

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

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

OXIS INTERNATIONAL, INC.
(Exact name of registrant as specified in its charter)

DELAWARE 94-1620407
(State or other jurisdiction of (I.R.S. Employer
incorporation or organization) Identification Number)

6040 N. CUTTER CIRCLE, SUITE 317
PORTLAND, OREGON 97217-3935
(503) 283-3911
(Address, including zip code, and telephone number, including area code, of
Registrants principal executive offices)

RAY R. ROGERS
CHAIRMAN OF THE BOARD
OXIS INTERNATIONAL, INC.
6040 N. CUTTER CIRCLE, SUITE 317
PORTLAND, OREGON 97217-3935
(503) 283-3911
(Name, address, including zip code and telephone number, including
area code of agent for service)

COPIES TO:
RICHARD SCUDELLARI, ESQ.
JACKSON TUFTS COLE & BLACK, LLP
60 SOUTH MARKET STREET
SAN JOSE, CALIFORNIA 95113
(408) 998-1952

Approximate date of commencement of proposed sale to the public:
As soon as practicable after the 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, check the following box.

CALCULATION OF REGISTRATION FEE

<TABLE>
<CAPTION>

Title of Securities to be Registered	Proposed Maximum Offering Price Amount to be Registered	Proposed Maximum Per Share (1)	Amount of Proposed Maximum Aggregate Offering Price (1)	Registration Fee
<S> Common Stock \$.50 par value..	<C> 5,701,225 (2)	<C> \$1.34375	<C> \$7,661,021.09	\$2,321.52

</TABLE>

(1) Estimated solely for the purpose of calculating the amount of the
registration fee pursuant to Rule 457 based on the average of the bid and
asked prices for the Common Stock, as reported by prices on the Nasdaq
National Market on December 16, 1996.

(2) Includes 55,000 shares issued in connection with an offering of Series E
Preferred Stock and Common Stock, a maximum of 2,678,799 shares issuable upon
conversion of Series E Preferred Stock, an aggregate of 105,778 shares issuable
upon exercise of a warrant issued to the placement agent in connection with such
Series E Preferred Stock placement, a maximum of 2,211,648 shares issuable upon
conversion of Secured Convertible Term Notes dated October 11, 1996 (the

"Notes"), an aggregate of 300,000 shares issuable upon exercise of warrants issued in connection with such Notes dated October 11, 1996, an aggregate of 150,000 shares issuable upon exercise of warrants issuable pursuant to the terms of the Notes, and 200,000 shares issuable upon exercise of a warrant issued to a prior placement agent and financial advisor.

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.

Pursuant to Rule 429 under the Securities Act of 1933, the Prospectus contained in this Registration Statement is a combined Prospectus and also relates to an aggregate of 5,075,073 shares of Common Stock registered on Registration Statement No. 33-61087 on Form S-3 and an aggregate of 9,306,426 shares of Common Stock registered on Registration Statement No. 333-5921 on Form S-3.

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OXIS INTERNATIONAL, INC.
CROSS REFERENCE SHEET

Between Items of Form S-3 and Prospectus

<TABLE>
<CAPTION>

REGISTRATION STATEMENT ITEM AND HEADING	PROSPECTUS CAPTION
<C> <S>	<C>
1. Front of Registration Statement and Outside Front Cover of Prospectus	Outside Front Cover Page
2. Inside Front and Outside Back Cover Pages of Prospectus	Front and Outside Back Cover Pages
3. Risk Factors	Risk Factors
4. Use of Proceeds	Use of Proceeds
5. Determination of Offering Price	Not Applicable
6. Dilution	Not Applicable
7. Selling Security Holders	Selling Stockholders
8. Plan of Distribution	Cover Page; Plan of Distribution
9. Description of Securities	Incorporation of Certain Documents by Reference
10. Interest of Named Experts and Counsel	Not Applicable
11. Material Changes	Incorporation of Certain Documents by Reference
12. Incorporation of Certain Information	Incorporation of Certain Documents by Reference
13. Disclosure of Commission Position on Indemnification for Securities Act Liabilities	Undertakings; Indemnification of Officers and Directors
14. Other Expenses of Issuance and Distribution	Other Expenses of Issuance and Distribution
15. Indemnification of Directors and Officers	Indemnification of Officers and Directors
16. Exhibits	Exhibits
17. Undertakings	Undertakings

</TABLE>

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Information contained herein is subject to completion or amendment. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This prospectus shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any State in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such State.

PROSPECTUS

OXIS INTERNATIONAL, INC.
19,920,823 SHARES
COMMON STOCK

This Prospectus relates to 19,920,823 shares of Common Stock, par value \$.50 (the Common Stock), of OXIS International, Inc. (OXIS or the Company) which are being offered and sold by certain security holders of the Company, including officers and directors of the Company (the Selling Stockholders). The above 19,920,823 shares of Common Stock being offered hereby include an aggregate of

5,043,410 shares which are issuable upon conversion of the Company's Series C Preferred Stock, Series D Preferred Stock, and Series E Preferred Stock and an aggregate of 2,211,648 shares which are issuable upon conversion of the Company's Secured Convertible Term Notes only upon the occurrence of certain events. The 19,920,823 shares of Common Stock being offered hereby, if all of the securities pursuant to which shares of Common Stock being offered hereby could be issued were to be converted or exercised, would represent approximately seventy-six percent (76%) of the issued and outstanding shares of Common Stock of the Company. The Selling Stockholders, directly or through agents, broker-dealers or underwriters, may sell the Common Stock offered hereby from time to time on terms to be determined at the time of sale, in transactions on the Nasdaq National Market or in privately negotiated transactions or otherwise. The Selling Stockholders and any agents, broker-dealers or underwriters that participate in the distribution of the Common Stock may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended (the "Act"), and any commission received by them and any profit on the resale of the Common Stock purchased by them may be deemed to be underwriting discounts or commissions under the Act. See Selling Stockholders and Plan of Distribution.

The Common Stock of the Company is quoted on the Nasdaq National Market under the symbol OXIS. The last reported sales price of the Company's Common Stock on the Nasdaq National Market on December 13, 1996 was \$1.4375 per share.

THE SHARES OF COMMON STOCK OFFERED HEREBY INVOLVE
A HIGH DEGREE OF RISK. SEE RISK FACTORS
AT PAGE NINE OF THIS PROSPECTUS.

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

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CAUTIONARY STATEMENT FOR PURPOSES OF THE SAFE HARBOR PROVISIONS OF THE PRIVATE
SECURITIES LITIGATION REFORM ACT OF 1995

This Prospectus contains or incorporates by reference certain "forward-looking" statements. The Company desires to take advantage of the new "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995 and is including this statement for the express purpose of availing itself of the protections of such safe harbor with respect to all of such forward-looking statements. Examples of forward-looking statements contained or incorporated by reference herein include the Company's projections with respect to: (a) the development, marketing and sales of Company products; (b) the availability of products and services from independent third parties; (c) the Company's future financial results, capital needs and sources of financing; and (d) the effect of certain legislation and governmental regulations on the Company. The Company's ability to predict any of such projected results or to predict the effect of any legislation or other pending events on the Company's operating results is inherently uncertain. Therefore, the Company wishes to caution each reader of this Prospectus to carefully consider the specific factors discussed with such forward-looking statements as such factors in some cases have affected, and in the future (together with other factors) could affect, the ability of the Company to achieve its projected results and may cause actual results to differ materially from those expressed herein.

No underwriting commissions or discounts will be paid by the Company in connection with this offering. Estimated expenses payable by the Company in connection with this offering are \$47,322. See Plan of Distribution. The aggregate proceeds to the Selling Stockholders from the Common Stock will be the purchase price of the Common Stock sold less the aggregate agents commissions and underwriters discounts, if any. The aggregate proceeds to the Company from the Common Stock, if any, will be the cancellation of debt by means of the conversion of the secured convertible term notes (\$1,000,000 in principal, plus any accrued and unpaid interest), and the exercise price for the warrants and options to purchase Common Stock offered hereunder (a maximum of \$6,832,000 in the aggregate assuming the exercise of all such warrants and options.) In addition, in certain events the Company may issue additional warrants to the holders of the secured convertible term notes, the exercise price of which to be received by the Company will be set at the time such warrants are issued.

The Company has agreed to indemnify certain of the Selling Stockholders and certain other persons against certain liabilities, including liabilities under the Act.

The date of this Prospectus is December 16, 1996

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AVAILABLE INFORMATION

The Company is subject to the reporting requirements of the Securities

Exchange Act of 1934, as amended (the Exchange Act), and in accordance therewith, files annual and quarterly reports, proxy statements and other information with the Securities and Exchange Commission (the Commission). Such reports, proxy statements and other information may be inspected and copied at the Commissions Regional Offices at 7 World Trade Center, 13th Floor, New York, New York 10048; and 500 West Madison Street, Suite 1400, Chicago, Illinois 60661-2511. Copies of such material can be obtained at prescribed rates from the Public Reference Section of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549. The Commission maintains a Web site that contains reports, proxy and information statements and other information regarding issuers that file electronically with the Commission. The Commission's Web site may be accessed at <http://www.sec.gov>. The Common Stock of the Company is quoted on the Nasdaq National Market. Reports 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.

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 other information or representations must not be relied upon as having been authorized by the Company. This Prospectus does not constitute an offer or solicitation by anyone in any state 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 any person to whom it is unlawful to make such offer or solicitation. The delivery of this Prospectus at any time does not imply that information herein is correct as of any time subsequent to the date hereof.

ADDITIONAL INFORMATION

A registration statement on Form S-3 with respect to the Common Stock offered hereby (the Registration Statement) has been filed with the Commission under the Act. This Prospectus does not contain all of the information contained in such Registration Statement and the exhibits and schedules thereto, certain portions of which have been omitted pursuant to the rules and regulations of the Commission. For further information with respect to the Company and the Common Stock offered hereby, reference is made to the Registration Statement and the exhibits and schedules thereto. Statements contained in this Prospectus regarding the contents of any contract or any other document are not necessarily complete and, in each instance, reference is hereby made to the copy of such contract or document filed as an exhibit to the Registration Statement. The Registration Statement, including exhibits thereto, may be inspected without charge at the Commissions principal office in Washington, D.C., and copies of all or any part thereof may be obtained from the Public Reference Section, Securities and Exchange Commission, Washington, D.C., 20549, upon payment of the prescribed fees.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents, filed or to be filed with the Commission under the Exchange Act are hereby incorporated by reference into this Prospectus:

- (i) The Companys Annual Report on Form 10-K for the fiscal year ended December 31, 1995, as amended, including all material incorporated by reference therein.
- (ii) The Companys Quarterly Report on Form 10-Q for the quarterly period ended March 31, 1996.
- (iii) The Companys Current Report on Form 8-K filed with the Commission on May 24, 1996.
- (iv) The Companys Current Report on Form 8-K filed with the Commission on June 21, 1996.
- (v) The Company's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 1996.
- (vi) The Company's Current Report on Form 8-K/A filed with the Commission on September 29, 1996.
- (vii) The Companys Current Report on Form 8-K filed with the Commission on November 4, 1996.
- (viii) The Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 1996.
- (ix) The description of the Registrant's Common Stock contained in the Company's Prospectus dated June 18, 1969 (File No. 0361150) filed pursuant to Section 12 of the Exchange Act on June 23, 1969.

All documents filed by the Company pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this Prospectus and prior to the termination of the offering shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents. Any statement contained in this Prospectus or in a 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 so modified or superseded, to constitute a part of this Prospectus.

The Company will provide without charge to each person, including any beneficial owner, to whom this Prospectus is delivered, upon written or oral request of such person, a copy of any and all of the documents that have been incorporated by reference herein (not including exhibits to such documents unless such exhibits are specifically incorporated by reference herein or into such documents). Such request may be directed to OXIS International, Inc., 6040 N. Cutter Circle, Suite 317, Portland, OR 97217-3935, telephone (503) 283-3911, Attn: Jon S. Pitcher, Chief Financial Officer.

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THE COMPANY

The Company was initially incorporated in 1965 as Diagnostic Data, Inc., a California corporation. It was reincorporated in Delaware in 1974, and adopted the name DDI Pharmaceuticals, Inc. in 1985. In September 1994, the Company acquired Bioxytech S.A., based in France (Bioxytech), and merged with International BioClinical, Inc. (IBC), an Oregon corporation (the Combination), and changed its name to OXIS International, Inc. Bioxytech was acquired through an exchange of shares that resulted in the Company owning in excess of 99% of the outstanding stock of Bioxytech, which operates as a subsidiary of the Company and has been renamed "OXIS International, S.A." In July 1995, the Company acquired Therox Pharmaceuticals, Inc., a Delaware corporation ("Therox"), a Philadelphia-based free radical therapeutics company funded by S.R. One, Limited, the venture capital subsidiary of SmithKline Beecham, and Brantley Venture Partners II, L.P.

OXIS is engaged in the discovery, development, manufacture and marketing of products to diagnose, treat and prevent the pathologic effects of free radicals (i.e., diseases of oxidative stress). Free radicals are highly reactive molecules that are damaging to cells when their concentration exceeds the body's antioxidant defense capacity. Oxidative stress is now thought to be a basic mechanism of cell damage and death in a number of acute and chronic diseases such as atherosclerosis, AIDS, cancer, diabetes, arthritis and traumatic injury. Concomitantly, advances in molecular biology are beginning to clarify the mechanism(s) of cellular damage by free radicals and driving market demand for new products to diagnose, treat and prevent diseases of oxidative stress. The Company sells research assays for markers of oxidative stress, clinical therapeutic drug monitoring ("TDM") assays and bovine superoxide dismutase ("bSOD"). In addition, the Company has several therapeutic research and development programs, with lead molecules identified for two different series of compounds, a glutathione peroxidase mimic and a lipid soluble antioxidant. The Company's staff consists of approximately 52 managers, scientists, technicians and administrative personnel who are currently located at two sites.

The Company's principal executive offices are located at 6040 N. Cutter Circle, Suite 317, Portland, OR 97217-3935. Research and development operations of OXIS are located at Z.A. des Petits Carreaux, 2 av. des Coquellcots, F 94385 Bonneuil-Sur-Marne, Cedex, France (outside of Paris).

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RISK FACTORS

The following are the significant risk factors that should be considered carefully in evaluating the Common Stock of OXIS.

NEED FOR ADDITIONAL FINANCING.

The Company has incurred losses in each of the last five years. As of September 30, 1996, the Company had an accumulated deficit of approximately \$31,500,000. The Company expects to incur operating losses for the foreseeable future. Accordingly, it is anticipated that further financing will be needed during 1997 to allow the Company to continue its planned research and development programs and marketing of additional products. The unavailability of such anticipated financing could cause the Company to cease or curtail its operations, and/or delay or prevent the development and marketing of the Company's potential therapeutic products. As of the date of this Prospectus, the Company has raised approximately \$6,000,000 (including \$843,035 in cancellation of indebtedness in exchange for Series C Preferred Stock) during 1996 through the sale of shares of its Series C Preferred Stock, Series D Preferred Stock and Series E Preferred Stock and \$1,000,000 in principal of secured convertible term notes. In addition, in June 1996, \$1,255,000 principal plus accrued interest of \$58,000 on the Company's 8% convertible subordinated debentures were converted to Common Stock.

The Company plans to conduct a follow-on public offering of its Common Stock to provide additional funds for clinical trials for its oxidative stress assays, complete preclinical studies on synthetic antioxidants, and initiate early clinical trials. Such public offering is currently planned to be made on the Le Nouveau Marche stock exchange in France, subject to obtaining appropriate authorization from the French stock market regulatory authorities. Assuming the successful completion of such offering pursuant to which the Company raises at least \$20,000,000, the Company believes that it will have sufficient capital to allow it to continue its planned research and development programs and marketing of additional products through 1998. Notwithstanding the foregoing, there can be no assurances that the Company will successfully complete any future private or follow-on public offering, that the terms of any such offering will be favorable to the Company, or that if any such offering occurs that funds generated thereby will be sufficient to complete the Company's contemplated development programs.

RESEARCH AND DEVELOPMENT STAGE PRODUCTS.

Much of the Company's success depends on potential products which are in research and development and no material revenues have been generated to date from sales of these products. Although the Company currently markets and sells research and diagnostic assays, the Company must successfully partner, develop, obtain regulatory approval for and market or sell its potential therapeutic products to achieve profitable operations. The preclinical work for one potential new therapeutic product is presently nearly completed, and the clinical development stage has commenced. No assurance can be given that the Company's product development efforts will be successfully completed, that required regulatory approvals will be obtained, or that any such products, if developed and introduced, will be successfully marketed. If the Company does not successfully introduce new products, its revenues and results of operations will be materially adversely affected.

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FUTURE PROFITABILITY UNCERTAIN.

The Company expects to incur operating losses for the foreseeable future. The Company's research and development expenses will increase as the Company pursues human clinical testing. These losses and expenses may increase and fluctuate from quarter to quarter as the Company expands its development activities. There can be no assurance that the Company will ever achieve profitable operations. The report of the Company's independent auditors on the Company's financial statements for the period ended December 31, 1995 included an explanatory paragraph referring to the Company's ability to continue as a going concern. The Company anticipates that it will expend significant capital resources in product research and development and in human clinical trials. Capital resources may also be used for the acquisition of complementary businesses, products or technologies. OXIS' future capital requirements will depend on many factors, including: continued scientific progress in its research and development programs; the magnitude of these programs; the success of preclinical and clinical trials; the costs associated with the scale-up of manufacturing; the time and costs required for regulatory approvals; the time and costs involved in filing, prosecuting, enforcing and defending patent claims; technological competition and market developments; the establishment of and changes in collaborative relationships; and the cost of commercialization activities and arrangements.

While the Company believes that its new products and technologies show considerable promise, its ability to realize significant revenues therefrom is dependent upon the Company's success in developing business alliances with biotechnology and/or pharmaceutical companies to develop and market these products. There is no assurance that the Company's effort to develop such business alliances will be successful.

Over the last several years the Company has sold a substantial amount of its bovine SOD ("bSOD") to Sanofi Winthrop. However, sales of bSOD to Sanofi Winthrop have ceased following Sanofi Winthrop's announcement in October 1995 that a second Phase III trial on its drug, DISMUTEC/TM/ coupled form of the Company's bSOD) to treat trauma related to head injury failed to show statistically significant improvement between the treatment and control groups.

PRODUCT WITHDRAWALS IN EUROPE; LICENSEES.

The European market for OXIS' bSOD for human use has been adversely impacted by a series of regulatory developments over the last few years. In January 1994, the Italian government rendered a decision to exclude all orgotein-containing products from the list of drugs eligible for patient reimbursement. In addition, OXIS was notified in January 1994 that the government of Austria had asked the Company's licensee, Grunenthal, to withdraw Peroxinorm (a form of bSOD) from the Austrian market. In March 1994, as a result of two fatalities (December 1993 and February 1994) of patients treated with Peroxinorm, the German Federal Health Administration asked Grunenthal to remove Peroxinorm from the German market. No claim has been made against the Company in connection with these two fatalities, and the Company does not believe there is a substantial likelihood of any liability to it as a result of these two fatalities.

In addition, the Company's licensee for Spain has had informal discussions with the Spanish regulatory authorities regarding the Company's bSOD product. Although no action has been taken by those authorities with regard to the Company's product, future sales in Spain may be adversely affected by either regulatory action in Spain, or safety concerns stemming from actions in other countries.

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Future sales of bSOD are largely dependent on the needs of the Company's Spanish licensee (which comprised almost fifty percent of the Company's sales for the nine-month period ending September 30, 1996). Thus, the Company's sales of bulk bSOD after 1996 are uncertain and difficult to predict and no assurances can be given with respect thereto.

FAILURE TO PROTECT TECHNOLOGY COULD ADVERSELY AFFECT RESULTS; POTENTIAL CLAIMS OF PATENT INFRINGEMENT; EXPIRATION OF PATENTS.

The Company's success will depend in part on its proprietary products and information. While OXIS has attempted to protect its proprietary products and information through patents and trade secrets, there can be no assurance that

competitors will not be able to develop similar products and information independently. No assurance can be given that patents will be issued on certain of the Company's pending applications or that the claims allowed on any patents held by the Company will be sufficiently broad to protect its products and information. In addition, no assurance can be given that any patents issued to the Company will not be challenged, invalidated or circumvented or that the rights granted thereunder will provide competitive advantages to it.

In addition, the Company's products and its customers may be alleged to have infringed third parties' patent rights. While such allegations are commonplace in the industry and to date the Company has been able to license necessary patents or technology on commercially reasonable terms, there can be no assurance that the Company will be able to license necessary patents or technology on commercially reasonable terms in the future. No assurances can be given that the Company will prevail in any infringement litigation or that the costs or damages from any such litigation would not materially and adversely affect the Company.

Although the Company continues to have unpatented trade secrets and know-how, substantially all of the Company's important U.S. and foreign patents regarding SOD inventions (other than its recently developed, long-acting SOD derivatives) have expired. Expiration of the Company's patents may enable other companies to benefit from research and development efforts of the Company, but such other companies would not receive the benefits of the Company's unpatented trade secrets and know-how or unpublished preclinical or clinical data. Such other companies would still be required in some countries to expend considerable resources to conduct preclinical studies and clinical studies of their own pharmaceutical preparations of SOD and to seek and secure governmental approval to market such preparations.

GOVERNMENT REGULATION; PRODUCT CLEARANCE AND APPROVAL UNCERTAIN.

As with other companies in its industry, OXIS' preclinical development, clinical trials, product manufacturing and marketing are subject to state and federal regulation by the United States and other countries. Clinical trials and product marketing and manufacturing are subject to the rigorous review and approval processes of the United States Food and Drug Administration ("FDA") and foreign regulatory authorities. The process of obtaining FDA and other required regulatory approvals is lengthy and expensive. Typically, this requires the expenditure of substantial resources and takes several years or more with respect to therapeutic products, depending upon the type, complexity and novelty of the product and the nature of the disease or other indication to be treated. Preclinical studies must be conducted in conformance with the FDAs Good Laboratory Practice regulations. Clinical testing must meet requirements for Institutional Review Board ("IRB") oversight and informed consent by clinical trial subjects, as well as prior FDA review, oversight and the FDA's Good Clinical Practice requirements. Clinical trials may require large numbers of test subjects, complex protocols and possibly lengthy follow-up

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periods. OXIS has limited experience in conducting clinical testing and in pursuing applications necessary to gain regulatory approvals. Furthermore, the Company or the FDA may suspend clinical trials at any time if either believes that the subjects participating in such trials are being exposed to unacceptable health risks, including undesirable or unintended side effects.

Before receiving FDA approval to market a product, OXIS may have to demonstrate that the product represents an improved form of treatment compared to existing therapies. Data obtained from preclinical and clinical activities are susceptible to varying interpretations, which could delay, limit or prevent regulatory approvals. In addition, delays or rejections may be encountered based upon additional government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical trials and FDA regulatory review. Delays in obtaining such approvals could adversely affect marketing of OXIS products. Delays in regulatory approvals that may be encountered by OXIS' joint development partners and licensees could adversely affect OXIS' ability to receive royalties or other revenues. There can be no assurance that, after such time and expenditures, regulatory approval will be obtained for any products developed by the Company. Even after initial FDA approval has been obtained, further studies may be required to provide additional data on safety or to gain approval for the use of a product as a treatment for clinical indications other than those initially targeted. Moreover, the FDA may reconsider its approval of any product at any time and may withdraw such approval. In addition, before the Company's products can be marketed in foreign countries, they are subject to regulatory approval in such countries similar to that required in the United States. Furthermore, approval may entail ongoing requirements for post-marketing studies.

The FDA's regulations require that any drug or formulation to be tested in humans must be manufactured according to current Good Manufacturing Practices regulations ("cGMPs"). This has been extended to include any drugs which will be tested for safety in animals, in support of human testing. The cGMPs set certain minimum requirements for procedures, record-keeping and the physical characteristics of the laboratories used in the production of these drugs. In addition, various federal and state laws, regulations and recommendations relating to safe working conditions, laboratory practices, the experimental use of animals and the purchase, storage, movement, import and export, use, and disposal of hazardous or potentially hazardous substances, including radioactive compounds and infectious disease agents, used in connection with the Company's research work are or may be applicable to their activities. They include, among others, the United States Atomic Energy Act, the Clean Air Act, the Clean Water Act, the Occupational Safety and Health Act, the National Environmental Policy

Act, the Toxic Substances Control Act, and the Resources Conservation and Recovery Act, national restrictions on technology transfer, import, export and customs regulations, and other present and possible future local, state or federal regulation. OXIS is unable to estimate the extent and impact of regulation resulting from such future federal, state or local legislation or administrative action.

Outside the United States, the Company's ability to market a product is contingent upon receiving marketing authorization from the appropriate foreign regulatory authorities, which may impose substantial additional costs and burdens. The requirements governing the conduct of clinical trials, marketing authorization, pricing and reimbursement vary widely from country to country. Many countries also impose product standards, packaging requirements, labeling requirements and import restrictions on drugs. Furthermore, the foreign regulatory approval process may include all of the risks associated with FDA approval set forth above.

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RISK OF PRODUCT LIABILITY; USE OF HAZARDOUS MATERIALS; LIMITED INSURANCE COVERAGE.

The testing, marketing and sale of human therapeutic products entails significant risks. If the Company succeeds in developing products in these areas, use of such products in trials and the sale of such products following regulatory approval may expose the Company to liability claims allegedly resulting from use of such products. These claims might be made directly by consumers or others. OXIS currently has only limited insurance for its clinical trials. Further, there can be no assurance that OXIS will be able to obtain and maintain such insurance for all of its clinical trials or that coverage will be in sufficient amounts to protect against damages for liability that could have a material adverse effect on OXIS. There can also be no assurance that OXIS will be able to obtain or maintain product liability insurance in the future on acceptable terms or in sufficient amounts to protect the Company against damages for liability that could have a material adverse effect on the Company.

In addition, the Company's research and development involves the controlled use of hazardous materials, radioactive compounds and other chemicals. Although the Company believes that its safety procedures for handling and disposing of such materials comply with the standards prescribed by state and federal regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, the Company could be held liable for any damages that result and any such liability could exceed the resources of the Company. The Company may incur substantial costs to comply with environmental regulations if the Company develops additional manufacturing capacity.

COMPANY IS IN HIGHLY COMPETITIVE BUSINESS.

The pharmaceutical industry is highly competitive. Competition in most of the Company's primary current and potential product areas from large pharmaceutical companies, and other companies, universities and research institutions is intense and expected to increase. Relative to the Company, many of these entities have substantially greater capital resources, research and development staffs, facilities and experience in conducting clinical trials and obtaining regulatory approvals, as well as in manufacturing and marketing diagnostic and pharmaceutical products. In addition, these and other entities may have or may develop new technologies or use existing technologies that are, or may in the future be, the basis for competitive products.

Any potential products that the Company succeeds in developing and for which it gains regulatory approval will have to compete for market acceptance and market share. For certain of the Company's potential products, an important factor in such competition may be the timing of market introduction of competitive products. Accordingly, the relative speed with which the Company can develop products, complete the clinical testing and regulatory approval processes and supply commercial quantities of the product to the market are expected to be important competitive factors. The Company expects that a competitive edge will be based, among other things, on product efficacy, safety, reliability, availability, timing and scope of regulatory approval and product price. There can be no assurance that the Company's competitors will not develop technologies and products that are more effective than those being developed by the Company. In addition, certain of the Company's competitors may achieve product commercialization or patent protection prior to OXIS.

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The Company's therapeutic drug monitoring products compete directly with similar products from major diagnostic companies such as Abbott, Roche Laboratories ("Roche"), E.I. DuPont de Nemours ("DuPont") and others. Since one of the Company's business strategies is to provide alternative reagents to customers who own or rent the Abbott TDx(R)/TDxFLx(R) analyzers, Abbott is the Company's major competitor in this area. The Company competes based on high product quality, an aggressive pricing strategy and technical services. The Company seeks to protect itself from competition in connection with its development of custom assays for pharmaceutical companies by generally obtaining exclusive manufacturing and marketing rights. Market position for these unique assays can be enhanced through patents and trade secrets, but in the absence of such protection other companies could develop comparable assays; and even if patent protection is obtained, competing companies could still develop competitive assays.

The Company believes it is a leader in the development of assays for

markers of oxidative stress. Although there are currently a limited number of competitors for the Company's assays to measure markers of oxidative stress, no assurances can be given that significant competition will not arise in the future. Two competitors in the area of oxidative stress testing are Randox Laboratories, based in the United Kingdom, and Pantox Laboratories, based in San Diego, California, in the United States. Both companies are privately held.

Some pharmaceutical companies are pursuing the development of synthetic molecules to treat diseases of oxidative stress. The Company's major competitors in the area of synthetic antioxidants include Transcend Therapeutics, Inc., formerly Free Radical Sciences, Inc. ("Transcend Therapeutics") and Centaur Pharmaceuticals ("Centaur"). Transcend Therapeutics is testing a drug called procysteine for use in Adult Respiratory Distress Syndrome and other diseases and Centaur is developing molecules called "spin traps" for the treatment of diseases of the central nervous system. Natterman/Rhone Poulenc Rorer and Daiichi are also developing glutathione peroxidase mimics.

MANUFACTURING/DEPENDENCE ON OTHERS.

Certain of the Company's products, and raw materials used in its products, are produced by independent third parties. The Company is and will continue to be dependent upon these third parties to produce products and supply materials with acceptable quality and to deliver them to the Company in a timely manner. The Company depends on these manufacturers to achieve acceptable manufacturing yields and to allocate to the Company a sufficient portion of their capacity to meet the Company's needs. The Company believes that its current third-party suppliers have sufficient manufacturing capacity to expand production, if necessary, for the foreseeable future. The Company has established a quality control program, including a set of standard documentation procedures intended to ensure that, where required, the Company's products are manufactured in accordance with GMP. Although the Company has not experienced material quality or allocation problems to date, there can be no assurance that such problems will not have a material adverse effect on the Company's business, financial condition and results of operations in the future. Furthermore, constraints or delays in the supply of the Company's products and materials used therein could result in the loss of customers, the delay of development projects and other adverse effects on the Company's business, financial condition and results of operations. The Company's reliance on third party manufacturers and suppliers involves several other risks, including reduced control over delivery schedules, quality assurance and costs. Foreign manufacturers and suppliers are subject to additional risks such as changes in governmental policies, imposition of tariffs and import restrictions and other factors beyond the Company's control.

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POSSIBLE HEALTH CARE REFORM LEGISLATION AND REIMBURSEMENT ISSUES.

OXIS' ability to successfully commercialize human therapeutic products may depend in part on the extent to which reimbursement for the cost of such products and related treatment will be available from government health administration authorities, private health coverage insurers and other organizations. Significant uncertainty exists as to the reimbursement status of newly approved healthcare products, and there can be no assurance that adequate third party coverage will be available for OXIS to maintain price levels sufficient for realization of an appropriate return on its investment in product development. Government and other third-party payers are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement for new therapeutic products approved for marketing by the FDA and by refusing, in some cases, to provide any coverage for uses of approved products for disease indications for which the FDA has not granted marketing approval (so-called off-label usage). If adequate coverage and reimbursement levels are not provided by government and third-party payers for uses of OXIS healthcare products, the market acceptance of these products would be adversely affected.

In addition, as with other companies which supply products and services to the health care industry, the Company faces an uncertain legislative environment. Over the last few years, the United States Congress, the President and various state governments have advanced various health care bills that could significantly alter the structure of the health care industry. Regardless of whether or not a health care bill is adopted, private businesses are placing increasing pressure on health care providers to reduce costs. As a result of these factors, the Company may be forced to reduce the prices of its pharmaceutical products. This uncertain legislative and business environment may also adversely affect the Company's ability to raise capital.

FOREIGN CURRENCY AND TAX EXPOSURE.

The Company's French subsidiary conducts virtually all of its non-U.S. business in currencies other than the U.S. dollar and the Company buys and sells the majority of its SOD in a foreign currency. Accordingly, foreign currency fluctuations may affect the Company's earnings and asset valuations. The Company may be affected by laws affecting its ability to repatriate foreign profits, if any, and by foreign tax laws, as well as by fluctuating tax rates and changes in international tax treaties. There can be no assurance that laws and changes such as these will not have a material adverse impact on the Company's operations.

LABOR LAWS IN FRANCE.

Approximately forty percent (40%) of the Company's personnel are located in France. The Company is subject to the Convention Collective Nationale des

Industries Chimiques (Chemical Industry Convention) which regulates the terms of employment contracts and employment conditions and determines certain mandatory obligations of the Company regarding wages and benefits of employees. In particular, French labor laws offer employees certain rights in the event of termination which do not exist under U.S. laws. For example, severance costs in connection with terminated employees in France typically amount to half of the employee's annual salary. French labor laws may inhibit management's ability to take future personnel actions or implement certain operating plans (such as reducing the size of the French subsidiary's operations).

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INTERNATIONAL SALES.

The Company expects that international sales will continue to account for a substantial portion of the Company's future revenues for the foreseeable future. The Company's business in foreign markets is and will be subject to the risks customarily associated with such activities, including fluctuations in foreign currency exchange rates and controls, expropriation, nationalization and other economic, tax and regulatory policies of foreign governments as well as the laws and policies of the United States affecting foreign trade and investment.

FAILURE TO ATTRACT OR RETAIN KEY PERSONNEL COULD ADVERSELY AFFECT RESULTS.

The Company is dependent upon the efforts and abilities of a number of its key personnel. The success of the Company depends to a large extent upon its ability to retain and attract key employees. President and Chief Executive Officer, Dr. Anna D. Barker, Ph.D., has built long-standing academic and corporate relationships valuable to the Company's professional affiliations and potential corporate alliances. Chief Operating Officer, Dr. Timothy C. Rodell, M.D., joined the Company in March 1996. Dr. Rodell's clinical experience will be critical in helping the Company design, submit and initiate clinical trial protocols in the United States. The loss of key employees or the Company's inability to attract and retain other key employees could materially adversely affect results of operations. This effect could be particularly significant if the Company needs to hire, train and assimilate large numbers of new employees. The Company is not subject to any collective bargaining agreements (other than the Chemical Industry Convention in France discussed under "Labor Laws in France" above), and believes its relationship with its employees is good.

VOLATILITY OF STOCK PRICE; SHARES AVAILABLE FOR FUTURE SALE; ABSENCE OF DIVIDENDS.

The market prices for securities of biotechnology and pharmaceutical companies, including the securities of OXIS, have been volatile. Announcements of technological innovations or new commercial products by OXIS or its competitors, a change in status of a corporate partner, developments concerning proprietary rights, including patents and litigation matters, publicity regarding actual or potential medical results with products under development by OXIS, regulatory developments in both the United States and foreign countries and public concern as to the safety of biotechnology or of pharmaceutical products, as well as period-to-period fluctuations in revenues and financial results, may have a significant impact on the market price of the Company's Common Stock. OXIS has not paid any cash dividends since its inception, and it does not anticipate paying cash dividends in the foreseeable future.

As of December 16, 1996, the Company had 13,790,736 shares of Common Stock outstanding. 2,200,000 shares of Common Stock are reserved for issuance under the Company's 1994 Stock Incentive Plan (the "Plan"). The Company has options or warrants outstanding to purchase a total of approximately 4,466,420 shares of Common Stock of which options to purchase 214,699 shares of Common Stock were granted in connection with the acquisition of International BioClinical, Inc. and Bioxytech S.A. (now OXIS International S.A.) and of which options to purchase 1,422,833 shares have been granted pursuant to the Plan. Pursuant to a Registration Statement on Form S-3 declared effective by the Securities and Exchange Commission on September 13, 1995, the Company registered an aggregate of 5,075,073 shares of Common Stock, which may now be sold into the public securities markets. Pursuant to a Registration Statement on Form S-3 declared effective by the Securities and Exchange Commission on August 27, 1996, the Company registered an aggregate of 9,306,426 shares of Common Stock

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which may be sold into the public securities market. (The foregoing 14,381,499 shares of Common Stock are included in the section of this Prospectus entitled "Selling Stockholders" because this Prospectus is intended for use in connection with the resale of such securities in addition to those shares being registered pursuant to the Registration Statement being filed currently.) Pursuant to a Registration Statement on Form S-8 effective upon filing with the Securities and Exchange Commission on November 20, 1995, the Company registered for resale 1,200,000 shares of Common Stock under the Plan and 85,781 additional shares subject to certain other options. In the near future, the Company expects to file an additional Registration Statement on Form S-8 to register 1,000,000 additional shares covered by the Plan. The shares once registered may be sold into the public securities markets upon issuance under the Plan or exercise of the options outside of the Plan.

Pursuant to this Registration Statement, the Company is registering for resale an aggregate of 200,000 shares issuable upon exercise of a warrant issued to a former placement agent, an aggregate of 2,211,648 shares issuable upon conversion of secured convertible term promissory notes, 300,000 shares issuable upon exercise of warrants issued in connection with such notes, an aggregate of 150,000 shares issuable upon exercise of warrants possibly to be issued pursuant

to the terms of such secured convertible term notes, an aggregate of 2,678,799 shares issuable upon conversion of Series E Preferred Stock, an aggregate of 55,000 shares issued in connection with such Series E Preferred Stock, and 105,778 shares issuable upon exercise of a warrant issued to the placement agent for such offering of Series E Preferred Stock and Common Stock.

Subject to certain agreements limiting the number of shares certain of the Selling Stockholders may sell (see "Plan of Distribution"), the above shares may be sold into the public securities markets after this Registration Statement becomes effective. The registration of Common Stock pursuant to this Registration Statement will result in an increase of up to approximately 28% in the number of shares of the Company's Common Stock available for trading in the public securities market. Future sales of Common Stock in the public securities markets may cause substantial fluctuations (including substantial price reductions) in the price of the Company's Common Stock over short time periods. Additionally, the price of the Company's Common Stock will be sensitive to the performance and prospects of the Company and other factors.

SHARE OWNERSHIP BY CERTAIN INDIVIDUALS AND CONCENTRATION OF OWNERSHIP.

As of December 16, 1996, Ray R. Rogers, the Chairman of OXIS, owned 701,367 shares of Common Stock and options to purchase shares of Common Stock (excluding 36,116 shares owned by an irrevocable trust for the benefit of Mr. Rogers' children as to which shares Mr. Rogers has no control). Dr. Anna D. Barker, the President and Chief Executive Officer of OXIS, owns 972,137 shares of Common Stock and options. Ownership of such Common Stock and Options represents control by Mr. Rogers and Dr. Barker of approximately 4.39% and 6.09% of the voting securities of OXIS, respectively. Alta-Berkeley L.P., II is the owner of 550,774 shares of Common Stock and options and an additional 242,924 shares of Common Stock issuable upon conversion of Series C Preferred Stock, representing approximately 4.54% of the voting securities of the Company. David Needham, a director of OXIS and a consultant to the investment advisory firm which advises Alta-Berkeley L.P. II, has a stock option entitling him to purchase 25,000 shares of Common Stock. Dr. Needham disclaims beneficial ownership of shares of Common Stock owned by Alta-Berkeley L.P. II. Timothy G. Biro, a director of OXIS, has been granted options to purchase an aggregate of 25,000 shares of Common Stock under the Plan, and was formerly a general partner of Brantley Venture Partners II, L.P., a Delaware limited partnership

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which owns an aggregate of 550,699 shares of Common Stock and an aggregate of 214,194 shares of the Company's Series B Preferred Stock (convertible into Common Stock on approximately a one-to-one basis), for an aggregate of 764,893 shares of OXIS stock (approximately 4.76% of the voting securities of OXIS). S.R. One, Limited owns 549,497 shares of Common Stock 428,389 shares of Series B Preferred Stock, a note convertible into 353,982 shares of Common Stock and a warrant entitling it to purchase 150,000 shares of Common Stock, for an aggregate of 1,481,878 shares of OXIS stock (approximately 8.82% of the voting securities of OXIS). Capital Ventures International owns 360,839 shares of Common Stock, 1,650 shares of Series D Preferred Stock (convertible into approximately 1,574,063 shares of Common Stock), a note convertible into 353,982 shares of Common Stock and warrants entitling it to purchase 960,126 shares of Common Stock, for an aggregate of 3,249,010 shares of OXIS Common Stock (approximately 17.33% of the voting securities of OXIS). As the largest stockholders of OXIS, Mr. Rogers, Dr. Barker, Alta-Berkeley L.P. II, Brantley Venture Partners II, L.P., S.R. One, Limited, and Capital Ventures International are in a position to significantly influence the outcome of matters (including the election of directors, and any merger, consolidation or sale of all or substantially all of the Company's assets) submitted to the Company's stockholders for approval. As a result, certain transactions may not be possible without the approval of Mr. Rogers, Dr. Barker, Alta-Berkeley L.P. II, Brantley Venture Partners II, L.P., S.R. One Limited and Capital Ventures International. In addition, the Company's directors, executive officers and principal stockholders and certain of their affiliates, as a group, have the ability to influence the election of the Company's directors and most other stockholder actions.

QUARTERLY OPERATING RESULTS AFFECTED BY MANY BUSINESS FACTORS.

The Company has experienced fluctuations in quarterly results and is likely to continue to experience such fluctuations. Expense levels are based, in part, on expectations of future revenues. If revenue levels in a particular quarter are less than expected, operating results will be affected adversely, which may have an adverse impact on the market price of the Company's Common Stock. A variety of factors have an influence on the level of revenues and expenses in a particular quarter. These factors include specific economic conditions in the pharmaceutical industry, the withdrawal or failure to grant requisite government approvals, customer cancellations or delay of shipments, production delays, exchange rate fluctuations, management decisions to commence or discontinue product lines, the introduction of new products by the Company or its competitors, the timing of research and development expenditures, and expenses attendant to acquisitions, strategic alliances and the further development of marketing and service capabilities.

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USE OF PROCEEDS

The Company will not receive any proceeds from the sale of Common Stock by the Selling Stockholders in the offering. The Company will receive a maximum aggregate amount of \$6,832,000 assuming the exercise of all outstanding warrants and options for which the resale of Common Stock is registered hereby. No

assurances can be given by the Company as to the exercise of any of such warrants or options. Proceeds from the exercise of such warrants and options, if any, are anticipated to be used for working capital purposes.

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SELLING STOCKHOLDERS

The following table sets forth the names of the Selling Stockholders, the number of shares of Common Stock owned beneficially by each of the Selling Stockholders as of December 16, 1996, and the number of shares which may be offered for resale pursuant to this Prospectus. This information is based upon information provided by the Selling Stockholders. Because the Selling Stockholders may offer all, some or none of their Common Stock, no definitive estimate as to the number of shares thereof that will be held by the Selling Stockholders after such offering can be provided and the following table has been prepared on the assumption that all shares of Common Stock under this Prospectus will be sold.

<TABLE>
<CAPTION>

Name	Shares Beneficially Owned Prior to Offering(1)(2)	Shares Being Offered	Shares Beneficially Owned After Offering(3)		Percentage(4)
	Number	Number	Number	Number	
<S>	<C>	<C>	<C>	<C>	
Russell E. Teasdale (5)	220,000	220,000	0	0	0
Mark G.P. Saifer (5)(7)	195,000	195,000	0	0	0
L. David Williams(5)	55,000	15,000	40,000		*
Marc A. Fisher(5)	35,000	35,000	0	0	0
Carol C. Golsch(5)	20,000	20,000	0	0	0
Carl Claassen(5)	5,000	5,000	0	0	0
Rima Agamian(5)	2,500	2,500	0	0	0
Ralph Somack(5)	47,500	47,500	0	0	0
Anna D. Barker(8)	972,137	876,138	95,999		*
H. Gerald Bidwell	13,016	13,016	0	0	0
Cascadia Pacific Management, Inc.	13,543	13,543	0	0	0
Daniel Cawley(9)	11,993	8,025	3,968		*
Terryl Dank(10)	15,630	11,369	4,261		*
Kari Henderson(11)	5,293	2,675	2,618		*
Debbie Heuvelhorst(12)	1,779	351	1,428		*
Charles Martin(13)	53,008	18,057	34,951		*

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<TABLE>
<CAPTION>

Name	Shares Beneficially Owned Prior to Offering(1)(2)	Shares Being Offered	Shares Beneficially Owned After Offering(3)		Percentage(4)
	Number	Number	Number	Number	
<S>	<C>	<C>	<C>	<C>	
Stephen H. Mastin(14)	51,660	50,160	1,500		*
Paul Mueggler(15)	37,611	34,778	2,833		*
Dennis Murray(16)	8,879	6,420	2,459		*
Jon S. Pitcher(17) (18)	65,751	21,625	44,126		*
Harry Roberts(19)	9,344	9,344	0	0	0
Ray R. Rogers(20)	701,367	585,368	115,999		*
George Spencer as Trustee for Rogers' Trusts dated March 7, 1994(21)	36,116	36,116	0	0	0
Stacey L. Holden	52,328	52,328	0	0	0
Richard R. Rogers	52,327	52,327	0	0	0

Anthony Miadich(23)	7,500	7,500	0	0
Oregon Resource and Technology Development Fund(25)	20,000	20,000	0	0
Lynda Taylor(24)	69,392	28,758	40,634	*
Innolion(26) (27)	707,430	738,331	0	0
Alta-Berkeley L.P. II(27)(28)	793,698	838,712	0	0
Sofinnova S.A. (27)(29)	237,696	251,855	0	0
Sofinnova Capital FCPR(27) (30)	356,634	377,872	0	0
Finovelec(27) (31)	609,326	644,453	0	0
Hemera II & Cie	132,630	132,630	0	0
Euroventures Germany C.V.	34,212	34,212	0	0

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<TABLE>
<CAPTION>

Name	Shares Beneficially Owned Prior to Offering(1)(2)	Shares Being Offered	Shares Beneficially Owned After Offering(3)	
	Number	Number	Number	Percentage(4)
<S> Chimtex S.A.	<C> 27,117	<C> 27,117	<C> 0	<C> 0
Finbiotec SPA	31,785	31,785	0	0
Sumaru S.r.l	21,895	21,895	0	0
Sea Farming S.r.l	21,895	21,895	0	0
Jean Chaudiere(32)	119,499	119,499	0	0
Christian Manuel	76,864	76,864	0	0
Estate of Pr. A. Crastes de Paulet(33)	13,362	13,362	0	0
Andre Capron	762	762	0	0
Michel Rigaud(34)	13,366	13,366	0	0
Catherine Rice Evans	754	754	0	0
Bernard Jacotot	754	754	0	0
Yves Grosogeat	754	754	0	0
Jean-Claude Yadan(55)	66,715	36,138	30,577	*
Henry-Michel Bouillet	670	670	0	0
Andre Galli	503	503	0	0
Jacques Emerit	503	503	0	0
Marc Lange	503	503	0	0
John B. Hawken(35)	24,231	24,231	0	0
Marc Moutet(36)	51,397	29,784	21,613	*
Irene Erdelmeier	24,911	24,911	0	0
Bailey & Co.(37)	208,395	208,395	0	0

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<TABLE>
<CAPTION>

Name	Shares Beneficially Owned Prior to Offering(1)(2)	Shares Being Offered	Shares Beneficially Owned After Offering(3)	
	Number	Number	Number	Percentage(4)
<S> Brantley Venture Partners II, L.P. (38)	<C> 764,893	<C> 764,893	<C> 0	<C> 0

S.R. One, Limited (39)	1,481,868	2,233,710	0	0
Ohio State University Research Foundation	87,131	87,131	0	0
William B. Weglicki	72,610	72,610	0	0
Donald T. Witiak	53,005	53,005	0	0
Bruce Freeman	21,783	21,783	0	0
Pierre L. Triozzi	4,357	4,357	0	0
Dennis R. Feller	2,904	2,904	0	0
Cynthia Brogan	2,179	2,179	0	0
John Zemniak(40)	80,942	72,610	8,332	*
Robert Johnson	14,522	14,522	0	0
Ronald Borchardt	5,809	5,809	0	0
Allen Hopper	3,630	3,630	0	0
Sanctus Spiritus Antilles N.V.(50)	150,258	150,258	0	0
Banque Nationale de Paris (Luxembourg) S.A.(41)	49,858	49,858	0	0
Marc Alexandre(41)	49,858	49,858	0	0
Bernard Herodin(41)	49,858	49,858	0	0
S. Czigler(41)	49,858	49,858	0	0
M. Kraland-Klein(41)	49,858	49,858	0	0
R. Marshall(41)	49,858	49,858	0	0
Van Geest Beheer B.V.(41)	49,858	49,858	0	0

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<TABLE>
<CAPTION>

Name	Shares Beneficially Owned Prior to Offering(1)(2)	Shares Being Offered	Shares Beneficially Owned After Offering(3)	
	Number	Number	Number	Percentage(4)
<S> Van Geest(41)	<C> 49,858	<C> 49,858	<C> 0	<C> 0
Montaigne Fund N.V. (41)	49,858	49,858	0	0
Legong Investments, N.V.(42)	99,717	99,717	0	0
Veer Palthe Voute(43)	199,434	199,434	0	0
Banque Industrielle et Mobilierie Privee(44)	149,575	149,575	0	0
Tocqueville N.V.(44)	149,575	149,575	0	0
Masidu N.V.(42)	99,717	99,717	0	0
Purling Holdings Limited(45)	39,578	39,578	0	0
C.S. Rennie(46)	14,841	14,841	0	0
Marc Dumont(47)	93,806	111,189	0	0
Legong Investments N.V.(47)	187,481	222,222	0	0
Rauch & Co. (47)	243,726	288,889	0	0
Megapolis B.V.(47)	23,434	27,777	0	0
BBL France	60,001	60,001	0	0
Henri Brunesholz(47)	12,186	14,444	0	0
Marc Rebagliati(47)	56,057	66,444	0	0
Carlo Gillet(47)	37,777	44,778	0	0
D.N.B. Fund Partners	76,923	76,923	0	0

Sharon L. Carpenter, (47) IRA Guarantee & Trust Co., TTEE	46,870	55,555	0	0
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Deborah A.Y. Day, (47) IRA Guarantee & Trust Co., TTEE	93,741	111,111	0	0
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<TABLE>
<CAPTION>

Name	Shares Beneficially Owned Prior to Offering(1)(2)	Shares Being Offered	Shares Beneficially Owned After Offering(3)	Percentage(4)
-----	-----	-----	-----	-----
<S> Guarantee & Trust Co.,(47) TTEE FBO Sylvia E. Morio, IRA	<C> 46,870	<C> 55,555	<C> 0	0
Maxine T. Yakushijin,(47) IRA Guarantee & Trust Co., TTEE	93,741	111,111	0	0
Terrance Y. Yoshikawa,(47) IRA Guarantee & Trust Co., TTEE	430,925	222,222	243,444	1.77%
America Health Care Fund, L.P. (47) (51)	93,834	111,222	0	0
Capital Ventures International(48)	3,249,010	4,490,834	0	0
Jackson Tufts Cole & Black, LLP(49)	35,000	35,000	0	0
Wasserstein Perella & Company, Inc. (52)	225,000	225,000	0	0
LaRocque Trading Group, LLC (53)	240,405	621,318	0	0
IHAG Handelsbank (53)	192,324	497,054	0	0
Coutts & Co. AG (53)	288,486	745,582	0	0
Stella Pasternak (53)	48,081	124,264	0	0
Yaffa Almani (53)	48,081	124,264	0	0
OVDA Fund, Ltd. (53)	240,405	621,318	0	0
H.J. Meyers & Co., Inc. (54)	105,778	105,778	0	0
Total:	<u>16,573,927</u>	<u>19,920,823</u>	<u>694,742</u>	<u>4.89%</u>

</TABLE>

* less than 1% of the issued and outstanding Common Stock of the Company.

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(1) Unless otherwise indicated in the footnotes to this table, the persons and entities named in the table have sole voting and sole investment power with respect to all shares beneficially owned, subject to community property laws where applicable. The shares in this table include an aggregate of 5,075,073 shares of Common Stock registered on Registration Statement No. 33-61087 on Form S-3 and an aggregate of 9,306,426 shares of Common Stock registered on Registration Statement No. 333-5921 on Form S-3.

(2) As required by regulations of the Securities and Exchange Commission, the number of shares in the table includes shares which can be purchased within 60 days.

(3) Assumes the sale of all shares offered hereby. As required by regulations of the Securities and Exchange Commission, each percentage reported in the table for these individuals is calculated as though shares which can be purchased within 60 days have been purchased by the respective person or group and are outstanding.

(4) Applicable percentage of ownership is based on 13,790,736 shares of Common Stock outstanding on December 16, 1996.

(5) Includes with respect to the following persons, the following number of shares which may be acquired through the exercise of stock warrants: Russell E. Teasdale (220,000); Mark G.P. Saifer (195,000); L. David Williams (15,000); Mark Fisher (35,000); Carol Golsch (20,000); Carl Claassen (5,000); Rima Agamian (2,500); Ralph Somack (47,500).

(6) This footnote was intentionally left out.

- (7) Mark Saifer resigned as an executive officer of the Company during 1995.
- (8) Anna Barker is a director of the Company and its President and Chief Executive Officer. Figure in first column includes 93,999 shares which may be acquired by exercise of options.
- (9) Includes 3,968 shares which may be acquired on exercise of options.
- (10) Includes 4,261 shares which may be acquired on exercise of options.
- (11) Includes 2,618 shares which may be acquired on exercise of options.
- (12) Includes 1,428 shares which may be acquired on exercise of options.
- (13) Includes 30,951 shares which may be acquired on exercise of options.
- (14) Includes 1,500 shares which may be acquired on exercise of options.
- (15) Includes 1,500 shares which may be acquired on exercise of options.
- (16) Includes 2,459 shares which may be acquired on exercise of options.
- (17) Includes 44,126 shares which may be acquired on exercise of options.
- (18) Jon Pitcher is the Company's Chief Financial Officer and Secretary.
- (19) Includes 6,000 shares which may be acquired on exercise of options.
- (20) Ray R. Rogers is a director and the Chairman of the Board of Directors of the Company. Figure in first column includes 10,000 shares owned by his individual retirement account, as to which Rogers exercises voting and investment power, and excludes 36,116 shares owned by an irrevocable trust for the benefit of his children. George C. Spencer is the trustee under such irrevocable trust. George C. Spencer is a partner of Tonkon, Torp, Galen, Marmaduke & Booth, a law firm which represents the Company. Figure in first column also includes 98,999 shares which may be acquired by exercise of options.

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- (21) See Note (20) above.
- (22) Intentionally omitted.
- (23) Includes 7,500 shares which may be acquired on exercise of options.
- (24) Includes 40,634 shares which may be acquired on exercise of options.
- (25) Includes 20,000 shares which may be acquired on exercise of options.
- (26) Includes 18,424 shares which may be acquired on exercise of options.
- (27) The number in the first column in each case includes the number of shares of Common Stock which may be acquired by the holder of Series C Preferred Stock currently (within 60 days), as follows: Innolion (166,760 shares), Alta-Berkeley L.P. II (242,924 shares), Sofinova S.A. (76,408 shares), Sofinova Capital FCPR (114,613 shares) and Finovelec (189,564 shares). The number in the second column in each case includes the maximum number of shares which may be issued pursuant to the terms of the Company's Series C Preferred Stock based on the adjustable conversion price of the Series C Preferred (see footnote 47), as follows: Innolion (197,661 shares), Alta-Berkeley L.P. II (287,938 shares), Sofinova S.A. (90,567 shares), Sofinova Capital FCPR (135,851 shares) and Finovelec (224,691 shares). The foregoing holders acquired the foregoing shares of Series C Preferred Stock in exchange for cancellation of promissory notes.
- (28) Includes 16,452 shares which may be acquired on exercise of options.
- (29) Includes 4,792 shares which may be acquired on exercise of options.
- (30) Includes 7,184 shares which may be acquired on exercise of options.
- (31) Includes 2,786 shares which may be acquired on exercise of options.
- (32) Jean Chaudiere resigned as an executive officer of the Company during 1995.
- (33) Includes 5,963 shares which may be acquired upon exercise of options.
- (34) Includes 5,963 shares which may be acquired upon exercise of options.
- (35) Includes 23,854 shares which may be acquired on exercise of options.
- (36) Includes 21,613 shares which may be acquired on exercise of options.
- (37) Includes 122,763 shares which may be acquired on exercise of warrants issued in connection with the sale of Common Stock, and 85,632 shares which may be acquired on exercise of warrants issued in connection with the sale of certain shares of Series C Preferred Stock.
- (38) Includes 214,194 shares issuable upon conversion of Series B Preferred Stock.

(39) Includes 428,389 shares issuable upon conversion of Series B Preferred Stock, 1,105,824 shares issuable upon conversion of Secured Convertible Term Notes (the "Notes"), an aggregate of 150,000 shares issuable upon exercise of warrants issued in connection with such Notes, and an aggregate of 75,000 shares issuable upon exercise of warrants issuable pursuant to such Notes. The Notes entitle the holder thereof to convert the Notes into shares of the Company's Common Stock at a conversion price which is the lesser of (i) eighty percent (80%) of the average closing bid prices of the Common Stock for the five consecutive trading days ended one trading day prior to the date the required conversion notice is sent to the Company, and (ii) the "Fixed Conversion Price." For the period of 180 days following the issuance of the Notes, i.e., through April 8, 1997, the Fixed

Conversion Price is \$1.4125. The Fixed Conversion Price is subject to reduction in the event that the Company issues Common Stock or securities convertible or exercisable for Common Stock for an amount less than the Fixed Conversion Price. The Fixed Conversion Price is further adjustable (by decreasing but not increasing the Fixed Conversion Price) beginning April 9, 1997 and through October

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11, 1997 by resetting such Fixed Conversion Price at each 30 day anniversary of April 9, 1997 to the price equal to the average closing bid prices of the Common Stock for the five consecutive trading days ended one trading day prior to such reset date. The maximum number of shares of Common Stock issuable upon conversion of the all of the Notes is 2,211,648 shares (subject to adjustment upon the occurrence of certain dilutive events), which number of shares is included in the second column for each holder of such Notes. Additional shares of Common Stock may also be issued to, and sold hereunder by, the holder of a Note pursuant to the anti-dilution provisions contained in the Notes and the related warrants. Pursuant to the terms of the Notes, the holder thereof can only acquire shares of Common Stock upon conversion of the Notes to the extent that the number of shares of Common Stock thereby issuable, together with a number of shares of Common Stock then held by such holder and its affiliates (not including shares of Common Stock underlying unconverted principal amounts under the Notes and unexercised warrants) would not exceed 4.9% of the then outstanding Common Stock as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended. Accordingly, the number of shares of Common Stock set forth herein to be sold by the holder of a Note may exceed the actual number of shares of Common Stock that it could own beneficially at any time through its ownership of such Note.

(40) Includes 8,332 shares which may be acquired on exercise of options.

(41) Includes 8,000 shares issuable upon exercise of warrants.

(42) Includes 16,000 shares issuable upon exercise of warrants.

(43) Includes 32,000 shares issuable upon exercise of warrants.

(44) Includes 24,000 shares issuable upon exercise of warrants.

(45) Includes 6,400 shares issuable upon exercise of warrants.

(46) Includes 2,400 shares issuable upon exercise of warrants.

(47) The number in the first column in each case constitutes the number of shares of Common Stock which may be acquired by the holder of Series C Preferred Stock currently (within 60 days). The number in the second column in each case constitutes the maximum number of shares which may be issued pursuant to the terms of the Company's Series C Preferred Stock, which provide that if at any time after six (6) months following the final sale of Series C Preferred Stock (such sale having occurred on May 9, 1996), any holder converts the Series C Preferred Stock, then the Series C Preferred Stock conversion price ("Series C Conversion Price") applicable to such holder's shares shall be the lesser of (i) \$1.30, or (ii) the greater of (x) .90 or (y) 80% of the average closing bid price of the Common Stock for the fifteen (15) consecutive trading days ending on the date immediately preceding the date notice of conversion is given. The Series C Conversion Price may only adjust once for each holder.

(48) (a) Number in first column includes a maximum of 2,874,171 shares of Common Stock issuable upon conversion of Series D Preferred Stock and exercise of warrants issued in connection with such Series D Preferred Stock. An aggregate of 810,126 shares of Common Stock are issuable on exercise of warrants. The Series D Preferred Stock entitles the holder thereof to receive a number of shares of Common Stock determined by dividing the stated value of the Series D Preferred Stock (i.e., \$1,000 per share), plus a premium in the amount of 8% per annum of the stated value from the date of issuance (unless the Company chooses to redeem the shares otherwise issuable in respect of that premium), by a conversion price equal to the lesser of (i) \$2.30 and (ii) a percentage (ranging from 100% on or before June 24, 1996 to 75% after July 3, 1996) of the average of the closing bid prices for shares of Common Stock for the five trading days immediately prior to conversion, subject to adjustment upon the occurrence of certain dilutive events. Under the applicable conversion formula, the number of shares of Common Stock currently issuable upon conversion of the Series D Preferred Stock would be higher if the market price of the Common Stock at the time of conversion decreases to a point at which the conversion price falls below the fixed conversion price. However, the maximum number of shares of Common Stock issuable upon conversion of the Series D Preferred

Stock is 2,424,884 shares (subject to adjustment upon the occurrence of certain dilutive events). Additional shares of Common Stock may also be issued to, and sold hereunder by, Capital Ventures International pursuant to the anti-dilution provisions contained in the Series D Preferred Stock and warrants. Pursuant to the terms of the Series D Preferred Stock and the warrants issued in connection

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therewith, the holder thereof can only acquire shares of Common Stock upon conversion of the Series D Preferred Stock and exercise of the warrants to the extent that the number of shares of Common Stock thereby issuable, together with a number of shares of Common Stock then held by such holder and its affiliates (not including shares of Common Stock underlying unconverted shares of Series D Preferred Stock and unexercised warrants) would not exceed 4.9% of the then outstanding Common Stock as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended. Accordingly, the number of shares of Common Stock set forth herein to be sold by Capital Ventures International may exceed the actual number of shares of Common Stock that it could own beneficially at any time through its ownership of Series D Preferred Stock and such warrants. Effective October 21, 1996, 350 shares of Series D Preferred Stock were converted into an aggregate of 360,839 shares of Common Stock, leaving 1,650 shares of Series D Preferred Stock outstanding.

(b) Number in first column also includes 1,105,824 shares of Common Stock issuable upon conversion of Notes, 150,000 shares issuable upon exercise of warrants issued in connection with such Notes, and an aggregate of 75,000 shares issuable upon exercise of warrants issuable pursuant to such Notes. The Notes entitle the holder thereof to convert the Notes into shares of the Company's Common Stock at a conversion price which is the lesser of (i) eighty percent (80%) of the average closing bid prices of the Common Stock for the five consecutive trading days ended one trading day prior to the date the required conversion notice is sent to the Company, and (ii) the "Fixed Conversion Price." For the period of 180 days following the issuance of the Notes, i.e., through April 8, 1997, the conversion price is

\$1.4125. The Fixed Conversion Price is subject to reduction in the event that the Company issues Common Stock or securities convertible or exercisable for Common Stock for an amount less than the Fixed Conversion Price. The Fixed Conversion Price is further adjustable (by decreasing but not increasing the Fixed Conversion Price) beginning April 9, 1997 and through October 11, 1997 by resetting such Fixed Conversion Price at each 30 day anniversary of April 9, 1997 to the price equal to the average closing bid prices of the Common Stock for the five consecutive trading days ended one trading day prior to such reset date. The maximum number of shares of Common Stock issuable upon conversion of the all of the Notes is 2,211,648 shares (subject to adjustment upon the occurrence of certain dilutive events), which number of shares is included in the second column for each holder of such Notes. Additional shares of Common Stock may also be issued to, and sold hereunder by, the holder of a Note pursuant to the anti-dilution provisions contained in the Notes and the related warrants. Pursuant to the terms of the Notes, the holder thereof can only acquire shares of Common Stock upon conversion of the Notes to the extent that the number of shares of Common Stock thereby issuable, together with a number of shares of Common Stock then held by such holder and its affiliates (not including shares of Common Stock underlying unconverted principal amounts under the Notes and unexercised warrants) would not exceed 4.9% of the then outstanding Common Stock as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended. Accordingly, the number of shares of Common Stock set forth herein to be sold by the holder of a Note may exceed the actual number of shares of Common Stock that it could own beneficially at any time through its ownership of such Note.

- (49) Number in first column constitutes 35,000 shares which may be acquired on exercise of options.
- (50) Includes 108,400 shares issuable upon exercise of warrants.
- (51) America Health Care Fund, L.P. is a limited partnership of which James McCamant, a director of the Company, is the general partner.
- (52) Includes 200,000 shares issuable upon exercise of warrants.
- (53) Number in first column includes with respect to the following investors, the following number of shares of issued Common Stock and the following number of shares of Common Stock issuable upon conversion of Series E Preferred Stock (assuming the holders of such Series E Preferred Stock were to convert their shares for Common Stock as of December 13, 1996) (for purposes of this footnote (53), the "Conversion Shares"): LaRocque Trading Group, LLC, 12,500 shares of Common Stock, 227,905 Conversion Shares; IHAG Handelsbank, 10,000 shares of Common Stock, 182,324 Conversion Shares; Coutts & CO AG, 15,000 shares of Common Stock, 273,486 Conversion Shares; Stella Pasternak, 2,500 shares of Common Stock, 45,581 Conversion Shares; Yaffa Almani, 2,500 shares of Common Stock, 45,581 Conversion Shares; and OVDA Fund, Ltd., 12,500 shares of Common Stock, 227,905 Conversion Shares. The Series E Preferred Stock entitles the holder thereof, after the earlier of (i) April 9, 1997 or (ii) 30 days following the closing of a public offering by the Company, to receive in exchange for its shares of Series E Preferred

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Stock, a number of shares of Common Stock determined by dividing the stated value of the Series E Preferred Stock (i.e., \$500 per share), by a conversion price equal to the lesser of (i) \$2.00 and (ii) 75% of the average of the closing bid prices for shares of Common Stock for the five consecutive trading days ending one trading day prior to conversion, subject to adjustment upon the occurrence of certain dilutive events. Under the applicable conversion formula, the number of shares of Common Stock currently issuable upon conversion of the Series E Preferred Stock would be higher if the market price of the Common Stock at the time of conversion decreases to a point at which the conversion price falls below the fixed conversion price. However, the maximum number of shares of Common Stock issuable upon conversion of the Series E Preferred Stock plus the number of shares of Common Stock issued in connection with the Series E Preferred Stock (55,000 shares) is 2,733,799 shares (subject to adjustment upon the occurrence of certain dilutive events). Additional shares of Common Stock may also be issued to, and sold hereunder by, the holder pursuant to the anti-dilution provisions contained in the Series E Preferred Stock. Pursuant to the terms of the Series E Preferred Stock, the holder thereof can only acquire shares of Common Stock upon conversion of the Series E Preferred Stock to the extent that the number of shares of Common Stock thereby issuable, together with a number of shares of Common Stock then held by such holder and its affiliates (not including shares of Common Stock underlying unconverted shares of Series E Preferred Stock) would not exceed 4.9% of the then outstanding Common Stock as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended. Accordingly, the number of shares of Common Stock set forth herein to be sold by any holder of Series E Preferred Stock may exceed the actual number of shares of Common Stock that it could own beneficially at any time through its ownership of Series E Preferred Stock.

(54) Includes 105,778 shares issuable upon exercise of warrants.

(55) Includes 30,577 shares which may be acquired on exercise of options.

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PLAN OF DISTRIBUTION

The Company is registering or has registered the shares of Common Stock offered by the Selling Stockholders hereunder in certain instances on a voluntary basis and otherwise pursuant to (i) the terms of the offering of convertible debentures with warrants concluded in December 1995, (ii) the Registration Rights Agreements entered into on September 7, 1994 with respect to the acquisitions of Bioxytech S.A. and International BioClinical, Inc., (iii) Registration Rights Agreements entered into on July 18, 1995 in connection with the acquisition of Therox Pharmaceuticals, Inc. and the sale of Series B Preferred Stock (the Restricted Registration Rights Agreements), (iv) the terms of warrants dated March 13, 1987 through August 21, 1988, (v) engagement letters providing for warrants for the Company's placement agent dated May 23, 1995 and June 27, 1995, as amended, (vi) a contractual agreement to register the underlying shares of Common Stock in connection with the offering and sale of Series C Convertible Preferred Stock concluded May 9, 1996, (vii) the Registration Rights Agreement entered into on May 15, 1996 with respect to the Common Stock underlying the Series D Convertible Preferred Stock and warrants to purchase Common Stock sold in connection with such Series D Convertible Preferred Stock, (viii) the Registration Rights Agreements entered into on October 11, 1996 with respect to the Common Stock underlying the Secured Convertible Term Notes and warrants to purchase Common Stock sold in connection with such Secured Convertible Term Notes, (ix) the Registration Rights Agreements entered into on and about December 10, 1996 with respect to the Common Stock sold in the December 1996 private placement of the Company and the Common Stock underlying the Series E Preferred Stock sold by the Company and (x) a letter agreement entered into December 10, 1996 with respect to the placement agent's warrant in connection with such offering in December 1996.

Pursuant to the terms of the Restricted Registration Rights Agreements, no Selling Stockholders party to the Restricted Registration Rights Agreements may sell during (i) any three month period while this Registration Statement is in effect, a number of shares of Common Stock which are Registrable Securities (as defined in the Restricted Registration Rights Agreements) that is greater than one percent (1%) of the number of issued and outstanding Common Stock at such time and (ii) any single month while this Registration Statement is in effect, a number of shares of Registrable Securities that is more than one-third (1/3) of one percent (1%) of the number of issued and outstanding Common Stock at such time. Within ten (10) days following the last day of any month in which a Selling Stockholder party to the Restricted Registration Rights Agreements sells Registrable Securities, any such Selling Stockholder must notify the Company of the number of shares of Registrable Securities sold by such Selling Stockholder.

The Restricted Registration Rights Agreements also provide that if the Company proposes to register any of its stock or other securities under the Securities Act in connection with an underwritten public offering of such securities solely for cash, the Company shall, at such time, promptly give each Selling Stockholder party to the Restricted Registration Rights Agreements written notice of such registration, and in connection with such public offering, the Selling Stockholders party to the Restricted Registration Rights Agreements have agreed not to sell any of the Registrable Securities during such customary lock-up period requested by the Company's underwriters who are underwriting such public offering. The Selling Stockholders party to the Restricted Registration Rights Agreements shall have no right to participate in any such public offering.

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Subject to the foregoing restrictions with respect to those Selling Stockholders which are parties to the Restricted Registration Rights Agreements, the shares of Common Stock offered hereunder may be sold from time to time by the Selling Stockholders, or by pledgees, donees, transferees or other successors in interest. Such sales may be made on the Nasdaq National Market or in the over-the-counter market or otherwise at prices and on terms then prevailing or related to the then current market price, or in negotiated transactions. The shares of Common Stock may be sold to or through one or more broker-dealers, acting as agent or principal in underwritten offerings, block trades, agency placements, short sales, exchange distributions, brokerage transactions or otherwise, or in any combination of the foregoing.

The Company is bearing the costs relating to the registration of the shares of Common Stock offered hereby. In connection with any transaction involving the Common Stock, broker-dealers or others may receive from the Selling Stockholders, and may in turn pay to other broker-dealers or others, compensation in the form of commissions, discounts or concessions in amounts to be negotiated at the time. Such compensation shall be paid by the Selling Stockholders. Broker-dealers and any other persons participating in a distribution of the Common Stock may be deemed to be underwriters within the meaning of the Act in connection with such distribution, and any such commissions, discounts or concessions may be deemed to be underwriting discounts or commissions under the Act.

Any or all of the sales or other transactions involving the Common Stock described above, whether effected by the Selling Stockholders, any broker-dealer or others, may be made pursuant to this Prospectus. In addition, any shares of Common Stock that qualify for sale pursuant to Rule 144 under the Act may be sold under Rule 144 rather than pursuant to this Prospectus.

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

The Company and certain of the Selling Stockholders have agreed, and hereafter may further agree, to indemnify certain persons, including certain of the Selling Stockholders, persons controlling certain Selling Stockholders and the underwriters for such Selling Stockholders, broker-dealers or others, against certain liabilities in connection with any offering of the Common Stock, including liabilities arising under the Act.

LEGAL MATTERS

The validity of the Common Stock offered hereby will be passed upon for the Company by Jackson Tufts Cole & Black, LLP, San Jose, California. Jackson Tufts Cole & Black, LLP is the beneficial owner of options to purchase 35,000 shares of the Common Stock of the Company.

EXPERTS

The financial statements and schedules incorporated by reference in this Prospectus from the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1995, as amended, have been audited by Deloitte & Touche LLP, independent auditors, as stated in their

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report which is incorporated herein by reference (which report expresses an unqualified opinion and includes an explanatory paragraph referring to the Company's ability to continue as a going concern), and the financial statements of Therox Pharmaceuticals, Inc. incorporated by reference in this Prospectus from the Company's Current Report on Form 8-K/A filed with the Commission on September 29, 1995, have been audited by Barna, Kowall & Company. Such financial statements and schedules have been so incorporated in reliance upon the reports of such firms given upon their authority as experts in accounting and auditing.

INDEMNIFICATION

Insofar as indemnification for liabilities arising under the Act may be permitted to directors, officers and controlling persons of the Company, the Company has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Company of expenses incurred or paid by a director, officer or controlling person of the Company 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 Company 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.

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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth all expenses, other than the underwriting discounts and commissions, payable by the Registrant in connection with the sale of the Common Stock being registered. All the amounts shown are estimates except for the registration fee.

<TABLE>	
<S>	
<C>	
Registration fee	\$ 2,322
Blue sky qualification fees and expenses	5,000
Printing and engraving expenses	5,000
Legal fees and expenses	25,000
Accounting fees and expenses	5,000
Miscellaneous	\$ 5,000

	\$47,322
	=====

</TABLE>

ITEM 15. INDEMNIFICATION OF OFFICERS AND DIRECTORS.

The Company has the power, pursuant to Section 102(7) of the Delaware General Corporation Law, to limit the liability of directors of the Company for certain breaches of fiduciary duty and, pursuant to Section 145 of the Delaware General Corporation Law, to indemnify its officers and directors and other persons for certain acts.

The Company's Restated Certificate of Incorporation includes the following provisions:

"A director of the Company shall not be personally liable to the company or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the directors duty of loyalty to the Company or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law or (iv) for any transaction from which the director derived an improper personal benefit. If the Delaware General Corporation Law is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Company shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended. Any repeal or modification of this Article by the stockholders of the Company shall not adversely affect any right or protection of a director of the Company existing at the time of such repeal or modification."

The Company shall indemnify any and all persons whom it has the power to indemnify pursuant to the General Corporation Law of Delaware against any and all expenses, judgments, fines, amounts paid in settlement, and any other liabilities to the fullest extent permitted by such law and may at the discretion of the Board of Directors, purchase and maintain insurance, at its expense, to protect itself and such persons against any expense, judgment, fine, amount paid in settlement or

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other liability, whether or not the Company would have the power to so indemnify such person under the General Corporation Law of Delaware.

The Company believes that these provisions are necessary to attract and retain qualified persons as directors and officers. These provisions do not eliminate liability for breach of the directors duty of loyalty to the Company or its stockholders, for acts or omissions not in good faith or involving intentional misconduct or knowing violations of law, for any transaction from which the director derived an improper personal benefit or for any willful or negligent payment of any unlawful dividend or any unlawful stock purchase agreement or redemption.

Pursuant to Section 145 of the Delaware Law, a corporation generally has the power to indemnify its present and former directors, officers, employees and agents against expenses incurred by them in connection with any suit to which they are, or are threatened to be made, a party by reason of their serving in such positions so long as they acted in good faith and in a manner they reasonably believed to be in, or not opposed to, the best interests of a corporation, and with respect to any criminal action, they had no reasonable cause to believe their conduct was unlawful.

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporations board of directors to grant indemnification to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act.

Article III of the Company's Bylaws provides that the Company, by action of the Board of Directors, may, to the fullest extent permitted by the General Corporation Law of Delaware, indemnify any and all persons who it shall have power to indemnify against any and all of the expenses, liabilities or other matters.

The Company has purchased and maintains an insurance policy covering the officers and directors of the Company with respect to certain liabilities arising under the Securities Act or otherwise.

ITEM 16. EXHIBITS

(a) Exhibits.

<TABLE>
<CAPTION>
EXHIBIT
NUMBER

<S> <C>
5.1 Opinion of Jackson Tufts Cole & Black, LLP.

23.1 Consent of Deloitte & Touche LLP.

23.2 Consent of Jackson Tufts Cole & Black, LLP.
 Reference is made to Exhibit 5.1.

23.3 Consent of Barna, Kowall & Company.
</TABLE>

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ITEM 17. UNDERTAKINGS

Insofar as indemnification for liabilities arising under the Act may be permitted to directors, officers and controlling persons of the Company pursuant to provisions described in Item 15, or otherwise, the Company has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Company of expenses incurred or paid by a director, officer or controlling person of the Company 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 Company 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.

The undersigned Company hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement 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.
- (2) That, for the purpose of determining any liability under the Act, each post-effective amendment that contains a form of prospectus 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.
- (4) That, for purposes of determining any liability under the Act, each filing of the Company's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plans annual report pursuant to Section 15(d) of the Exchange Act) 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.
- (5) That, for purposes of determining any liability under the Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Company pursuant to Rule 424(b)(1) or (4) or 497(h) under the Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(6) To deliver or cause to be delivered with the Prospectus, to each person to whom the Prospectus is sent or given, the latest annual report to security holders that is incorporated by reference in the Prospectus and furnished pursuant to and meeting the requirements of Rule 14a-3 or Rule 14c-3 under the Exchange Act; and, where interim financial information required to be presented by Article 3 of Regulation S-X are not set forth in the Prospectus, to deliver, or cause to be delivered to each person to whom the Prospectus is sent or given, the latest quarterly report that is specifically incorporated by reference in the Prospectus to provide such interim financial information.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Company has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Portland, State of Oregon, on the 16th day of December, 1996.

OXIS INTERNATIONAL, INC.

By: /s/Anna D. Barker

 Anna D. Barker, Ph.D.
 President and Chief Executive Officer
 (Principal Executive Officer)

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Ray R. Rogers and Anna D. Barker, or either of them, as his true and lawful attorneys-in-fact and agents with full power of substitution and resubstitution, for him and in his name, place, and stead, in any and full capacities, to sign any and all amendments (including post-effective 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, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

<TABLE>

<CAPTION>

SIGNATURE	TITLE	DATE
/s/Anna D. Barker ----- Anna D. Barker	Director; President and Chief Executive Officer (Principal Executive Officer)	December 16, 1996
/s/Jon S. Pitcher ----- Jon S. Pitcher	Chief Financial Officer and Secretary (Principal Financial and Accounting Officer)	December 16, 1996
/s/Ray R. Rogers ----- Ray R. Rogers	Director; Chairman of the Board	December 16, 1996

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<TABLE>

<CAPTION>

/s/Gerald D. Mayer ----- Gerald D. Mayer	Director	December 16, 1996
/s/James McCamant ----- James McCamant	Director	December 16, 1996
/s/Stuart Lang ----- Stuart Lang	Director	December 16, 1996
/s/David Needham ----- David Needham	Director	December 16, 1996
/s/A.R. Sitaraman ----- A.R. Sitaraman	Director	December 16, 1996
/s/Timothy G. Biro ----- Timothy G. Biro	Director	December 16, 1996

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INDEX TO EXHIBITS

<TABLE>

<CAPTION>

EXHIBIT NUMBER	DESCRIPTION	SEQUENTIAL PAGE NO.
5.1	Opinion of Jackson Tufts Cole & Black, LLP	40

23.1	Consent of Deloitte & Touche LLP	41
23.2	Consent of Jackson Tufts Cole & Black, LLP. Reference is made to Exhibit 5.1	
23.3	Consent of Barna, Kowall & Company	42

</TABLE>

EXHIBIT 5.1

OPINION OF JACKSON TUFTS COLE & BLACK, LLP

December 16, 1996

OXIS International, Inc.
6040 N. Cutter Circle
Suite 317
Portland, Oregon 97217-3935

Ladies and Gentlemen:

With reference to the Registration Statement on Form S-3 (the "Registration Statement") to be filed by OXIS International, Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission under the Securities Act of 1933, as amended, relating to 5,701,225 shares of Common Stock, par value \$.50 per share, of the Company (the "Common Stock"), it is our opinion that with respect to (i) the shares of Common Stock to be offered and sold pursuant to the Registration Statement which are issued and outstanding on the date hereof, such shares of Common Stock are legally issued, fully paid and nonassessable and (ii) the shares of Common Stock to be offered and sold pursuant to the Registration Statement which are issuable pursuant to the terms of Series E Preferred Stock, secured convertible term notes or warrants, such shares of Common Stock, when issued and sold in accordance with the applicable Series E Preferred Stock, secured convertible term notes or warrants, will be legally issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion with the Securities and Exchange Commission as Exhibit 5.1 to the Registration Statement.

Very truly yours,

Jackson Tufts Cole & Black, LLP

EXHIBIT 23.1

CONSENT OF DELOITTE & TOUCHE LLP

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in this Registration Statement of OXIS International, Inc. (formerly DDI Pharmaceuticals, Inc.) and subsidiaries on Form S-3, of our report dated March 7, 1996, which included an explanatory paragraph relating to the Company's ability to continue as a going concern, appearing in the Annual Report on Form 10-K of OXIS International, Inc. for the year ended December 31, 1995, as amended by Form 10-K/A, and to the reference to us under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

DELOITTE & TOUCHE LLP
Portland, Oregon
December 16, 1996

EXHIBIT 23.3

CONSENT OF BARNA, KOWALL & COMPANY

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in this Registration Statement of OXIS International, Inc. (formerly DDI Pharmaceuticals, Inc.) and subsidiaries on Form S-3, of our report dated June 22, 1995, on the financial statements of Therox Pharmaceuticals, Inc. appearing in the Form 8-K/A Current Report of OXIS International, Inc. dated September 28, 1995, and to the reference to us under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

BARNA, KOWALL & COMPANY
December 16, 1996
Independence, Ohio