in Registrant's Annual Report on Form 10-K for the year ended April 30, 1988)
10.31	Agreement dated February 5, 1996, between Cambridge Antibody Technology, Ltd. and Registrant (Incorporated by reference to Exhibit 10.1 contained in Registrant's Current Report on Form 8-K dated February 5, 1996, as filed with the SEC on or about February 8, 1996)

10.32	Distribution Agreement dated February 29, 1996, between Biotechnology Development, Ltd. and Registrant (Incorporated by reference to Exhibit 10.1 contained in Registrant's Current Report on Form 8-K dated February 29, 1996, as filed with the SEC on or about March 7, 1996)
10.33	Option Agreement dated February 29, 1996, by and between Biotechnology Development, Ltd. And Registrant (Incorporated by reference to Exhibit 10.2 contained in Registrant's Current Report on Form 8-K dated February 29, 1996, as filed with the SEC on or about March 7, 1996)
10.34	Purchase Agreement for Real Property and Escrow Instructions dated as of March 22, 1996, by and between TR Koll Tustin Tech Corp. and Registrant (Incorporated by reference to Exhibit 10.1 contained in Registrant's Current Report on Form 8-K dated March 25, 1996, as filed with the SEC on or about April 5, 1996)
10.35	Incentive Stock Option and Nonqualified Stock Option Plan-1993 (Incorporated by reference to the exhibit contained in Registrants' Registration Statement on Form S-8 (File No. 33-87662))
10.36	Promissory Note dated October 24, 1996 in the original principal amount of \$1,020,000 payable to Imperial Thrift and Loan Association by Registrant (Incorporated by reference to Exhibit 10.1 to Registrants' Current Report on Form 8-K dated October 25, 1996)
10.37	Deed of Trust dated October 24, 1996 among Registrant and Imperial Thrift and Loan Association (Incorporated by reference to Exhibit 10.2 to Registrants' Current Report on Form 8-K dated October 25, 1996)
10.38	Assignment of Lease and Rents dated October 24, 1996 between Registrant and Imperial Thrift and Loan Association (Incorporated by reference to Exhibit 10.3 on Registrants' Current Report on Form 8-K dated October 25, 1996)
10.39	Commercial Security Agreement dated October 24, 1996 between Imperial Thrift and Loan Association and Registrant (Incorporated by reference to Exhibit 10.4 on Registrants' Current Report on Form 8-K dated October 25, 1996)

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10.40	1996 Stock Incentive Plan (Incorporated by reference to the exhibit contained in Registrants' Registration Statement on Form S-8 (File No. 333-17513))
10.41	Stock Exchange Agreement dated as of January 15, 1997 among the stockholders of Peregrine Pharmaceuticals, Inc. and Registrant (Incorporated by reference to Exhibit 2.1 to Registrants' Quarterly Report on Form 10-Q for the quarter ended January 31, 1997)
10.42	First Amendment to Stock Exchange Agreement among the Stockholders of Peregrine Pharmaceuticals, Inc. and Registrant (Incorporated by reference to Exhibit 2.1 contained in Registrant's Current Report on Form 8-K as filed with the SEC on or about May 12, 1997)
10.43	Termination and Transfer Agreement dated as of November 14, 1997 by and between Registrant and Alpha Therapeutic Corporation (Incorporated by reference to Exhibit 10.1 contained in Registrant's Current Report on Form 8-K as filed with the SEC on or about November 24, 1997)
10.44	Severance Agreement between Lon H. Stone and the Registrant dated July 28, 1998 (Incorporated by reference to the exhibit contained in Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended October 31, 1998, as filed with the SEC on or about December 15, 1998)
10.45	Severance Agreement between William (Bix) V. Moding and the Registrant dated September 25, 1998 (Incorporated by reference to the exhibit contained in Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended October 31, 1998, as filed with the SEC on or about December 15, 1998)
10.46	Option Agreement dated October 23, 1998 between Biotechnology Development Ltd. and the Registrant (Incorporated by reference to the exhibit contained in Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended October 31, 1998, as filed with the SEC on or about December 15, 1998)
23.1	Consent of Rutan & Tucker, LLP (contained in Exhibit 5)*
23.2	Consent of Deloitte & Touche LLP*

Filed herewith.

- (a) The undersigned Registrant hereby undertakes:
- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price present no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement;
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;
- PROVIDED, HOWEVER, that paragraphs (1)(i) and (1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement.
- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial BONA FIDE offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial BONA FIDE offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described under Item 15 above, 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 Securities 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.

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 S-3 and has duly caused this Registration Statement on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Tustin, State of California, on February 28, 1999

TECHNICLONE CORPORATION

By: /S/ LARRY 0. BYMASTER
Larry 0. Bymaster, President

In accordance with the requirements of the Securities Act of 1933, this Registration Statement on Form S-3 has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE		DATE	Ε
/s/ Larry O. Bymaster Larry O. Bymaster	President, Chief Executive Officer and Director (Principal Executive Officer)	February	28,	1999
/s/ Steven C. Burke Steven C. Burke	Chief Financial Officer (Principal Financial and Principal Accounting Officer)	February	28,	1999
/s/ Thomas R. Testman	Chairman of the Board	February	28,	1999
Thomas R. Testman				
/s/ Rock Hankin	Director	February	28,	1999
Rock Hankin				
/s/ William C. Shepherd	Director	February	28,	1999
William C. Shepherd				
/s/ Carmelo J. Santoro, Ph.D.	Director	February	28,	1999
Carmelo J. Santoro, Ph.D.				
/s/ Clive R. Taylor	Director	February	28,	1999
Clive R. Taylor, M.D., Ph.D.				

EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION	SEQUENTIALLY NUMBERED PAGE
5	Opinion of Rutan & Tucker, LLP	
23.2	Consent of Deloitte & Touche LLP	

March 5, 1999

Techniclone Corporation 14282 Franklin Avenue Tustin, California 92780-7017

Re: Registration Statement on Form S-3:

Techniclone Corporation Common Stock, par value \$.001 per share

Ladies and Gentlemen:

We are rendering this opinion in connection with the Registration Statement on Form S-3 (the "Registration Statement"), filed by Techniclone Corporation (the "Company") with the Securities and Exchange Commission under the Securities Act of 1933, as amended, on March 5, 1999. The Registration Statement relates to the resale of up to 2,631,389 shares of common stock, \$.001 par value, of the Company by Dunwoody Brokerage Services, Inc. (the "Shares").

In our capacity as your counsel in connection with this transaction, we have examined the proceedings taken and are familiar with the proceedings proposed to be taken by you in connection with the authorization and issuance of the securities in the manner set forth in the Registration Statement. We have examined such documents as we consider necessary to render this opinion. In such examination, we have assumed the authenticity of all documents submitted to us as originals, the conformity with originals of all documents submitted to us as copies and the genuineness of all signatures. We have also assumed the legal capacity of all natural persons and that, with respect to all parties to agreements or instruments relevant hereto other than the Company, such parties had the requisite power and authority to execute, deliver and perform such agreements or instruments, that such agreements or instruments have been duly authorized by all requisite action and have been executed and delivered by such parties and that such agreements or instruments are valid, binding and enforceable obligations of such parties.

Based upon the foregoing and the compliance with applicable state securities laws by the Company and the additional proceedings to be taken by the Company as referred to above, we are of the opinion that the Shares have been duly authorized, and when issued by the Company upon receipt of payment therefor (to the extent required), the Shares will be validly issued, fully paid and nonassessable.

Our opinions herein are limited to the effect on the subject transaction of United States Federal law and the General Corporation Law of the State of Delaware. We assume no responsibility regarding the applicability thereto, or the effect thereon, of the laws of any other jurisdiction.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to our firm contained under the caption "Legal Matters" in the prospectus which is a part of the Registration Statement.

Respectfully submitted,

/s/ Rutan & Tucker, LLP

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in this Registration Statement of Techniclone Corporation (the Company) on Form S-3 of our report dated June 15, 1998, except for Note 12, as to which the date is July 17, 1998 (which expresses an unqualified opinion and includes an explanatory paragraph regarding substantial doubt about the Company's ability to continue as a going concern), appearing in the Annual Report on Form 10-K of Techniclone Corporation for the year ended April 30, 1998 and to the reference to us under the heading "Experts" in the Prospectus, which is a part of this Registration Statement.

/s/ DELOITTE & TOUCHE LLP

Costa Mesa, California

March 4, 1999