Registration No. 333-

\_\_\_\_\_

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

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

TITAN PHARMACEUTICALS, INC.

(Exact name of Small Business Issuer as specified in its charter)

Delaware 2836 94-3171940

tion of incorporation)

State or other jurisdic- (Primary standard industrial classification code number)

(I.R.S. employer identification number)

400 Oyster Point Blvd. South San Francisco, California 94080 (650) 244-4990 (Address and telephone number of

principal executive offices and principal place of business)

Louis R. Bucalo, M.D., Chief Executive Officer Titan Pharmaceuticals, Inc. 400 Oyster Point Blvd. South San Francisco, California 94080 (650) 244-4990 (Name, address and telephone number of agent for service)

Copies to: Fran Stoller, Esq. Bachner, Tally, Polevoy & Misher LLP 380 Madison Avenue New York, New York 10017 (212) 687-7000

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

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

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

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

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 registration statement for the same offering. |\_|

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

CALCULATION OF REGISTRATION FEE UNDER THE SECURITIES ACT OF 1933

<TABLE> <CAPTION>

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Aggregate Price per Security(1)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
<pre><s> Common Stock, \$.001 par value</s></pre>	<c></c>	<c></c>	<c></c>	<c></c>
	2,149,273	\$3.50	\$7,522,455.50	\$2,091.24

(1) Estimated in accordance with Rule 457(c) solely for the purpose of calculating the registration fee. The price shown is the average of the high and low price of the Common Stock on April 1, 1999 as reported by the American Stock Exchange.

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.

Subject to Completion - Dated April 7, 1999

Prospectus

-----

2,149,273 Shares

TITAN PHARMACEUTICALS, INC.

Common Stock

\_\_\_\_\_

Selling stockholders identified in this prospectus are offering all of the shares to be sold in this offering. We will not receive any of the proceeds from the sale of the shares.

Our common stock and class A warrants are traded on the American Stock Exchange under the symbols TTP and TTP:WS, respectively. On April \_\_\_, 1999, the closing prices of the common stock and warrants were \$\_\_\_ and \$\_\_\_\_, respectively.

An investment in our securities involves a high degree of risk. See "Risk Factors" beginning on page 3.

\_\_\_\_\_

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

\_\_\_\_\_\_

The date of this prospectus is  $\phantom{000}$  , 1999  $\phantom{000}$  .

### PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus or incorporated by reference herein. It is not complete and may not contain all of the information that you should consider before investing in our securities. You should read the entire prospectus carefully, including the "Risk Factors" section, and the financial statements and related notes which are incorporated by reference herein.

We are a biopharmaceutical company developing therapeutic products for the treatment of cancer, disorders of the central nervous system and other serious and life-threatening diseases.

Our lead product, Iloperidone, is currently in Phase III clinical testing for schizophrenia through a strategic alliance with Novartis Pharma AG. Novartis has tradenamed the product Zomaril(TM), and the Phase III program, which will enroll 3,300 patients in 24 countries, has been named the ZEUS(TM) program, for Zomaril Efficacy/Utility and Safety. Iloperidone is being developed for the treatment of schizophrenia and related psychotic disorders - a market expected to exceed \$4 billion within two years. Also in the central nervous system arena, we are developing a unique cell based therapeutic, Spheramine(TM), for the treatment of Parkinson's disease. Our cancer therapeutics in clinical testing include three immunotherapeutics --CeaVac(TM), TriAb(TM), and TriGem -- that are designed to stimulate a patient's immune system against cancer cells. CeaVac(TM) is currently in multicenter double-blind prospectively controlled Phase II clinical testing for colorectal cancer. TriAb(TM) is currently in multicenter double-blind prospectively controlled Phase II clinical testing for breast cancer. TriGem(TM) has completed Phase I testing in melanoma and we are pursuing later stage clinical trials through co-operative groups. Another product we have in development, Pivanex(TM), is a small molecule drug that acts as a cell differentiating agent. Pivanex is currently in Phase II clinical testing for non-small cell lung cancer. Additionally, we are developing gene therapy

products for treating various cancers and, with the help of SBIR grants, an implantable drug delivery system with applications in the treatment of central nervous system disorders.

A portion of our operations are currently conducted through two consolidated subsidiaries: Ingenex, Inc., engaged in the development of proprietary gene-based therapies and ProNeura, Inc., engaged in research and development activities relating to a polymeric implantable drug delivery technology. Theracell, Inc., engaged in the development of cell-based therapeutics intended for the restorative treatment of neurological diseases and central nervous system disorders, was merged into Titan in March 1999. References in this prospectus to our company and our products include the operations and products of our operating subsidiaries.

Our executive offices are located at 400 Oyster Point Blvd., Suite 505, South San Francisco, California 94080, and our telephone number is (650) 244-4990

-2-

### RISK FACTORS

An investment in our shares involves various risks. You should carefully consider the following risks factors and other information incorporated by reference herein before deciding to purchase shares.

We have a history of operating losses and may never be profitable. Through December 31, 1998, we had accumulated net losses since inception of approximately \$54.1 million. We will continue to incur losses for the foreseeable future as a result of the various costs associated with our research, development, financial, administrative, regulatory and management activities. We may never achieve or sustain profitability.

We will need additional financing. At March 15, 1999, we had working capital of approximately \$13 million which we believe will enable us to fund our operations for at least 18 months. We will be required to seek substantial additional financing after such time to continue our product development activities and to commercialize any products that we may successfully develop. We do not have any funding commitments or arrangements other than our bank line. If we are unable to enter into a corporate collaboration, complete a debt or equity offering, or otherwise obtain any needed financing, we will be required to reduce, defer or discontinue our product development programs. We may be required to obtain funds on terms that are not favorable to us and our stockholders.

Our products are at an early stage of development and may not be successfully developed or commercialized. Our proposed products are at various stages of development, but all will require significant further research, development, testing and regulatory clearances prior to commercialization. We are subject to the risk that some or all of our proposed products:

- o will be found to be ineffective or unsafe;
- o will not receive necessary regulatory clearances;
- o will not be capable of being produced in commercial quantities at reasonable costs; or
- o will not be successfully marketed.

We may experience unanticipated problems relating to product development, testing, regulatory compliance, manufacturing, marketing and competition, and our costs and expenses could exceed current estimates. We cannot predict whether we will successfully develop and commercialize any products.

We must comply with extensive government regulations. Our research, development and pre-clinical and clinical trial activities and the manufacturing and marketing of any products which we may successfully develop are subject to an extensive regulatory approval process by the FDA and other regulatory agencies in the U.S. and other countries. The process of obtaining required regulatory approvals for drugs, including conducting preclinical and clinical testing, is lengthy, expensive and uncertain. Even after such time and expenditures, we may not obtain necessary regulatory approvals for clinical testing or for the manufacturing or marketing of any products. Regulatory approval may entail limitations on the indicated usage of a drug, which may reduce the drug's market potential. Even if regulatory clearance is obtained, post-market evaluation of the products, if required, could result in restrictions on a product's marketing or

-3-

withdrawal of the product from the market as well as possible civil or criminal sanctions. We depend on laboratories and medical institutions conducting preclinical studies and clinical trials to maintain both good laboratory and good clinical practices. We will also depend upon the manufacturers of any products we may successfully develop to comply with cGMP.

regulation under state and federal laws, including requirements regarding occupational safety, laboratory practices, environmental protection and hazardous substance control, and may be subject to other local, state, federal and foreign regulation. We cannot predict the impact of such regulation on us, although it could be material and adverse.

We have limited patent protection and may be unable to obtain or retain patents and proprietary rights.

Our future success will depend to a significant extent on our ability to:

- o obtain and enforce patent protection on our products and technologies;
- o maintain trade secrets; and
- o operate and commercialize products without infringing on the patents or proprietary rights of others.

Our patents may not afford any competitive advantages and may be challenged or circumvented by third parties. Further, patents may not issue on pending patent applications. Because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that before a potential product can be commercialized, any related patent may expire, or remain in existence for only a short period following commercialization, reducing any advantage of the patent.

Our business may be materially adversely affected if we fail to obtain and retain needed patents, licenses or proprietary information. Others may independently develop similar technologies or duplicate any technology we develop. Furthermore, costly and time consuming litigation may be necessary to:

- o enforce any of our patents;
- o determine the scope and validity of the patent rights of others; or
- o respond to a legal action against us claiming damages for infringement of patent rights or other proprietary rights or seeking to enjoin commercial activities relating to the affected product or process.

The outcome of any such litigation is highly uncertain.

To the extent that consultants, key employees or other third parties apply technological information independently developed by them or by others to our proposed products, disputes may arise as to the proprietary rights to such information which may not be resolved in our favor. Most of our consultants are employed by or have consulting agreements with third parties and any inventions are discovered by such individuals generally will not become our property. There is a

-4-

risk that other parties may breach confidentiality agreements or that our trade secrets become known or independently discovered by competitors, which could adversely affect us.

We face intense competition. Competition in the pharmaceutical and biotechnology industries is intense and is expected to increase. We will face competition from numerous companies that currently market, or are developing, products for the treatment of the diseases and disorders we have targeted. Many of these entities have significantly greater research and development capabilities, experience in obtaining regulatory approvals and manufacturing, marketing, financial and managerial resources than us. We also compete with universities and other research institutions in the development of products, technologies and processes, as well as the recruitment of highly qualified personnel. Our competitors may succeed in developing technologies or products that are more effective than the ones we have under development or that render our proposed products or technologies noncompetitive or obsolete. In addition, certain of such competitors may achieve product commercialization or patent protection earlier than us.

We are dependent upon our key collaborative relationships and license and sponsored research agreements. As a small company with limited resources, we rely significantly on the resources of third parties to conduct research and development on our behalf. For example, our ability to ultimately derive revenues from Iloperidone is almost entirely dependent upon Novartis conducting the Phase III trials and completing the regulatory approval process and implementing the marketing program necessary to commercialize Iloperidone if the trials are successful. Our success in the future will depend, in part, on our ability to maintain existing collaborative relationships and to develop new collaborative relationships with third parties. Our license agreements relating to the in-licensing of technology generally require the payment of up-front license fees and royalties based on sales with minimum annual royalties, the use of due diligence in developing and bringing products to market, the achievement of funding milestones and, in some cases, the grant of stock to the licensor. Our sponsored research agreements generally require periodic payments on an annual or quarterly basis. Some agreements also require funding or production facilities relating to clinical research. Our failure to meet financial or other obligations under license or sponsored research agreements in a timely manner could result in the loss of our rights to proprietary technology or our right to

have the applicable university or institution conduct research and development efforts.

We will be dependent on third parties to manufacture and market any products we may successfully develop. To date, we have not introduced any products on the commercial market. We do not expect to have the resources in the foreseeable future to allocate to the manufacture or direct marketing of any proposed products and, therefore, it is intended that collaborative arrangements be pursued regarding the manufacture and marketing of any products that may be successfully developed. We may be unable to enter into additional collaborative arrangements to manufacture or market any proposed products or, in lieu thereof, estsablish our own manufacturing operations or sales force.

We may not be able to retain our key management and scientific personnel. As a small company with a limited number of personnel, we are highly dependent on the services of Dr. Louis R. Bucalo, President and Chief Executive Officer, as well as the other principal members of our management and scientific staff. The loss of one or more of such individuals could substantially impair ongoing research and development programs and could hinder our

\_5\_

ability to obtain corporate partners. Our success depends in large part upon our ability to attract and retain highly qualified personnel. We compete in our hiring efforts with other pharmaceutical and biotechnology companies, as well as universities and nonprofit research organizations, and we may have to pay higher salaries to attract and retain personnel.

Futures sales of our common stock in the public market could adversely impact our stock price. Future sales of our common stock by existing stockholders pursuant to Rule 144 under the Securities Act, pursuant to an effective registration statement or otherwise, could have an adverse effect on the price of our securities.

#### USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares by the selling stockholders.

#### DIVIDEND POLICY

We have never paid cash dividends on our common stock and do not anticipate paving cash dividends in the foreseeable future.

# FORWARD-LOOKING STATEMENTS

Statements in this prospectus or in the documents incorporated by reference herein that are not descriptions of historical facts are forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. Reference is made in particular to the description of our plans and objectives for future operations, assumptions underlying such plans and objectives and other forward-looking terminology such as "may," "expects," "believes," "anticipates," "intends," "expects," "projects," or similar terms, variations of such terms or the negative of such terms. Forward-looking statements are based on management's current expectations. Actual results could differ materially from those currently anticipated due to a number of factors, including those set forth under "Risk Factors" including, in particular, risks relating to:

- o the results of ongoing research and development activities;
- o uncertainties relating to pre-clinical and clinical testing, financing and strategic agreements and relationships;
- o the early stage of products under development;
- o government regulation;
- o patent matters; and
- o competition.

We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations or any changes in events, conditions or circumstances on which any such statement is based.

-6-

### SELLING STOCKHOLDERS

In January 1999, we completed a private placement in which we sold an aggregate of 2,149,273 shares to the selling stockholders listed in the table below. We agreed to bear expenses, other than fees and expenses of counsel to the selling stockholders, in connection with the registration and sale of the shares. See "Plan of Distribution."

The following table sets forth information regarding the beneficial ownership of our common stock by the selling stockholders and as adjusted to

give effect to the sale of the shares offered hereby. No selling stockholder has held any position nor had any material relationship with Titan or its affiliates during the past three years.

<TABLE> <CAPTION>

Name of	Number of Shares Beneficially Owned Prior	Number of Shares Being	Number of Shares Beneficially Owned	Percentage Ownership After
Selling Stockholder	To Offering	Offered	After Offering	Offering
<s></s>	<c></c>	<c></c>	<c></c>	 <c></c>
Biotechnology Value Fund, L.P. (1)(2)	703, 648	316,273	387, 375	2.5%
Biotechnology Value Fund, Ltd. (2)	354,000	354,000	0	*
Caduceus Capital II, L.P. (3)	80,000	80,000	0	*
Caduceus Capital Trust (3)	445,000	445,000	0	*
Clearwater Offshore Fund Ltd. (4)	254,000	185,000	69,000	*
Clearwater Fund I, L.P. (4)	200,000	200,000	0	*
Curran Partners L.P. (5)	100,000	100,000	0	*
Donald D. Graham	50,000	50,000	0	*
Investment 10 L.L.C.(2)	20,000	20,000	0	*
Michael T. Jackson Trust,	265,000	182,000	83,000	*
New Technologies Fund				
James A. Ruffalo and Margaret	50,000	50,000	0	*
M. Ruffalo, JTROS				
Ursus Capital, L.P.(6)	63,000	30,000	33,000	*
Worthington Growth L.P. (7)	100,000	100,000	0	*
ZPG Securities LLC (2)	37,000	37,000	0	*

  |  |  |  |

- \* Less than 1%
- (1) Includes 112,375 shares underlying a warrant.
- (2) The shares held by each of these selling stockholders are beneficially owned by BVF Partners L.P. ("Partners"), the general partner of Biotechnology Value Fund, L.P., and BVF Inc., the general partner of Partners. Biotechnology Value Fund, Ltd., Investment 10 L.L.C and ZPG Securities LLC are investment accounts managed by Partners.
- (3) The shares held by these selling stockholders are beneficially owned by OrbiMed Advisors LLC, the general partner of Caduceus Capital II, L.P. and the investment advisor for Caduceus Capital Trust.
- (4) These shares may be deemed to be beneficially owned by Hans F. Heye, the trading manager of Clearwater Offshore Fund Ltd. and the president of the corporate general partner of Clearwater Fund I, L.P.
- (5) These shares may be deemed to be beneficially owned by John P. Curran, as general partner.
- (6) These shares may be deemed to be beneficially owned by Evan Sturza, as manager and principal. Includes 14,400 shares underlying Class A Warrants owned by Mr. Sturza.
- (7) The shares may be deemed to be beneficially owned by Clifford W. Henry, as general partner.

-7-

### PLAN OF DISTRIBUTION

The selling stockholders may sell shares from time to time:

- o in transactions on the American Stock Exchange or the Pacific Exchange;
- o in privately negotiated transactions;
- o through the writing of options on the shares;
- o or a combination of such methods of sale.

The may sell their shares:

- o at fixed prices which may be changed;
- o at market prices prevailing at the time of sale;
- o at prices related to such prevailing market prices;
- o or at negotiated prices.

The selling stockholders may sell shares to or through broker-dealers, and such broker-dealers may receive compensation in the form of discounts, concessions or commissions from either the selling stockholders, the purchasers of the shares for whom such broker-dealers may act as agent or to whom they sell as principal, or both. Compensation to a particular broker-dealer might be in excess of customary commissions.

The selling stockholders and any broker-dealers who act in connection with the sale of shares hereunder may be deemed to be "underwriters" as that term is defined in the Securities Act of 1933, and any commissions received by them and profit on any resale of the shares as principal might be deemed to be underwriting discounts and commissions under the Securities Act.

We have agreed to indemnify the selling stockholders against certain liabilities, including certain liabilities under the Securities Act.

The validity of the securities offered hereby have been passed upon for Titan by Bachner, Tally, Polevoy & Misher LLP, New York, New York.

#### INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents which we have filed with the Commission (File No. 0-27436) pursuant to the Exchange Act of 1934 are incorporated herein by reference:

- 1. Our Annual Report on Form 10-K for the fiscal year ended December 31,1998, including any documents or portions thereof incorporated by reference therein;
- 2. Our definitive Proxy Statement dated June 29, 1998;

-8-

- 3. Our Registration Statement on Form 8-A registering the common stock and class A warrants under the Exchange Act; and
- 4. All other documents filed by us 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 termination of this offering.

Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein or in any subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as modified or superseded, to constitute a part of this prospectus.

We will provide without charge to each person to whom this prospectus is delivered, upon written or oral request of any such person, a copy of any or all of the documents incorporated herein by reference, other than exhibits to such documents which are not specifically incorporated by reference into such documents. Requests for documents should be directed to us at 400 Oyster Point Boulevard, South San Francisco, California 94080, Attention: Chief Financial Officer, telephone (650) 244-4990.

#### AVAILABLE INFORMATION

We have filed with the Commission a Registration Statement on Form S-3 under the Securities Act of 1993 covering the shares offered by this prospectus. This prospectus does not contain all of the information set forth in the Registration Statement and the exhibits thereto. Statements contained in this prospectus as to the contents of any contract or other document referred to are not necessarily complete and in each instance such statement is qualified by reference to each such contract or document. The Company is subject to the informational requirements of the Exchange Act, and in accordance therewith files reports and other information with the Commission. Copies of such material can be obtained from the Public Reference Section of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549 at prescribed rates. The Company is an electronic filer, and the Commission maintains a web site that contains reports, proxy and information statements and other information regarding the Company at www.sec.gov./edgar.html.

-9-

-----

## [Back Cover]

No dealer, salesman or other person has been authorized to give any information or to make any representations, other than those contained in this prospectus, and, if given or made, such information or representations must not be relied upon as having been authorized by the Company or by the Underwriter. This prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, any securities offered hereby by anyone in any jurisdiction in which such offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer, or solicitation. Neither the delivery of this prospectus nor any sale made hereunder shall, under any circumstances, create any implication that the information herein contained is correct as of any time subsequent to the date of this prospectus.

### TABLE OF CONTENTS

	Page
Prospectus Summary	2
Risk Factors	3
Use of Proceeds	6
Dividend Policy	6

Forward-Looking Statements 6	
Selling Stockholders	
Plan of Distribution	
Legal Matters8	
Incorporation of Certain	
Documents by Reference	
Available Information9	

TITAN PHARMACEUTICALS, INC.

PROSPECTUS

[date]

\_\_\_\_\_\_

### PART II

#### Information Not Required in Prospectus

### Item 14. Other Expenses of Issuance and Distribution

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

	Amount
SEC Registration Fee	\$ 2,091.24
Printing and Engraving Expenses	
Legal Fees and Expenses	3,500.00
Blue Sky Fees and Expenses	1,000.00
Accounting Fees and Expenses	5,000.00
Total	\$15,091.24
	========

### Item 15. Indemnification of Directors and Officers

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

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

The Registrant also enters into indemnification agreements with each of its officers and directors, the form of which has been filed as Exhibit 10.6 and reference is hereby made to such form.

In addition, the Registrant currently maintains an officers' and directors' liability insurance policy which insures, subject to the exclusions and limitations of the policy, officers and directors of the Company against certain liabilities which might be incurred by them solely in such capacities.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the Registrant, pursuant to the foregoing provisions, the Company has been informed that in the opinion of the commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. See Item 17, "Undertakings."

## Item 16. Exhibits

- 3.1 Restated Certificate of Incorporation of the Registrant(1)
- 3.2 Form of Amendment to Restated Certificate of Incorporation of the Registrant(1)
- 3.3 By-laws of the Registrant (1)
- 4.3 Form of Warrant Agreement(1)

### II-1

- 4.4 Form of Underwriter's Unit Purchase Option(1)
- 4.5 Form of Investor Rights Agreement between the Registrant and the holders of Series A and Series B Preferred Stock(1)

- 4.6 Form of Placement Agent's Unit Purchase Option(4)
- 4.7 Certificate of Designation of Series C Preferred Stock(8)
- 4.8 Certificate of Designation of Series D Preferred Stock(8)
- 10.1 1993 Stock Option Plan(1)
- 10.2 1995 Stock Option Plan(1)
- 10.3 Employment Agreement between the Registrant and Louis Bucalo dated February 1, 1993, amended as of February 3, 1994(1)
- 10.4 Employment Agreement between Registrant and Richard Allen dated July 28, 1995(1)
- 10.5 Employment Agreement between Registrant and Sunil Bhonsle, dated August 6, 1995(1)
- 10.6 Form of Indemnification Agreement (1)
- +10.9 MDR Exclusive License Agreement between Ingenex, Inc. (formerly Pharm-Gen Systems Ltd.) and the Board of Trustees of the University of Illinois dated May 6, 1992(1)
- +10.11 License Agreement between Theracell, Inc. and New York University dated November 20, 1992, as amended as of February 23, 1993 and as of February 25, 1995(1)
- +10.12 License Agreement between the Registrant and the Massachusetts
  Institute of Technology dated September 28, 1995(1)
- +10.14 Exclusive License Agreement between Ingenex, Inc. and the Board of Trustees of the University of Illinois, dated July 1, 1994(1)
- +10.15 Exclusive License Agreement between Ingenex, Inc. and the Board of Trustees of the University of Illinois, dated July 1, 1994(1)
- +10.16 License Agreement between Ingenex, Inc. and the Massachusetts
  Institute of Technology, dated September 11,1 992(1)
- +10.17 License Agreement between Ingenex, Inc. and Baylor College of Medicine, dated October 21, 1992(1)
- 10.18 Lease for Registrant's facilities(2)
- +10.19 License Agreement between Theracell, Inc. and the University of South Florida dated March 15, 1996(3)
- +10.20 License Agreement between Trilex Pharmaceuticals, Inc. (formerly Ascalon Pharmaceuticals, Inc.) and the University of Kentucky Research Foundation dated May 30, 1996(4)
- +10.22 License Agreement between the Registrant and Hoechst Marion Roussel, Inc. effective as of December 31, 1996(5)
- 10.23 Employment Agreement between Registrant and Robert E. Farrell dated August 9, 1996(5)
- 10.24 Financing Agreement between the Registrant and Ansan Pharmaceuticals, Inc. dated March 21, 1997(6)
- 10.25 Agreement for Purchase and Sale of Assets between the Registrant and Pharmaceuticals Product Development, Inc. dated June 4, 1997(6)
- +10.27 License Agreement between the Registrant and Bar-Ilan Research and Development Company Limited effective November 25, 1997(7)

## II-2

- 10.28 License Agreement between the Registrant and Ansan Pharmaceuticals, Inc. dated November 24, 1997(7)
- 10.29 Stock Purchase Agreement between the Registrant and Ansan Pharmaceuticals, Inc. effective November 25, 1997(7)
- +10.30 Sublicense Agreement between the Registrant and Novartis Pharma AG dated November 20, 1997(7)
- 10.31 1998 Stock Option Plan(9)
- 23.1 Consent of Ernst & Young LLP, Independent Auditors Included on Page II-6
- + Confidential treatment has been granted with respect to portions of this exhibit.
- Incorporated by reference from the Registrant's Registration Statement on Form SB-2 (File No. 33-99386).
- (2) Incorporated by reference from the Registrant's Annual Report on Form 10-KSB for the year ended December 31, 1995.
- (3) Incorporated by reference from the Registrant's Quarterly Report on Form 10-QSB for the period ended March 31, 1996.
- (4) Incorporated by reference from the Registrant's Registration Statement on Form SB-2 (File No. 333-13469).
- (5) Incorporated by reference from the Registrant's Annual Report on Form 10-KSB for the year ended December 31, 1996.
- (6) Incorporated by reference from the Registrant's Quarterly Report on Form 10-QSB for the period ended March 31, 1997.
- (7) Incorporated by reference from the Registrant's Registration Statement on Form S-3 (File No. 333-42367).
- (8) Incorporated by reference from the Registrant's Annual Report on Form 10-K for the year ended December 31, 1997.
- (9) Incorporated by reference from the Registrant's Annual Report on Form 10-K for the year ended December 31, 1998.

### Item 17. Undertakings

Undertaking Required by Item 512 of Regulation S-K.

The undersigned registrant hereby undertakes that, for purpose of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 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 that time shall be deemed to be the initial bona fide offering thereof.

II-3

#### 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 authorized this Registration Statement or Amendment thereto to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California on the 5th day of April, 1999.

TITAN PHARMACEUTICALS, INC.

By: /s/ Louis R. Bucalo

Louis R. Bucalo, M.D., President

#### POWER OF ATTORNEY

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

In accordance with the requirements of the Securities Act of 1933, this Registration Statement or Amendment thereto has been signed by the following persons in the capacities and on the dates stated.

Signature	Title 	Date 
/s/ Louis R. Bucalo		
	President, Chief Executive Officer and Director (principal executive officer)	April 5, 1999
/s/ Ernst Gunter-Afting		
Ernst Gunter-Afting	Director	April 5, 1999
/s/ Victor J. Bauer		
Victor J. Bauer	Director	April 5, 1999
/s/ Eurelio Cavalier		
	Director	April 5, 1999
 Michael K. Hsu	Director	April , 1999
/s/ Hubert E. Huckel		• ,
Hubert E. Huckel, M.D.	Director	April 5, 1999
/s/ Marvin E. Jaffe		
Marvin E. Jaffe, M.D.	Director	April 5, 1999
/s/ Konrad M. Weis		

Konrad M. Weis, Ph.D. Director April 5, 1999

/s/ Kenneth J. Widder

Kenneth J. Widder, M.D. Director April 5, 1999

/s/ Robert E. Farrell

\_ \_\_\_\_\_\_

Robert E. Farrell Executive Vice President and April 5, 1999

Chief Financial Officer (principal financial and accounting officer)

II-4

CONSENT OF COUNSEL

The consent of Bachner, Tally, Polevoy & Misher LLP is contained in its opinion filed as Exhibit 5.1 to the Registration Statement.

II-5

Titan Pharmaceuticals, Inc. 400 Oyster Point Blvd., Suite 505 South San Francisco, California 94080

Re: Registration Statement on Form S-3

Gentlemen:

We have acted as counsel to Titan Pharmaceuticals, Inc., a Delaware corporation (the "Company"), in connection with the preparation of a registration statement on Form S-3 (the "Registration Statement") filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Act"), relating to the registration of an aggregate of 2,149,273 shares (the "Shares") of the common stock, par value \$.001 per share, of the Company (the "Common Stock") for resale by certain selling stockholders named in the Registration Statement (the "Selling Stockholders").

In this connection, we have reviewed (a) the Registration Statement; (b) the Company's Restated Certificate of Incorporation and Bylaws; (c) the form of Subscription Agreement between the Company and each of the Selling Stockholders dated January 27, 1999; and (d) certain records of the Company's corporate proceedings as reflected in its minute books. In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals and the conformity with the original of all documents submitted to us as copies thereof. Where factual matters relevant to such opinion were not independently established, we have relied upon certificates of officers and responsible employees and agents of the Company. Our opinion set forth below is limited to the General Corporation Law of the State of Delaware.

Based upon the foregoing, it is our opinion that the Shares have been duly and validly authorized and issued and are fully paid and nonassessable.

We hereby consent to the use of this opinion as Exhibit 5.1 to the Registration Statement and to all references to our firm in the Registration Statement. In giving this consent, we do not thereby concede that we come within the categories of persons whose consent is required by the Act or the General Rules and Regulations promulgated thereunder.

Very truly yours,

/s/ BACHNER, TALLY, POLEVOY & MISHER LLP

## CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Registration Statement (Form S-3) and related Prospectus of Titan Pharmaceuticals, Inc. for the registration of 2,149,273 shares of its common stock, of our report dated February 12, 1999 with respect to the consolidated financial statements of Titan Pharmaceuticals, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 1998, filed with the Securities and Exchange Commission.

Palo Alto, California April 5, 1999