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

#### **AMENDMENT NO. 1 FORM SB-2**

## REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Advaxis, Inc. (Name of small business issuer in our charter)

Colorado (State or other jurisdiction of incorporation or organization) 2836 (Primary Standard Industrial Classification Code Number) 841521955 (I.R.S. Employer Identification No.)

212 Carnegie Center Suite 206 Princeton, NJ 08540 (609) 497-7555

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

Mr. Todd Derbin, Chief Executive Officer

212 Carnegie Center Suite 206 Princeton, NJ 08540 (609) 497-7555

(Name, address, including zip code, and telephone number, including area code, of registrant's agent for service)

Copies to:

Gary A. Schonwald, Esq. Reitler Brown & Rosenblatt LLC 800 Third Avenue 21ª Floor New York, New York 10022 (212) 209-3050 / (212) 371-5500 (Telecopy)

Approximate date of commencement of proposed sale to the public. From time to time after this Registration Statement becomes effective.

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, as amended, check the following box: x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: o

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act of 1933, check the following box and list the Securities Act of 1933 registration statement number of the earlier effective registration statement for the same offering: o

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box: o

## CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be <u>Registered</u> <sup>(1)</sup>	Proposed maximum offering price <u>per unit</u> <sup>(2)</sup>	Proposed maximum aggregate <u>offering price</u> <sup>(2)</sup>	Amount of <u>registration fee</u>
common stock par value \$0.001 per share <sup>(3)</sup>	36,690,056	\$1.00	\$4,318.42	\$4,318.42
common stock par value \$0.001 per share <sup>(4)</sup>	19,630,588	\$1.00	\$2,310.52	\$2,310.52

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION SATEMENT 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 SECTION8(A) MAY DETERMINE.

- (1) In accordance with Rule 416(a), the Registrant is also registering hereunder an indeterminate number of shares that may be issued and resold to prevent dilution resulting from stock splits, stock dividends or similar transactions as well as anti-dilution provisions applicable to shares underlying the warrants.
- (2) Estimated pursuant to Rule 457(c) of the Securities Act of 1933 solely for the purpose of computing the amount of the registration fee.
- (3) Represents shares of the Registrant's common stock being registered for resale that have been issued to the selling stockholders named in the prospectus or a prospectus supplement.
- (4) Represents shares of the Registrant's common stock being registered for resale that have been or may be acquired upon the exercise of warrants issued to the selling stockholders named in the prospectus or a prospectus supplement.

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Subject to completion Dated April 7, 2005

## PRELIMINARY PROSPECTUS

#### 56,320,644 Shares

#### Advaxis, Inc.

This prospectus relates to the resale of up to 36,690,056 shares of common stock and 19,630,588 shares of common stock underlying warrants of Advaxis, Inc. by certain selling stockholders identified in this prospectus. All of the shares, when sold will be sold by these selling stockholders. The selling stockholders may sell their common stock from time to time at prevailing market prices. We will not receive any proceeds from the sales by the Selling Stockholders, but we will receive funds from the exercise of warrants held by selling stockholders, if exercised and if payment is made by means other than cashless exercise

We have applied for our common stock to be quoted on the Over The Counter Bulletin Board, which is commonly referred to as the "OTC Bulletin Board" maintained by various broker dealers. There is no "public market" for shares of our common stock.

No underwriter or person has been engaged to facilitate the sale of shares of common stock in this offering. None of the proceeds from the sale of common stock by the selling stockholders will be placed in escrow, trust or any similar account. There are no underwriting commissions involved in this offering. We have agreed to pay all the costs of this offering. Selling stockholders will pay no offering expenses.

# This offering is highly speculative and these securities involve a high degree of risk. You should purchase shares only if you can afford a complete loss. See "Risk Factors" beginning on page 9.

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

The date of this prospectus is \_\_\_\_\_, 2005.

The information in this prospectus is not complete and may be changed without notice. The selling stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and it is not soliciting offers to buy these securities, in any state where the offer or sale of these securities is not permitted.

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Please read this prospectus carefully. It describes our business, our financial condition and results of operations. We have prepared this prospectus so that you will have the information necessary to make an informed investment decision.

You should rely on the information contained in this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus. The selling stockholders are offering to sell shares of our common stock and seeking offers to buy shares of our common stock only in jurisdictions where offers and sales are pemitted. The information contained in this prospectus is accurate only as of the date of the prospectus, regardless of the time the prospectus is delivered or the common stock is sold.

## PROSPECTUS SUMMARY

This summary highlights some information from this prospectus, and it may not contain all of the information that is important to you. You should read the following summary together with the more detailed information regarding our company and the common stock being sold in this offering, including "Risk Factors" and our consolidated financial statements and related notes, included elsewhere in, or incorporated by reference into, this prospectus.

#### General

We are a development stage biotechnology company utilizing multiple mechanisms of immunity with the intent to develop cancer vaccines that are more effective and safer than existing vaccines. To that end, we have licensed rights from the University of Pennsylvania ("Penn") to use a patented system to engineer a live attenuated Listeria monocytogenes bacteria (the "Listeria System") to secrete a protein sequence containing a tumor-specific antigen. Using the Listeria System, we believe we will force the body's immune system to process and recognize the antigen as if it were foreign, creating the immune response needed to attack the cancer. Our licensed Listeria System, developed at Penn over the past 10 years, provides a scientific basis for believing that this therapeutic approach induces a significant immune response to a tumor. Accordingly, we believe that the Listeria System is a broadly enabling platform technology that can be applied to many types of cancers. In addition, we believe there may be useful applications in infectious diseases and auto-immune disorders.

The therapeutic approach that comprises the Listeria System is based upon the innovative work of Yvonne Paterson, Ph.D., Professor of Microbiology at Penn, involving the creation of genetically engineered Listeria that stimulate the innate immune system and induce an antigen-specific immune response involving humoral and cellular components. We have obtained an exclusive 20-year license from Penn to exploit the Listeria System, subject to meeting various royalty and other obligations (the "Penn License").

We have focused our initial development efforts upon cancer vaccines targeting cervical, breast, melanoma, ovarian, lung and other cancers. Our lead products in development are as follows:

<u>Product</u> Lovaxin C	Indication Cervical and head and neck cancers	<u>Stage</u> Pre-clinical; Phase I study in cervical cancer anticipated to commence in the first half of 2005*
Lovaxin B	Breast cancer and melanoma	Pre-clinical; Phase I study anticipated to commence in 2006

Lovaxin NY	Ovarian, melanoma and lung cancer	Pre-clinical; Phase I study anticipated to commence in 2006
Lovaxin W	Wilms tumor and leukemia	Pre-clinical; Phase I study anticipated to commence in 2006
Lovaxin T	Cancer through control of telomerase	Pre-clincial
Lovaxin H	Prophylactic vaccine for HIV (AIDS)	Pre-clincial

\* Possible delays of up to three months may occur based on the production schedule of Cobra Biomanufacturing PLC of material, the length of time for Pharm Olam to complete toxicology studies and the issuance of required regulatory approval.

See "Business - Research and Development Programs".

Since our formation, we have had a history of losses which, as of January 31, 2005 aggregate (\$1,903,996), and because of the long development period for new drugs, we expect to continue to incur losses for several years. Our business plan to date has been realized by substantial outsourcing of virtually all major functions of drug development including scaling up for manufacturing, research and development, grant applications and others. The expenses of these outsourced services account for most of our accumulated loss. We cannot predict when, if ever, any of our product candidates will become commercially viable or FDA approved. Even if one or more of our products becomes commercially viable and receives FDA approval, we are not certain that we will ever become a profitable business.

#### Strategy

During the next 12 to 24 months our strategic focus will be to achieve several objectives. The foremost of these objectives are as follows:

- Initiate and complete Phase I clinical study of Lovaxin C;
- · Continue the pre-clinical development of our product candidates, as well as continue research to expand our technology platform; and
- · Initiate strategic and development collaborations with biotechnology and pharmaceutical companies.

There are many potential obstacles to the implementation of our proposed strategy. Among the potential obstacles we may encounter with respect to the Phase I clinical study of Lovaxin C are: difficulty in recruiting patients for the study; a material, adverse medical result in a patient during the study; and extended time for FDA approval of the IND (or foreign regulatory authority approval) required to proceed with the test.

Among the potential obstacles which we may encounter with respect to continuing preclinical development of our product candidates such as Lovaxin B or T are ambiguous animal data not sufficient to establish a proof of concept; insufficient or adverse preclinical data on future products; and unexpected higher costs or preclinical studies.

Among the potential obstacles which we may encounter in establishing strategic collaborations are: we may be perceived by desirable potential partners as too early stage; we may need to demonstrate more human safety or efficicacy data; or our technology may be perceived as high risk for patients or to the environment.

We were originally incorporated in the State of Colorado on June 5, 1987 under the name Great Expectations, Inc. We were administratively dissolved January 1, 1997 and reinstated June 18, 1998 under the name Great Expectations and Associates, Inc. In 1999, we became a reporting company under the Securities Exchange of 1934 (the "Exchange Act"). Until November 2004, we were a shell company without any business. On November 12, 2004, we acquired Advaxis, Inc., a Delaware corporation ("Advaxis"), through a Share Exchange and Reorganization Agreement, dated as of August 25, 2004 (the "Share Exchange"), by and among Advaxis, the stockholders of Advaxis and us. As a result of such acquisition, Advaxis become our wholly-owned subsidiary and our sole operating company. On December 23, 2004, we amended and restated our articles of incorporation and changed our name to Advaxis, Inc. Our principal executive offices are located at 212 Carnegie Center, Suite 206, Princeton, NJ 08540 and our telephone number is (609) 844-7755.

#### **Recent Developments**

In November 2004, we acquired 100% of the stock of Advaxis. Advaxis was organized in 2002 to develop the Listeria System under patents licensed from Penn which are described above under "General" and later in this prospectus under "Business."

The acquisition of Advaxis was pursuant to the Share Exchange. In connection with the Share Exchange (i) our existing stockholders entered into a Surrender and Cancellation Agreement whereby such stockholders contributed to us 199 shares of every 200 shares of common stock beneficially owned by them so that their ownership was reduced to 752,600 shares of common stock and (ii) we issued to the existing stockholders of Advaxis and others 16,350,323 shares of common stock, warrants to purchase 584,885 shares of common stock and options to purchase 2,381,525 shares of common stock. Upon the closing of the Share Exchange, the total number of shares of our common stock outstanding was 20,069,333 shares on a fully-diluted basis. The transaction is being accounted for as a recapitalization. The historical financial statements of Advaxis are our financial statements for reporting purposes.

On November 12, 2004, we completed an initial closing of a private placement offering (the "Private Placement"), whereby we sold an aggregate of \$2.925 million worth of units to accredited investors. Each unit was sold for \$25,000 (the "Unit Price") and consisted of (a) 87,108 shares of common stock and (b) a warrant to purchase, at any time prior to the fifth anniversary following the date of issuance of the warrant, 87,108 shares of common stock included at a price equal to \$0.40 per share of common stock (a "Unit"). In consideration of the investment, we granted to each investor certain registration rights and anti-dilution rights. Also, in November 2004, we converted approximately \$618,000 aggregate principal of promissory notes and accrued interest outstanding into Units.

On December 8, 2004, we completed a second closing of the Private Placement, whereby we sold an aggregate of \$200,000 of Units to accredited investors.

On January 4, 2005, we completed a third and final closing of the Private Placement, whereby we sold an aggregate of \$128,000 of Units to accredited investors.

The aggregate sale of the Units in the Private Placement was \$3,253,000.

Pursuant to the terms of a investment banking agreement, dated March 19, 2004, by and between us and Sunrise Securities, Corp. (the "Placement Agent"), we issued to the Placement Agent and its designees an aggregate of 2,283,445 shares of common stock and warrants to purchase up to an aggregate of 2,666,900 shares of common stock. The shares were issued as part consideration for the services of the Placement Agent, as our placement agent in the Private Placement. In addition, we paid the Placement Agent a total cash fee of \$50,530.

On January 12, 2005, we completed a second private sale of Units whereby we sold an aggregate of \$1,100,000 of Units to a single investor. As with the Private Placement, each Unit issued and sold in this subsequent private placement was sold at \$25,000 per Unit and is comprised of (i) 87,108 shares of our common stock, and (ii) a five-year warrant to purchase 87,108 shares of our common stock at an exercise price of \$0.40 per share.

Our auditors, in their report on our financial statements as of December 31, 2002 and 2003, indicated that the Company has incurred losses from operations, has a working capital deficiency, and a shareholder's deficiency, which raise substantial doubt about the Company's ability to continue as a going concern. Subsequent to the issuance of those financial statements the Company has raised additional equity financing in the Private Placement and intends to raise additional funds. As a result of raising such funds our ability to continue as a going concern is no longer an issue for our accountants. See further discussion in "Management's Discussion and Analysis of Financial Condition and Results of Operations and Plan of Operations - Liquidity and Capital Resources".

#### Our Website

We maintain a website at www.advaxis.com which contains descriptions of our technology, our drugs and the trial status of each drug.

## SUMMARY CONSOLIDATED FINANCIAL DATA OF ADVAXIS

On November 12, 2004, we acquired Advaxis, Inc., a Delaware corporation through the Share Exchange. The transaction was accounted for as a recapitalization. The historical financial statements of Advaxis will be our financial statements for reporting purposes.

The following condensed statement of operations data for the period from March 1, 2002 (inception) to December 31, 2002, and the year ended December 31, 2003, and the selected balance sheet data at December 31, 2002 and 2003, are derived from Advaxis' financial statements and the related notes, audited by Goldstein Golub Kessler LLP, Certified Public Accountants, 1185 Avenue of the Americas, Suite 500, New York, NY 10036-2602, Advaxis' independent registered public accounting firm. The financial statements and the related notes as of December 31, 2002 and 2003 and for period ended December 31, 2002 the year ended December 31, and 2003 are included elsewhere herein. The unaudited selected statement of operations data for the three months ended January 31, 2004 and 2005, and the unaudited consolidated selected balance sheet data at January 31, 2005, are derived from Advaxis' unaudited financial statements, which have been prepared on a basis consistent with Advaxis' audited financial statements and, in the opinion of management, include all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of Advaxis' financial position and results of operations. The results of operations for any interim period are not necessarily indicative of results to be expected for the entire year. The following data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations and Plan of Operations" and our financial statements and the related notes included elsewhere in this prospectus.

Statement of Operations Data:		Period from March 1, 2002 (inception) to December 31,	 Year ended December 31,	 Three Months E	<u> </u>
		2002	 2003	 2004	 2005
Total operating expenses	\$	167,902	\$ 897,076	\$ 132,241	\$ 245,126
Interest expense (income)			17,190	10,655	2,968
Other income		966	4,521	(430)	(2,739)
Provision for income taxes					
Net loss	\$	(166,936)	\$ (909,745)	\$ (142,466)	\$ (245,355)
Loss per Share Information:					
Basic and diluted net loss per share	\$	(0.01)	\$ (0.05)	\$ (0.01)	\$ (0.01)

	De	cember 31,	 December 31,	 January 31,	January
Balance Sheet Data:				(unaudited)	
		2002	 2003	 2005	
Cash and cash equivalents	\$	204,382	\$ 47,160	\$ 3,217,430	
Intangible assets			\$ 277,243	\$ 666,447	
Total assets	\$	204,382	\$ 324,403	\$ 3,886,327	
Total liabilities	\$	125,825	\$ 1,131,138	\$ 923,517	
Stockholders' equity (deficiency)		78,557	(806,735)	2,962,810	

Common stock offered by selling stockholders Common stock outstanding Use of proceeds

"OTC Bulletin Board Quote"

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- Represents 36,690,056 shares of common stock that were issued to selling stockholders and 19,630,588 shares of common stock underlying warrants that were issued to selling stockholders.
- (2) The number of shares of common stock outstanding as of January 31, 2005 listed above excludes
  - · 2,182,894 shares of common stock issuable upon exercise of options;
  - 20,302,582 shares of common stock issuable upon exercise of warrants with exercise prices ranging from \$0.1952 to \$0.40 per share;
  - · Commitments to issue stock, options or warrants.

## ADDITIONAL INFORMATION

In this prospectus, the terms "we", "us", and "our" refer to Advaxis, Inc., a Colorado corporation, and its consolidated subsidiary, Advaxis, as appropriate in the context, and, unless the context otherwise requires, "common stock" refers to the common stock, par value \$0.001 per share, of Advaxis, Inc.

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56,320,644<sup>(1)</sup> 36,690,056<sup>(2)</sup> We will not receive any proceeds from the sale of the common stock, but we will receive funds from the exercise of warrants by selling stockholders, if exercised for cash. None

## **RISK FACTORS**

An investment in the common stock is highly speculative, involves a high degree of risk, and should be made only by investors who can afford a complete loss. You should carefully consider, together with the other matters referred to in this prospectus, the following risk factors before you decide whether to buy our common stock.

#### **Risks Specific to Us**

## We are a development stage company.

We are a development stage company with a history of losses and can provide no assurance as to future operating results. As a result of losses which will continue throughout our development stage, we may exhaust our financial resources and be unable to complete the development of our production. Our deficit will continue to grow during our drug development period.

We have sustained losses from operations in each fiscal year since our inception and losses are expected to continue, due to the substantial investment in research and development, for the next several years. At January 31, 2005, we had an accumulated deficit of \$1,903,996 and stockholders' equity of \$2,962,810. We expect to spend substantial additional sums on the continued research and development of proprietary products and technologies with no certainty that losses will not increase or that we will ever become profitable as a result of these expenditures.

#### We will require substantial additional financing in order to meet our business objectives.

Although we believe that the net proceeds received from the sale of Units will be sufficient to finance our currently planned operations for the near-term (approximately 12 to 24 months), such amounts will not be sufficient to meet our longer-term cash requirements or cash requirements for the commercialization of certain products currently in development. We will be required to issue equity or debt securities or enter into other financial arrangements, including relationships with corporate and other partners, in order to raise substantial additional capital during the five to ten year period of product development and the United States Food and Drug Administration ("FDA") testing through Phase III testing. Depending upon market conditions, we may not be successful in raising sufficient additional capital for our long-term requirements. If we fail to raise sufficient additional financing we will not be able to develop our product candidates, we will be required to reduce staff, reduce or eliminate research and development, slow the development of our product candidates and outsource or eliminate several business functions. Even if we are successful in raising such additional financing, we may not be able to successfully complete planned clinical trials, development, and marketing of all, or of any, of our product candidates. In such event, our business, prospects, financial condition and results of operations could be materially adversely affected. We may be required to reduce our staff, discontinue certain research or development programs of our future products, and cease to operate. We may not be able to conduct clinical trial in Lovaxin C. See "Management's Discussion and Analysis of Financial Condition and Results of Operations and Plan of Operations".

## Our limited operating history does not afford investors a sufficient history on which to base an investment decision.

We commenced our Listeria System vaccine development business in February 2002 and have existed as a development stage company since such time. Prior thereto we conducted no business. Accordingly, we have a limited operating history. Investors must consider the risks and difficulties we have encountered in the rapidly evolving vaccine and therapeutic biopharmaceutical industry. Such risks include the following:

· competition from companies that have substantially greater assets and financial resources than we have;

- need for acceptance of products;
- ability to anticipate and adapt to a competitive market and rapid technological developments;
- amount and timing of operating costs and capital expenditures relating to expansion of our business, operations and infrastructure;
- need to rely on multiple levels of outside funding due to the length of the product development cycles and governmental approved protocols associated with the pharmaceutical industry; and
  - dependence upon key personnel including key independent consultants and advisors.

We cannot be certain that our strategy will be successful or that we will successfully address these risks. In the event that we do not successfully address these risks, our business, prospects, financial condition and results of operations could be materially and adversely affected. We may be required to reduce our staff, discontinue certain research or development programs of our future products, and cease to operate. We may not be able to conduct clinical trials in Lovaxin C.

#### We can provide no assurance of the successful and timely development of new products.

Our products are at various stages of research and development. Further development and extensive testing will be required to determine their technical feasibility and commercial viability. Our success will depend on our ability to achieve scientific and technological advances and to translate such advances into reliable, commercially competitive products on a timely basis. Vaccine products that we may develop are not likely to be commercially available until the second part of this decade. The proposed development schedules for our products may be affected by a variety of factors, including technological difficulties, proprietary technology of others, and changes in governmental regulation, many of which will not be within our control. Any delay in the development, introduction or marketing of our products could result either in such products being marketed at a time when their cost and performance characteristics would not be competitive in the marketplace or in the shortening of their commercial lives. In light of the long-term nature of our projects, the unproven technology involved and the other factors described elsewhere in "Risk Factors", there can be no assurance that we will be able to complete successfully the development or marketing of any new products. See "Business - Research and Development Program".

#### Our research and development expenses are subject to uncertainty.

Factors affecting our research and development (or R&D) expenses include, but are not limited to:

- The number of and the outcome of clinical studies we are planning to conduct. For example, our R&D expenses may increase based on the number of late-stage clinical studies which we may be required to conduct;
- The number of products entering into development from late-stage research. For example, there is no guarantee that internal research efforts will succeed in generating sufficient data for us to make a positive development decision or that an external candidate will be available on terms acceptable to us. Some promising candidates may not yield sufficiently positive pre-clinical results to meet our stringent development criteria;
- In-licensing activities, including the timing and amount of related development funding or milestone payments. For example, we may enter into agreements requiring us to pay a significant up-front fee for the purchase of in-process research and development which we may record as an R&D expense;

- As part of our strategy, we invest in R&D. R&D as a percent of future potential revenues can fluctuate with the changes in future levels of revenue. Lower revenues can lead to more limited spending on R&D efforts; and
- · Future levels of revenue.

#### We are subject to numerous risks inherent in conducting clinical trials.

We must outsource our clinical trials and are in the process of negotiating with third parties to conduct such trials. We are not certain that we will successfully conclude agreements for the conduct of our clinical trials. Delay in concluding such agreements would delay the commencement of the Phase 1 Trial of Lovaxin C.

Agreements with clinical investigators and medical institutions for clinical testing and with other third parties for data management services place substantial responsibilities on these parties, which could result in delays in, or termination of, our clinical trials if these parties fail to perform as expected. For example, if any of our clinical trial sites fail to comply with FDA-approved good clinical practices, we may be unable to use the data gathered at those sites. If these clinical investigators, medical institutions or other third parties do not carry out their contractual duties or obligations or fail to meet expected deadlines, or if the quality or accuracy of the clinical data they obtain is compromised due to their failure to adhere to our clinical protocols or for other reasons, our clinical trials may be extended, delayed or terminated, and we may be unable to obtain regulatory approval for or successfully commercialize Lovaxin C.

We or regulators may suspend or terminate our clinical trials for a number of reasons. We may voluntarily suspend or terminate our clinical trials if at any time we believe that they present an unacceptable risk to the patients enrolled in our clinical trials. In addition, regulatory agencies may order the temporary or permanent discontinuation of our clinical trials at any time if they believe that the clinical trials are not being conducted in accordance with applicable regulatory requirements or that they present an unacceptable safety risk to the patients enrolled in our clinical trials.

Our clinical trial operations are subject to regulatory inspections at any time. If regulatory inspectors conclude that we or our clinical trial sites are not in compliance with applicable regulatory requirements for conducting clinical trials, we may receive reports of observations or warning letters detailing deficiencies, and we will be required to implement corrective actions. If regulatory agencies deem our responses to be inadequate, or are dissatisfied with the corrective actions we or our clinical trial sites have implemented, our clinical trials may be temporarily or permanently discontinued, we may be fined, we or our investigators may be precluded from conducting any ongoing or any future clinical trials, the government may refuse to approve our marketing applications or allow us to manufacture or market our products, and we may be criminally prosecuted.

#### The successful development of biopharmaceuticals is highly uncertain.

Successful development of biopharmaceuticals is highly uncertain and is dependent on numerous factors, many of which are beyond our control. Products that appear promising in the early phases of development may fail to reach the market for several reasons including:

• Pre-clinical study results that may show the product to be less effective than desired (e.g., the study failed to meet its primary objectives) or to have harmful or problematic side effects;

- Failure to receive the necessary regulatory approvals or a delay in receiving such approvals. Among other things, such delays may be caused by slow enrollment in clinical studies, length of time to achieve study endpoints, additional time requirements for data analysis, or BLA preparation, discussions with the FDA, an FDA request for additional pre-clinical or clinical data, or unexpected safety or manufacturing issues.
- · Manufacturing costs, pricing or reimbursement issues, or other factors that make the product uneconomical; and
- The proprietary rights of others and their competing products and technologies that may prevent the product from being commercialized.

Success in pre-clinical and early clinical studies does not ensure that large-scale clinical studies will be successful. Clinical results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals. The length of time necessary to complete clinical studies and to submit an application for marketing approval for a final decision by a regulatory authority varies significantly from one product to the next, and may be difficult to predict.

#### We must comply with significant government regulations.

The research and development, manufacture and marketing of human therapeutic and diagnostic products are subject to regulation, primarily by the FDA in the United States and by comparable authorities in other countries. These national agencies and other federal, state, local and foreign entities regulate, among other things, research and development activities (including testing in animals and in humans) and the testing, manufacturing, handling, labeling, storage, record keeping, approval, advertising and promotion of the products that we are developing. Noncompliance with applicable requirements can result in various adverse consequences, including, delay in approving or refusal to approve product licenses or other applications, suspension or termination of clinical investigations, revocation of approvals previously granted, fines, criminal prosecution, recall or seizure of products, injunctions against shipping products and total or partial suspension of production and/or refusal to allow a company to enter into governmental supply contracts.

The process of obtaining requisite FDA approval has historically been costly and time consuming. Current FDA requirements for a new human drug or biological product to be marketed in the United States include: (1) the successful conclusion of pre-clinical laboratory and animal tests, if appropriate, to gain preliminary information on the product's safety; (2) filing with the FDA of an Investigational New Drug Application ("INDA"), to conduct human clinical trials for drugs or biologics; (3) the successful completion of adequate and well-controlled human clinical investigations to establish the safety and efficacy of the product for its recommended use; and (4) filing by a Company and acceptance and approval by the FDA of a New Drug Application ("NDA") for a drug product or a Biological License Application ("BLA") for a biological product to allow commercial distribution of the drug or biologic. A delay in one or more of the procedural steps outlined above could be harmful to us in terms of getting our product candidates through clinical testing and to market.

#### We can provide no assurance that the Advaxis products will obtain regulatory approval or that the results of clinical studies will be favorable.

The testing, marketing and manufacturing of any product will require the approval of the FDA. We cannot predict with any certainty the amount of time necessary to obtain such FDA approval and whether any such approval will ultimately be granted. Preclinical and clinical trials may reveal that one or more products is ineffective or unsafe, in which event further development of such products could be seriously delayed or terminated. Moreover, obtaining approval for certain products may require the testing on human subjects of substances whose effects on humans are not fully understood or documented. Delays in obtaining FDA or any other necessary regulatory approvals of any proposed product and failure to receive such approvals would have an adverse effect on the product's potential commercial success and on our business, prospects, financial condition and results of operations. In addition, it is possible that a product may be found to be ineffective or unsafe due to conditions or facts which arise after development has been completed and regulatory approvals have been obtained. In this event, we may be required to withdraw such product from the market. To the extent that our success will depend on any regulatory approvals from governmental authorities outside of the United States which perform roles similar to that of the FDA, uncertainties similar to those stated above will also exist. See "Business - Governmental Regulation".

# We rely upon patents to protect our technology. We may be unable to protect our intellectual property rights and we may be liable for infringing the intellectual property rights of others.

Our ability to compete effectively will depend on our ability to maintain the proprietary nature of our technologies, including the Listeria System, and the proprietary technology of others with which we have entered into licensing agreements. We have licensed eight patents and 12 patent applications from Penn. Further, we rely on a combination of trade secrets and nondisclosure, and other contractual agreements and technical measures to protect our rights in the technology. We depend upon confidentiality agreements with our officers, employees, consultants, and subcontractors to maintain the proprietary nature of the technology. These measures may not afford us sufficient or complete protection, and others may independently develop technology similar to ours, otherwise avoid the confidentiality agreements, or produce patents that would materially and adversely affect our business, prospects, financial condition, and results of operations. Such competitive events, technology due to third party patent blocking right. Such competitive events, technology due to third party patent blocking right. Such competitive events, technology due to third party patent blocking right.

We believe that our technology and the technology licensed from Penn do not infringe the rights of others; however, we cannot assure you that the technology licensed from Penn will not, in the future be found to infringe upon the rights of others. We have become aware of a public company, Cerus Corporation, which has issued a press release claiming to have a proprietary Listeria-based approach to a cancer vaccine. We believe that through our exclusive license with Penn of U.S. Patent Nos. 5,830,702, 6,051,237 and 6,565,852, we have the earliest known and dominant patent position for the use of recombinant Listeria monocytogenes expressing proteins or tumor antigens as a vaccine for the treatment of infectious diseases and tumors. Based on searches of publicly available databases, we do not believe that Cerus or The University of California Berkeley (which is where Cerus' consulting scientist works) or any other third party owns any published Listeria patents or has any issued patent claims that might materially negatively affect our freedom to operate our business (as currently contemplated to be operated) in the field of Listeria monocytogenes. For more information about Cerus Corporation and its claims with respect to listeria-based technology, you should visit their web site at <u>www.cerus.com</u> or to view its publicly filed documents, <u>www.sec.gov</u>. Others may assert infringement claims against us, and should we be found to infringe upon their patents, or otherwise impermissibly utilize their intellectual property, our ability to continue to use our technology or the licensed technology could be materially restricted or prohibited. If this event occurs, we may be required to obtain licenses from the holders of our intellectual property, enter into royalty agreements or redesign our products so as not to utilize this intellectual property, each of which may prove to be uneconomical or otherwise impossible. Licenses or royalty affect our business, prospects, financial condition and results of operations. Such c

#### We are dependent upon our license agreement with Penn, as well as proprietary technology of others.

The manufacture and sale of any products developed by us will involve the use of processes, products or information, the rights to certain of which are owned by others. Although we have obtained licenses with regard to the use of Penn's patents as described herein and certain of such processes, products and information of others, we can provide no assurance that such licenses will be obtained on commercially reasonable terms. If we are unable to maintain and/or obtain licenses, we may have to develop alternatives to avoid infringing or the patents of others, potentially causing increased costs and delays in product development and introduction or preclude the development, manufacture, or sale of planned products. Some of our licenses provide for limited periods of exclusivity that require minimum license fees and payments and/or may be extended only with the consent of the licensor. We can provide no assurance that we will be able to meet these minimum license fees in the future or that these third parties will grant extensions on any or all such licenses. Furthermore, we call to your attention that in 2001 an issue arose regarding the inventorship of U.S. Patent 6,565,852 and U.S. Patent Application No. 09/537,642 of Penn. These patent rights are included in the patent rights licensed by us from Penn. It is contemplated by GlaxoSmithKline Biologicals PLC ("GSK") Penn and us that the issue will be resolved through: (1) a correction of inventorship to add certain GSK inventors, (2) where necessary and appropriate, an assignment of GSK's possible rights under these patent rights are used by us from the sand by endures. (2) where necessary and appropriate, an assignment of GSK's possible rights under these patent rights of Penn, and (3) a sublicense from us to GSK. To date, this arrangement has not been finalized and we cannot assure that this issue will ultimately be resolved in the manner described above. See "Business - Patents and Licenses". To the extent any products developed by us are based on licensed tech

#### We have no manufacturing, sales, marketing or distribution capability and we must rely upon third parties for such.

We do not intend to create facilities to manufacture our products and therefore are dependent upon third parties to do so. We currently have an agreement with Cobra Manufacturing for production of our vaccines in small quantities for research and development purposes. We are negotiating with Cobra to produce large quantities of our vaccines for trials purposes, but no definitive agreement has been reached with them. Our reliance on third parties for the manufacture of our products creates a dependency that could severely disrupt our research and development, our clinical testing, and ultimately our sales and marketing efforts if the source of such supply prove to be unreliable or unavailable. If the contracted manufacturing source is unreliable or unavailable, we may not be able to replace the development of our product candidates, including the clinical testing program, could not go forward and our entire business plan could fail.

#### If we are unable to establish or manage strategic collaborations in the future, our revenue and product development may be limited.

Our strategy includes eventual substantial reliance upon strategic collaborations for marketing and commercialization of Lovaxin C, and we may rely even more on strategic collaborations for research, development, marketing and commercialization of our other product candidates. To date, we have not entered into any strategic collaborations with third parties capable of providing these services although we have been heavily reliant upon third party outsourcing for our research and development activities. In addition, we have not yet marketed or sold any of our product candidates or entered into successful collaborations for these services in order to ultimately commercialize our product candidates. Establishing strategic collaborations is difficult and time-consuming. Our discussion with potential collaborators may not lead to the establishment of collaborations of favorable terms, if at all. For example, potential collaborators may reject collaborations based upon their assessment of our financial, regulatory or intellectual property position. If we successfully establish new collaborations, these relationships may never result in the successful development or commercialization of our product candidates or the generation of sales revenue. To the extent that we enter into co-promotion or other collaborative arrangements, our product revenues are likely to be lower than if we directly marketed and sold any products that we may develop.

Management of our relationships with our collaborators will require:

- · significant time and effort from our management team;
- · coordination of our research and development programs with the research and development priorities of our collaborators; and
- · effective allocation of our resources to multiple projects.

If we continue to enter into research and development collaborations at the early phases of product development, our success will in part depend on the performance of our corporate collaborators. We will not directly control the amount or timing of resources devoted by our corporate collaborators to activities related to our product candidates. Our corporate collaborators may not commit sufficient resources to our research and development programs or the commercialization, marketing or distribution of our product candidates. If any corporate collaborator fails to commit sufficient resources, our preclinical or clinical development programs related to this collaboration could be delayed or terminated. Also, our collaborators may pursue existing or other development-stage products or alternative technologies in preference to those being developed in collaboration with us. Finally, if we fail to make required milestone or royalty payments to our collaborators or to observe other obligations in our agreements with them, our collaborators may have the right to terminate those agreements.

## We may incur substantial liabilities from any product liability claims if our insurance coverage for those claims is inadequate.

We face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials, and will face an even greater risk if the product candidates are sold commercially. An individual may bring a liability claim against us if one of the product candidates causes, or merely appears to have caused, an injury. If we cannot successfully defend ourselves against the product liability claim, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- · decreased demand for our product candidates,
- $\cdot$  injury to our reputation,
- · withdrawal of clinical trial participants,
- · costs of related litigation,
- $\cdot\,$  substantial monetary awards to patients or other claimants,
- $\cdot$  loss of revenues,
- · the inability to commercialize product candidates, and
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· increased difficulty in raising required additional funds in the private and public capital markets.

We currently do not have product liability insurance. We intend to obtain insurance coverage and to expand such coverage to include the sale of commercial products if marketing approval is obtained for any of our product candidates. However, insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost and we may not be able to obtain insurance coverage that will be adequate to satisfy any liability that may arise.

## We may incur significant costs complying with environmental laws and regulations.

We will use hazardous materials, including chemicals and biological agents and compounds that could be dangerous to human health and safety or the environment. As appropriate, we will store these materials and wastes resulting from their use at our or our outsourced laboratory facility pending their ultimate use or disposal. We will contract with a third party to properly dispose of these materials and wastes. We will be subject to a variety of federal, state and local laws and regulations governing the use, generation, manufacture, storage, handling and disposal of these materials and wastes. We may also incur significant costs complying with environmental laws and regulations adopted in the future.

#### If we use biological and hazardous materials in a manner that causes injury, we may be liable for damages.

Our research and development and manufacturing activities will involve the use of biological and hazardous materials. Although we believe our safety procedures for handling and disposing of these materials will comply with federal, state and local laws and regulations, we cannot entirely eliminate the risk of accidental injury or contamination from the use, storage, handling or disposal of these materials. We do not carry specific biological or hazardous waste insurance coverage, workers compensation or property and casualty and general liability insurance policies which include coverage for damages and fines arising from biological or hazardous waste exposure or contamination. Accordingly, in the event of contamination or injury, we could be held liable for damages or penalized with fines in an amount exceeding our resources, and our clinical trials or regulatory approvals could be suspended or terminated.

## We need to attract and retain highly skilled personnel; we may be unable to effectively manage growth with our limited resources.

At the date of this prospectus, we have three employees. We intend to expand our operations and staff materially. Our new employees will include a number of key managerial, technical, financial, research and development and operations personnel who will not have been fully integrated into our operations. We expect the expansion of our business to place a significant strain on our limited managerial, operational and financial resources. We will be required to expand our operational and financial systems significantly and to expand, train and manage our work force in order to manage the expansion of our operations. Our failure to fully integrate our new employees into our operations could have a material adverse effect on our business, prospects, financial condition and results of operations. Our ability to attract and retain highly skilled personnel is critical to our operations and expansion. We face competition for these types of personnel from other technology companies and more established organizations, many of which have significantly larger operations and greater financial, technical, human and other resources than we have. We may not be successful in attracting and retaining qualified personnel on a timely basis, on competitive terms, or at all. If we are not successful in attracting and retaining these personnel, our business, prospects, financial condition and results of the company. See "Management's Discussion and Analysis of Financial Condition and Results of Operations and Plan of Operations", "Business - Strategy", and "Business--Employees."

## We depend upon our senior management and key consultants and their loss or unavailability could put us at a competitive disadvantage.

We depend upon the efforts and abilities of our senior executive, as well as the services of several key consultants, including Yvonne Paterson, Ph.D. The loss or unavailability of the services of any of these individuals for any significant period of time could have a material adverse effect on our business, prospects, financial condition and results of operations. We have not obtained, do not own, nor are we the beneficiary of, key-person life insurance. See "Management—Employment Agreements".

### Risks Related to the Biotechnology / Biopharmaceutical Industry

# The biotechnology and biopharmaceutical industries are characterized by rapid technological developments and a high degree of competition. We may be unable to compete with more substantial enterprises.

The biotechnology and biopharmaceutical industries are characterized by rapid technological developments and a high degree of competition. Competition in the biopharmaceutical industry is based significantly on scientific and technological factors. These factors include the availability of patent and other protection for technology and products, the ability to commercialize technological developments and the ability to obtain governmental approval for testing, manufacturing and marketing. We compete with specialized biopharmaceutical firms in the United States, Europe and elsewhere, as well as a growing number of large pharmaceutical companies that are applying biotechnology to their operations. Many biopharmaceutical companies have focused their development efforts in the human therapeutics area, including cancer. Many major pharmaceutical companies have developed or acquired internal biotechnology capabilities or made commercial arrangements with other biopharmaceutical companies, as well as academic institutions and governmental agencies and private research organizations, also compete with us in recruiting and retaining highly qualified scientific personnel and consultants. Our ability to compete successfully with other companies in the pharmaceutical field will also depend to a considerable degree on the continuing availability of capital to us.

We are aware of certain products under development or manufactured by competitors that are used for the prevention, diagnosis, or treatment of certain diseases we have targeted for product development. Various companies are developing biopharmaceutical products that potentially directly compete with our product candidates even though their approach to such treatment is different. Several companies, such as Cerus Corporation, in particular, Dandreon Corporation and CancerVax Corporation, are developing cancer vaccines which would be directly competitive with our product candidates. In addition, numerous other companies, many of which have greater financial resources than we do, are actively engaged in the research and development of cancer vaccines, and are in Stage II and Stage III Testing of such products. Such companies include: Antigenics, Inc.; Avi BioPharma, Inc.; Biomira, Inc.; Corixa Corporation; Dendreon Corporation; Epimmune, Inc.; Genzyme Corp.; Progenics Pharmaceuticals, Inc.; Vical Incorporated; CancerVax Corporation; Genitope Corporation; and Xcyte Therapies, Inc.

We expect that our products under development and in clinical trials will address major markets within the cancer sector. Our competition will be determined in part by the potential indications for which drugs are developed and ultimately approved by regulatory authorities. Additionally, the timing of market introduction of some of our potential products or of competitors' products may be an important competitive factor. Accordingly, the relative speed with which we can develop products, complete pre-clinical testing, clinical trials and approval processes and supply commercial quantities to market are expected to be important competitive factors. We expect that competition among products approved for sale will be based on various factors, including product efficacy, safety, reliability, availability, price and patent position. See "Business - Research and Development Programs" and "Business - Competition".

## Risks Related to the Securities Markets and Investments in our Common Stock

#### The price of our common stock may be volatile.

The trading price of our common stock may fluctuate substantially. The price of the common stock that will prevail in the market after the sale of the shares of common stock by the selling stockholders may be higher or lower than the price you have paid, depending on many factors, some of which are beyond our control and may not be related to our operating performance. These fluctuations could cause you to lose part or all of your investment in our common stock. Those factors that could cause fluctuations include, but are not limited to, the following:

- · price and volume fluctuations in the overall stock market from time to time;
- · fluctuations in stock market prices and trading volumes of similar companies;
- · actual or anticipated changes in our earnings or fluctuations in our operating results or in the expectations of securities analysts;
- general economic conditions and trends;
- major catastrophic events;
- sales of large blocks of our stock;
- · departures of key personnel;
- · changes in the regulatory status of our product candidates, including results of our clinical trials;
- · events affecting Penn or any future collaborators;
- · announcements of new products or technologies, commercial relationships or other events by us or our competitors;
- · regulatory developments in the United States and other countries;
- failure of our common stock to be listed quoted on the Nasdaq Small Cap Market, American Stock Exchange, OTC Bulletin Board or other national market system;
- · changes in accounting principles; and
- · discussion of us or our stock price by the financial and scientific press and in online investor communities.

In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Due to the potential volatility of our stock price, we may therefore be the target of securities litigation in the future. Securities litigation could result in substantial costs and divert management's attention and resources from our business.

# If additional authorized shares of our common stock available for issuance or shares eligible for future sale were introduced into the market, it could hurt our stock price.

We are authorized to issue 500,000,000 shares of common stock. As of March 31, 2005, there were an aggregate of 59,374,162 shares of our common stock issued and outstanding on a fully diluted basis. In addition, 2,341,198 shares of our common stock may be issued upon the exercise of currently outstanding stock options and 20,509,220 shares of common stock may be issued upon the exercise of substantial amounts of the common stock in the public market by these holders or perceptions that such sales may take place may lower the common stock's market price.

Currently, holders of 15,597,723 shares of our common stock are subject to a standstill agreement. Pursuant to the standstill agreement, such holders agree not to effect any sale, transfer or distribution of his, her or its equity securities in us, or any securities convertible into or exchangeable or exercisable for such securities, during the period from the November 12, 2004 until the earlier of (i) the date that this registration statement has been filed with and declared effective by the Securities and Exchange Commission ("SEC") and (ii) the first year anniversary of the Private Placement, unless (a) such sale, transfer or distribution is approved in writing by a majority of the investors in the Private Placement, and (b) the transferee of such sold, transferred or distributed securities agrees in writing to be bound by the terms of the standstill agreement to the same extent as if they had originally been a party hereto.

### Our common stock is considered to be "penny stock".

Our common stock may be deemed to be "penny stock" as that term is defined in Rule 3a51-1, promulgated under the Securities and Exchange Act of 1934, as amended (the "Exchange Act"). Penny stocks are stocks:

- with a price of less than \$5.00 per share;
- · that are not traded on a "recognized" national exchange;
- $\cdot$  whose prices are not quoted on the NASDAQ automated quotation system; or
- of issuers with net tangible assets less than \$2,000,000 (if the issuer has been in continuous operation for at least three years) or \$5,000,000 (if in continuous operation for less than three years), or with average revenue of less than \$6,000,000 for the last three years.

Section 15(g) of the Exchange Act and Rule 15g-2 promulgated thereunder require broker-dealers dealing in penny stocks to provide potential investors with a document disclosing the risks of penny stocks and to obtain a manually signed and dated written receipt of the document before effecting any transaction in a "penny stock" for the investor's account. We urge potential investors to obtain and read this disclosure carefully before purchasing any shares that are deemed to be "penny stock."

Rule 15g-9 promulgated under the Exchange Act requires broker-dealers in penny stocks to approve the account of any investor for transactions in such stocks before selling any "penny stock" to that investor. This procedure requires the broker-dealer to:

- · obtain from the investor information about his or her financial situation, investment experience and investment objectives;
- reasonably determine, based on that information, that transactions in penny stocks are suitable for the investor and that the investor has enough knowledge and experience to be able to evaluate the risks of "penny stock" transactions;
- · provide the investor with a written statement setting forth the basis on which the broker-dealer made his or her determination; and
- receive a signed and dated copy of the statement from the investor, confirming that it accurately reflects the investor's financial situation, investment experience and investment objectives.

Compliance with these requirements may make it harder for investors in our common stock to resell their shares to third parties. Accordingly, our common stock should only be purchased by investors, who understand that such investment is a long-term and illiquid investment, and are capable of and prepared to bear the risk of holding the common stock for an indefinite period of time.

## We may incur increased costs as a result of recently enacted and proposed changes in laws and regulations relating to corporate governance matters.

Recently enacted and proposed changes in the laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act of 2002 and rules adopted or proposed by the SEC and by the Nasdaq Stock Market, will result in increased costs to us as we evaluate the implications of these laws and regulations and respond to their requirements. These laws and regulations could make it more difficult or more costly for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers. We are presently evaluating and monitoring developments with respect to these laws and regulations and cannot predict or estimate the amount or timing of additional costs we may incur to respond to their requirements.

## A limited public trading market may cause volatility in the price of our common stock.

We have applied to have our common stock quoted on the OTC Bulletin Board. The quotation of our common stock on the OTC Bulleting Board does not assure that a meaningful, consistent and liquid trading market currently exists, and in recent years such market has experience extreme price and volume fluctuations that have particularly affected the market prices of many smaller companies like us. Our common stock is thus subject to this volatility. Sales of substantial amounts of common stock, or the perception that such sales might occur, could adversely affect prevailing market prices of our common stock and our stock price may decline substantially in a short time and our shareholders could suffer losses or be unable to liquidate their holdings.

#### There is no assurance of an established public trading market.

A regular trading market for our common stock may not be established or sustained in the future. The NASD has enacted recent changes that limit quotation on the OTC Bulletin Board to securities of issuers that are current in their reports filed with the SEC. The effect on the OTC Bulletin Board of these rule changes and other proposed changes cannot be determined at this time. The OTC Bulletin Board is an inter-dealer, over-the-counter market that provides significantly less liquidity than the NASDAQ Stock Market. Quotes for stocks included on the OTC Bulletin Board are not listed in the financial sections of newspapers as are those for the NASDAQ Stock Market. Therefore, prices for securities traded solely on the OTC Bulletin Board may be difficult to obtain and holders of common stock may be unable to resell their securities at or near their originial offering price or at any price. Market prices for our common stock will be influenced by a number of factors, including:

- · The issuance of new equity securities pursuant to a future offering;
- · Changes in interest rates;
- · Competitive developments, including announcements by competitors of new products or services or significant contracts, acquisitions, strategic partnerships, joint ventures or capital commitments;
- · Variations in quarterly operating results
- · Change in financial estimates by securities analysts;

- The depth and liquidity of the market for our common stock;
- · Investor perceptions of our company and the technologies industires generally; and
- · General economic and other national conditions.

We have applied to have our common stock quoted on the OTC Bulletin Board. In addition we are subject to a covenant to use our best efforts to apply to be listed on the American Stock Exchange or quoted on the Nasdaq National Stock Market. We cannot assure you that we will be successful in obtaining approval for such applications.

#### We may not be able to achieve secondary trading of our stock in certain states because our common stock is not nationally traded.

Because our common stock is not approved for trading on the Nasdaq National Market or listed for trading on a national securities exchange, our common stock is subject to the securities laws of the various states and jurisdictions of the United States in addition to federal securities law. This regulation covers any primary offering we might attempt and all secondary trading by our stockholders. While we intend to take appropriate steps to register our common stock or qualify for exemptions for our common stock, in all of the states and jurisdictions of the United States, if we fail to do so the investors in those jurisdictions where we have not taken such steps may not be allowed to purchase our stock or those who presently hold our stock may not be able to resell their shares without substantial effort and expense. These restrictions and potential costs could be significant burdens on our stockholders.

## Our executive officers, directors and principal stockholders control our business and may make decisions that are not in our best interests.

Our officers, directors and principal stockholders, and their affiliates, in the aggregate, beneficially own approximately 63.79% of the outstanding shares of our common stock on a fully diluted basis. As a result, such persons, acting together, have the ability to substantially influence all maters submitted to our stockholders for approval, including the election and removal of directors and any merger, consolidation or sale of all or substantially all of our assets, and to control our management and affairs. Accordingly, such concentration of ownership may have the effect of delaying, deferring or preventing a change in discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of our business, even if such a transaction would be beneficial to other stockholders.

## Sales of additional equity securities may adversely affect the market price of our common stock and your rights in us may be reduced.

The Selling Stockholders hereunder have the right to register securities for resale that they hold pursuant to registration rights agreements. We expect to continue to incur product development and selling, general and administrative costs, and in order to satisfy our funding requirements, we will need to sell additional equity securities, which may be subject to similar registration rights; provided, that the Selling Stockholders consent to such registration rights. The sale or the proposed sale of substantial amounts of our common stock in the public markets may adversely affect the market price of our common stock and our stock price may decline substantially. Our stockholders may experience substantial dilution and a reduction in the price that they are able to obtain upon sale of their shares. Also, any new equity securities issued may have greater rights, preferences or privileges than our existing common stock.

#### Additional authorized shares of common stock available for issuance may adversely affect the market.

We are authorized to issue 500,000,000 shares of our common stock. As of January 31, 2005, we had 36,690,056 shares of our common stock issued and outstanding, excluding shares issuable upon exercise of our outstanding warrants and options. As of January 31, 2005, we had outstanding 2,182,894 options to purchase shares of our common stock at a weighted exercise price of \$0.40 per share and outstanding warrants to purchase 20,302,582 shares of our common stock, with exercise prices ranging from \$0.1952 to \$0.40 per share. Pursuant to our 2004 Stock Option Plan, 2,381,525 shares of common stock are reserved for issuance under the plan. To the extent the shares of common stock are issued or options and warrants are exercised, holders of our common stock will experience dilution. In addition, in the event of any future financing of equity securities or securities convertible into or exchangeable for, common stock, holders of our common stock may experience dilution.

## Shares eligible for future sale may adversely affect the market.

From time to time, certain of our stockholders may be eligible to sell all or some of their shares of common stock by means of ordinary brokerage transactions in the open market pursuant to Rule 144 ("Rule 144") promulgated under the Securities Act of 1933, as amended (the "Securities Act of 1933"), subject to certain limitations. In general, pursuant to Rule 144, a stockholder (or stockholders whose shares are aggregated) who has satisfied a one-year holding period may, under certain circumstances, sell within any three-month period a number of securites which does not exceed the greater of 1% of the then outstanding shares of common stock or the average weekly trading volume of the class during the four calendar weeks prior to such sale. Rule 144 also permits, under cetain circumstances, the sale of securities, without any limitations, by a non-affiliate of our company who has satisfied a two-year holding period. Any substantial sale of our common stock pursuat to Rule 144 or pursuant ot any resale prospectus may have an adverse effect on the market price of our securities.

Holders of 17,734,165 shares of our common stock and 2,808,434 shares of our common stock underlying exercisable warrants are subject to a standstill agreement. Pursuant to the standstill agreement, such holders agree not to effect any sale, transfer or distribution of his, her or its equity securities in us, or any securities convertible into or exchangeable or exercisable for such securities, during the period from the November 12, 2004 until the earlier of (i) the date that this registration statement has been filed with and declared effective by the SEC and (ii) the first year anniversary of the Private Placement, unless (a) such sale, transfer or distribution is approved in writing by a majority of the investors in the Private Placement, and (b) the transferee of such sold, transferred or distributed securities agrees in writing to be bound by the terms of the standstill agreement to the same extent as if they had originally been a party hereto.

An aggregate of 56,320,644 shares of common stock are being registered with the SEC in the registration statement of which this prospectus forms a part. These shares would otherwise be eligible for future sale under Rule 144 after passage of the minimum one year holding period for holders who are not officers, directors or affilites of the Company. The registration and subsequent sales of such shares of common stock will likely have an adverse effect on the market price of our common stock when it commences to trade.

# We are able to issue shares of preferred stock with rights superior to those of holders of our common stock. Such issuances can dilute the tangible net book value of shares of our common stock.

Our Articles of Incorporation provide for the authorization of 5,000,000 shares of "blank check" preferred stock. Pursuant to our Articles of Incorporation, our Board of Directors is authorized to issue such "blank check" preferred stock with rights that are superior to the rights of stockholders of our common stock, at a purchase price then approved by our Board of Directors, which purchase price may be substantially lower than the market price of shares of our common stock, without stockholder approval.

## We do not intend to pay dividends.

We have never declared or paid any dividends on our securities. We currently intend to retain our earnings for funding growth and, therefore, do not expect to pay any dividends in the foreseeable future.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. We have based these forward-looking statements on our current expectations and projections about future events. These statements include, but are not limited to:

- statements as to the anticipated timing of clinical studies and other business developments;
- statements as to the development of new products;
- expectations as to the adequacy of our cash balances to support our operations for specified periods of time and as to the nature and level of cash expenditures; and
- expectations as to the market opportunities for our products, as well as our ability to take advantage of those opportunities.

These statements may be found in the sections of this prospectus entitled "Prospectus Summary," "Risk Factors", "Management's Discussion and Analysis of Financial Condition and Results of Operations and Plan of Operations", and "Business," as well as in this prospectus generally. Actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including all the risks discussed in "Risk Factors" and elsewhere in this prospectus.

In addition, statements that use the terms "can," "continue," "could," "may," "potential," "predicts," "should," "will," "believe," "expect," "plan," "intend," "estimate," "anticipate," "scheduled" and similar expressions are intended to identify forward-looking statements. All forward-looking statements in this prospectus reflect our current views about future events and are based on assumptions and are subject to risks and uncertainties that could cause our actual results to differ materially from future results expressed or implied by the forward-looking statements. Many of these factors are beyond our ability to control or predict. Forward-looking statements do not guarantee future performance and involve risks and uncertainties. Actual results will differ, and may differ materially, from projected results as a result of certain risks and uncertainties. The risks and uncertainties include, without limitation, those described under "Risk Factors" and those detailed from time to time in our filings with the SEC, and include, among others, the following:

- · Our limited operating history and ability to continue as a going concern;
- · Our ability to successfully develop and commercialize products based on our therapies and the Listeria System;
- A lengthy approval process and the uncertainty of FDA and other government regulatory requirements may have a material adverse effect on our ability to commercialize our aplications;
- Clinical trials may fail to demonstrate the safety and effectiveness of our applications or therapies, which could have a material adverse effect on our ability to obtain government regulatory approval;
- The degree and nature of our competition;
- · Our ability to employ and retain qualified employees; and

The other factors referenced in this prospectus, including, without limitation, under the section entitled "Risk Factors", "Management's Discussion and Analysis of Financial Condition and Results of Operations and Plan of Operations", and Business".

These risks are not exhaustive. Other sections of this prospectus may include additonal factors which could adversely impact our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time and it is not possible for our management to predict all risk factors, nor can we assess the impact of all factors on our business or to the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. Given these risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results. These forward-looking statements are made only as of the date of this prospectus. Except for our ongoing obligation to disclose material information as required by federal securities laws, we do not intend to update you concerning any future revisions to any forward-looking statements or circumstances occurring after the date of this prospectus.

### USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares of common stock by the selling stockholders, but we will receive funds from the exercise of warrants held by selling stockholders, if exercised for cash.

## MARKET FOR COMMON STOCK AND RELATED STOCKHOLDER MATTERS

Prior to March 31, 2005, there is no record of any quotes in the Pink Sheets or OTC Bulletin Board and according to our records no public sales of our securities have occurred.

At March 31, 2005, there were approximately 84 holders of our common stock.

## **DIVIDEND POLICY**

We have not declared nor paid any cash dividend on our common stock, and we currently intend to retain future earnings, if any, to finance the expansion of our business, and we do not expect to pay any cash dividends in the foreseeable future. The decision whether to pay cash dividends on our common stock will be made by our Board of Directors, in their discretion, and will depend on our financial condition, operating results, capital requirements and other factors that our Board of Directors considers significant.

## DILUTION

We are only registering shares of common stock already outstanding and held by selling stockholders under this prospectus. As such, purchasers of shares of common stock sold under this prospectus shall not experience any immediate dilution as a result of or upon such purchase.

## CAPITALIZATION

The following table sets forth as of January 31, 2005, our actual capitalization. This table should be read in conjunction with the information contained in "Management's Discussion and Analysis of Financial Condition and Results of Operations and Plan of Operations" and the consolidated financial statements and the notes thereto included elsewhere in this prospectus.

	Actual (Unaudited)
Long-term debt	\$ 230,000
Stockholders' equity (deficit):	
Common stock	36,690
Additional paid in capital	4,830,116
Deferred compensation	
Retained earnings (deficit)	(\$1,903,996)
Total stockholders equity	\$ 2,962,810
Total capitalization	\$ 3,192,810*

\* Not including short term payables.

## SUMMARY CONSOLIDATED FINANCIAL DATA OF ADVAXIS

On November 12, 2004, we acquired Advaxis, Inc., a Delaware corporation through the Share Exchange. The transaction was accounted for as a reverse acquision whereby Advaxis became acquiror for accounting purposes. Accordingly, the historical financial statements of Advaxis will be our financial statements for reporting purposes.

The following condensed statement of operations data for the period from March 1, 2002 (inception) to December 31, 2002, and the year ended December 31, 2003, and the selected balance sheet data at December 31, 2002 and 2003, are derived from Advaxis' financial statements and the related notes, audited by Goldstein Golub Kessler LLP, Certified Public Accountants, 1185 Avenue of the Americas, Suite 500, New York, NY 10036-2602, Advaxis' independent registered public accounting firm. The financial statements and the related notes as of December 31, 2002 and 2003 and for periods ended December 31, 2002 and 2003 are included elsewhere herein. The unaudited selected statement of operations data for the three months ended January 31, 2004 and 2005, and the unaudited consolidated selected balance sheet data at January 31, 2005, are derived from Advaxis' unaudited financial statements, which have been prepared on a basis consistent with Advaxis' audited financial statements and, in the opinion of management, include all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of Advaxis' financial position and results of operations. The results of operations for any interim period are not necessarily indicative of results to be expected for the entire year. The following data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations and Plan of Operations" and our financial statements and the related notes included elsewhere in this prospectus.

Statement of Operations Data:		Period from Iarch 1, 2002 inception) to December 31,	 Year ended December 31,	 Three Months E	<u> </u>
		2002	 2003	 2004	 2005
Total operating expenses	\$	167,902	\$ 897,076	\$ 132,241	\$ 245,126
Interest expense (income)			 17,190	10,655	2,968
Other income		966	4,521	(430)	(2,739)
Provision for income taxes					
Net loss	\$	(166,936)	\$ (909,745)	 (\$142,466)	\$ (745,355)
Loss per Share Information:					
Basic and diluted net loss per share	\$	(0.01)	\$ (0.05)	\$ (0.01)	\$ (0.01)

	D	ecember 31,	 December 31,	 January 31,	
Balance Sheet Data:				(unaudited)	
		2002	 2003	 2005	
Cash and cash equivalents	\$	204,382	\$ 47,160	\$ 3,217,430	
Intangible assets			\$ 277,243	\$ 666,447	
Total assets	\$	204,382	\$ 324,403	\$ 3,886,327	
Total liabilities	\$	125,825	\$ 1,131,138	\$ 923,517	
Stockholders' equity (deficiency)		78,557	(806,735)	\$ (2,962,810)	

### MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS AND PLAN OF OPERATIONS

This Management's Discussion and Analysis of Financial Condition and Results of Operations and Plan of Operations and other portions of this prospectus contain forward-looking information that involve risks and uncertainties. Our actual results could differ materially from those anticipated by the forward-looking information. Factors that may cause such differences include, but are not limited to, availability and cost of financial resources, product demand, market acceptance and other factors discussed in this prospectus under the heading "Risk Factors". This Management's Discussion and Analysis of Financial Condition and Results of Operations and Plan of Operations should be read in conjunction with our financial statements and the related notes included elsewhere in this prospectus.

#### Overview

We are a biotechnology company utilizing multiple mechanisms of immunity with the intent to develop cancer vaccines that are more effective and safer than existing vaccines. We believe that by using our licensed Listeria System to engineer a live attenuated Listeria monocytogenes bacteria to secrete a protein sequence containing a tumor-specific antigen, we will force the body's immune system to process and recognize the antigen as if it were foreign, creating the immune response needed to attack the cancer. The licensed Listeria System, developed at Penn over the past 10 years, provides a scientific basis for believing that this therapeutic approach induces a significant immune response to the tumor. Accordingly, we believe that the Listeria System is a broadly enabling platform technology that can be applied in many cancers, infectious diseases and auto-immune disorders.

Our therapeutic approach is based upon, and we have obtained an exclusive license with respect to, the innovative work of Yvonne Paterson, Ph.D., Professor of Microbiology at Penn involving the creation of genetically engineered Listeria that stimulate the innate immune system and induce an antigen-specific immune response involving humoral and cellular components.

We have focused our initial development efforts on six lead compounds and anticipate commencing a Phase I clinical study of Lovaxin C, a potential cervical and neck cancer vaccine, in the first quarter of 2005. See "Business - Research and Development Program".

We were originally incorporated in the state of Colorado on June 5, 1987 under the name Great Expectations, Inc. We were administratively dissolved January 1, 1997 and reinstated June 18, 1998 under the name Great Expectations and Associates, Inc. In 1999, we became a reporting company under the Securities Exchange Act of 1934, as amended. We were a publicly-traded "shell" company in November 2004 without any business. On November 12, 2004, we acquired Advaxis through the Share Exchange, as a result of which Advaxis become our wholly-owned subsidiary and our sole operating company. For financial reporting purposes, we have treated the Share Exchange as a recapitalization. As a result of the foregoing as well as the fact that the Share Exchange is treated as a recapitalization of Advaxis rather than as a business combination, the historical financial statements of Advaxis became our historical financial statements after the Share Exchange.

On November 12, 2004, December 8, 2004 and January 4, 2005, we closed a private offering of an aggregate of 11,334,495 shares of our common stock and warrants to purchase an aggregate of 11,334,495 shares of our common stock resulting in aggregate net proceeds of approximately \$3,253,000. Such offering was solely to "accredited investors", as defined in Rule 501(a) of Regulation D under the Securities Act of 1933, through the Placement Agent. See "Management's Discussion and Analysis of Financial Condition and Results of Operations and Plan of Operations - Liquidity and Capital Resources".

On November 12, 2004 we converted \$595,000 of aggregate principal promissory notes plus accrued interest outstanding into an aggregate of 2,136,441 shares of our common stock and warrants to purchase 2,223,549 shares of our common stock.

On January 12, 2005, we closed a private offering of 3,832,753 shares of our common stock and warrants to purchase 3,832,753 shares of our common stock resulting in aggregate net proceeds of approximately \$1,100,000. Such offering was to a single "accredited investor", as defined in Rule 501(a) of Regulation D under the Securities Act of 1933. See "Management's Discussion and Analysis of Financial Condition and Results of Operations and Plan of Operations - Liquidity and Capital Resources".

To date we have been in the development stage. During the year ended December 31, 2003 and the three months ended January 31, 2005, we had no customers and focused our efforts on research and development related to our product candidates, capital raising and formation, and activities relating to the Share Exchange. During these periods, our net loss was \$909,745 and \$245,355, respectively. As of December 31, 2003 and January 31, 2005, we had a working capital (deficit) of (\$997,184) and \$2,523,913, respectively and an accumulated deficit of \$1,076,861 and (1,903,996), respectively.

#### Plan of Operations

We intend to use the proceeds of the Private Placement closed on November 12, 2004, December 8, 2004 and January 4, 2005 and the proceeds of the offering closed on January 12, 2005 to conduct a Phase I clinical trial in cervical cancer using Lovaxin C, one of our lead product candidates in development using our Listeria System. We intend to expand our research and development team and further the development of the product candidates. We also intend to deploy a portion of the funds in expanding our manufacturing capabilities and in strategic activities. Our corporate staff will be responsible for the general and administrative activities.

During the next 12 to 24 months, we anticipate that our strategic focus will be to achieve several objectives. Our foremost objectives are as follows and are further described under "Business - Strategy":

- Initiate and complete phase I clinical study of Lovaxin C;
- Continue pre-clinical development of our products;
- Continue research to expand our technology platform.

#### Accounting Policies; Impact of Growth

Below is a brief description of basic accounting principles which we have adopted in determining our recognition of expenses, as well as a brief description of the effects that our management believes that our anticipated growth will have on our revenues and expenses in the future 12 months.

*Revenues.* We do not anticipate that we will record any material revenues during at least the year ending December 31, 2005. When we recognize revenues, we anticipate that the revenue sources will be principally comprised of grants and licensing fees.

Expenses. We recorded operating expenses for the year ended December 31, 2003 and the nine months ended September 30, 2004 of \$897,076 and \$697,012, respectively.

The preparation of financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, based on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policy involves significant estimate and judgment. We amortize trademark and patent costs over their estimated useful lives. We may be required to adjust these lives based on advances in science and competitor actions. We review the recorded amounts of trademarks and patents at each period end to determine if their carrying amount is still recoverable based on expectations regarding potential licensing of the intangibles or sales of related products. Such an assessment, in the future, may result in a conclusion that the assets are impaired, with a corresponding charge against earnings.

Due to the limited nature of our operations, we do not identify any other accounting policies involving estimates or assumptions that are material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and where the impact of the estimates and assumptions on financial condition or operating performance is material.

In accordance with Securities and Exchange Commission Staff Accounting Bulletin (SAB) No. 104, revenue from license fees and grants is recognized when the following criteria are met; persuasive evidence of an arrangement exists, services have been rendered, the contract price is fixed or determinable, and collectibility is reasonably assured. In licensing arrangements, delivery does not occur for revenue recognition purposes until the license term begins. Nonrefundable upfront fees received in exchange for products delivered or services performed that do not represent the culmination of a separate earnings process will be deferred and recognized over the term of the agreement.

For revenue contracts that contain multiple elements, we will determine whether the contract includes multiple units of accounting in accordance with EITF No. 00-21, Revenue Arrangements with Multiple Deliverables. Under that guidance, revenue arrangements with multiple deliverables are divided into separate units of accounting if the delivered item has value to the customer on a standalone basis and there is objective and reliable evidence of the fair value of the undelivered item.

Research and Development. During the year ended December 31, 2003 and the nine months ended September 30, 2004, we recorded research and development expenses of \$491,508 and \$228,880, respectively. Such expenses were principally comprised of manufacturing scale up and process development, license fees, sponsored research and consulting. We recognize research and development expenses as incurred.

During the year ending December 31, 2005 and beyond, we anticipate that our research and development expenses will increase as a result of our expanded development and commercialization efforts related to clinical trials, product development, and development of strategic and other relationships that will be required ultimately for the licensing, manufacture and distribution of our product candidates. We regard four of our product candidates as major research and development projects. The timing, costs and risks of those projects are as follows:

## Lovaxin C - Phase I trial Summary Information

- · Cost incurred to date: approximately \$700,000
- · Estimated future costs: \$1,000,000
- · Anticipated completion date: second quarter of 2006
- · Risks and uncertainties:
  - the FDA (or relevant foreign regulatory authority) may not approve the study
  - any adverse event in a patient in the trial
  - difficulty in recruiting patients
  - delays in the program
  - strong side effects in patients in the trial



- · Commencement of material cash flows:
  - Unknown at this stage and dependent upon a licensing deal or pursuant to a marketing collaberation subject to regulatory approval to market and sell the product.

## Lovaxin B - Phase I trial Summary Information

- · Cost incurred to date: \$100,000
- · Estimated future costs: \$1,800,000
- · Anticipate completion dates: second quarter of 2007
- · Risks and uncertainties:
  - Obtaining favorable animal data
  - Proving low toxicity in animals and obtaining favorable animal data
  - Manufacturing scale up to GMP level
  - $-\,$  FDA (or foreign regulatory authority) may not approve the study
  - The occurrence of an adverse event in a patient
  - Delays in the program
- $\cdot\,$  Commencement of material cash flows:
  - Unknown at this stage, upon a licensing deal or pursuant to a marketing collaboration subject to regulatory approval to market and sell the product.

## Lovaxin T - Phase I trial Summary Information

- $\cdot\,$  Cost incurred to date: None
- · Estimated future costs: \$1,500,000
- · Anticipate completion dates: third quarter of 2007
- · Risks and uncertainties:
  - Obtaining favorable animal data
  - Proving low toxicity in animals and obtaining favorable animal data
  - Manufacturing scale up to GMP levels
  - FDA (or foreign regulatory authority) may not approve the study initiation
  - Adverse event in a patient in the program
  - Delays in the program
- · Commencement of material cash flows:
  - Unknown at this stage and dependent upon a licensing deal or pursuant to a maekting collaberation subject to regulatory approval to market and sell the product.

## Lovaxin NY - Phase I trial Summary Information

· Cost incurred to date: \$100,000



- · Estimated future costs: Unknown at this stage.
- $\cdot$  Anticipated completion dates: Unknown at this stage.
- · Risks and uncertainties:
  - Obtaining favorable animal data
  - Proving low toxicity in animals and obtaining favorable animal data
  - Manufacturing scale up to GMP levels
  - $-\,$  FDA (or foreign regulatory authority) may not approve the study
  - The occurrence of an adverse event in a patient in the program
  - $-\,$  Delays in the program
- · Commencement of material cash flows:
  - Unknown at this stage and dependent upon a licensing deal or pursuant to a marketing collaberation subject to regulatory approval to market and sell the product.

<u>General and Administrative Expenses</u>. During the year ended December 31, 2003 and the nine months ended September 30, 2004, we recorded general and administrative expenses of \$405,568 and \$468,132, respectively. General and administrative costs primarily include the salaries for executive, finance, facilities, insurances, accounting and legal assistance, as well as other corporate and administrative functions that serve to support Advaxis' current and our future operations and provide an infrastructure to support this anticipated future growth. During the year ending December 31, 2005 and beyond, we anticipate that our general and administrative costs will increase due to the increased compliance requirements, including, without limitation, legal, accounting, and insurance expenses, arising out of complying with periodic reporting and other regulations applicable to public companies.

Interest Expense. During the year ended December 31, 2003 and the nine months ended September 30, 2004, we recorded interest expense of \$17,190 and \$46,048, respectively. Interest expense, relates primarily to our convertible promissory notes which have been converted into Units at the initial closing of our Private Placement on November 12, 2004. Each Unit consisting of 87,108 shares of common stock and warrants to purchase 87,108 shares of common stock.

Recently Issued Accounting Pronouncements. In December 2004, the Financial Accounting Standards Board issued FASB Statement No. 123 (revised 2004), share-based payment. This statement requires that compensation cost relating to share based payment transactions be recognized in financial statements. The cost will be measured based on the fair value of the equity or liability instruments issued. At present, we are unable to determine what effect, if any, the adoption of FASB Statement No. 123 (revised 2004) will have on our financial statements.

## **Results of Operations**

## Three Months Ended January 31, 2005 Compared to the Three Months Ended January 31, 2004

Research and Development Expenses. Research and development expenses increased by \$132,109, or 152.13%, from \$86,842 for the three months ended January 31, 2004 to \$218,951 for the three months ended January 31, 2005. This decrease was principally attributable to the following:

an increase in our related manufacturing expenses of \$189,947 or 10,629% from \$1,787 to \$191,734; such decrease reflects the delay in the manufacturing program during 2004 because of delays in funding;

an increase in expenses related to toxicology studies from \$0 to \$27,216; such increase reflects the initiation of toxicology studies by Pharm Olam in connection with our Lovaxin C product candidates, and the payment of deferred license fees to Penn;

*General and Administrative Expenses.* General and administrative expenses descreased by \$19,224 or 73.44% from \$45,399 for the three months ended January 31, 2004 to \$26,175 for the three months ended January 31, 2005. This decrease is primarily attributable to the following:

- employee related expenses increased by \$18,720, or 43.90%, from \$42,670 for the three months ended January 31, 2004 to \$61,390 for the three months ended January 31, 2005 arising from a bonus to Mr. Derbin, the Chief Executive Officer, in stock;
- professional fees decreased by \$89,670 from \$14,102 for the three-months ended January 31, 2004 to \$(75,568) for the three months ended January 31, 2005 principally due to (a) an increase in consulting fees from \$13,000 to \$63,259, and (b) a decrease in legal fees from \$832 for the three-months ended January 31, 2004 to (\$166,346) for the three months ended January 31, 2005, as a result of a settlement with the Company's Intellectual Property law firm which resulted in a reduction by approximately \$177,000 of accounts payable previously recorded as legal fee expense; and
- Option expense was reduced from \$8,484 for the three months ended January 31, 2004 to \$0 for the three months ended January 31, 2005.

The following is a summary of the principal general and administrative expenses for the three months ending January 31, 2004 and 2004 and the three months ending January 31, 2005.

General and Administrative Expenses	Three Months J January 3			
	2005	2004	Net Change	% Change
Option expense	-	8,484	(8,484)	-100.00%
Accounting	21,853	-	21,853	100.00%
Consulting Fees	63,250	13,000	51,250	394.20%
Legal Fees	(166,346)	832	(167,178)	-20093.50%
Payroll Fees	371	271	100	37.00%
Insurance	5,398	-	5,398	100.00%
Employee Costs	61,391	42,670	18,720	43.90%

## Interest Expenses.

Interest expense decreased by \$7,687, or 72.14%, from \$10,655 for the three months ended January 31, 2004 to \$2,968 for the three months ended January 31, 2005. The decrease results primarily from a reduction on interest payable on certain notes which were converted on November 12, 2004.

#### Other Income.

Other Income increased by \$2,303, or 536%, from \$430 for the three months ended January 31, 2004 to \$2,739 for the three months ended January 31, 2005. The increase results primarily from an increase in interest paid to the company on cash deposits held by the Company.

No provision for income taxes was made for the three months ended January 31, 2004 or 2005 due to significant tax losses during and prior to such periods.

## Year ended December 31, 2003 and the period from March 1, 2002 (inception) to December 31, 2002

Research and Development Expenses. Research and development expenses increased by \$440,609, or 865.6%, from \$50,899 for the period from March 1, 2002 (inception) through December 31, 2002 to \$491,508 for the year ended December 31, 2003. This increase was principally attributable to the increase in outside research expenses increased by \$33,838, or 53%, from \$63,468 for the period from March 1, 2002 (inception) through December 31, 2002 to \$97,306 for the year ended December 31, 2003 due to increased research fees due to Penn relating to an increased research program, the initiation of our manufacturing scale up program with Cobra Biomanufacturing PLC in year 2003 where such plan did not yet exist in year 2002 as well as the hire of certain pre clinical and regulatory consultants in early 2003 such as Therrimune Research Corporation, Dr. Bruce Mackler and AccessBio.

*General and Administrative Expenses*. General and administrative expenses increased by \$288,565 or 246.6% from \$117,003 for the period from March 31, 2002 (inception) through December 31, 2002 to \$405,568 for the year ended December 31, 2003. This increase is primarily attributable to the increase in professional fees increased by \$316,457, or 328.85%, from \$96,231 for the period from March 1, 2002 (inception) to December 31, 2002 to \$412,688 for the year ended December 31, 2003 due to increased consulting and legal requirements and increased consulting fees paid to financial advisors in 2003

*Interest Expenses.* Interest expense increased by \$17,190 or 100% from \$0 for the period from March 31, 2002 (inception) through December 31, 2002 to \$17,190 for the year ended December 31, 2003. The increase results primarily from the interest attributable to notes issued during such later period.

No provision for income taxes was made for the period from March 31, 2002 (inception) through December 31, 2002 or the year ended December 31, 2003 due to significant tax losses incurred.

### Liquidity and capital resources

At December 31, 2003 and January 31, 2005, our cash was \$47,160 and \$3,217,430, respectively, and we had a working capital deficit of \$997,184 at December 31, 2003 and working capital of \$2,523,913 at January 31, 2005.

To date, our principal sources of liquidity has been cash provided by private offerings of our securities. These offering have been structured so as to be exempt from the prospectus delivery requirements under the Securities Act of 1933. Our principal uses of cash have been research and development and working capital. We anticipate these uses will continue to be our principal uses of cash in the future.

Although we believe that the net proceeds received by us from the Private Placement and the private offerings will be sufficient to finance our currently planned operations for approximately the next 12 to 24 months, we do not believe that these amounts will be sufficient to meet our longer-term cash requirements or our cash requirements for the commercialization of any of our existing or future product candidates. We will be required to issue equity or debt securities or to enter into other financial arrangements, including relationships with corporate and other partners, in order to raise additional capital. Depending upon market conditions, we may not be successful in raising sufficient additional capital for our long-term requirements. In such event, our business, prospects, financial condition and results of operations could be materially adversely affected.

The following factors, among others, could cause actual results to differ from those indicated in the above forward-looking statements: increased length and scope of our clinical trials, increased costs related to intellectual property related expenses, increased cost of manufacturing and higher consulting costs. These factors or additional risks and uncertainties not known to us or that we currently deem immaterial may impair business operations and may cause our actual results to differ materially from any forward-looking statement.

Although we believe the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. We are under no duty to update any of the forward-looking statements after the date of this prospectus to conform them to actual results or to make changes in our expectations.

We expect our future sources of liquidity to be primarily equity capital raised from investors, as well as licensing fees and milestone payments in the event we enter into licensing agreements with third parties, and research collaboration fees in the event we enter into research collaborations with third parties.

On November 12, 2004, we sold to accredited investors at an initial closing of the Private Placement 117 Units at \$25,000 per unit for an aggregate purchase price of \$2,925,000. Each Unit is comprised of (i) 87,108 shares of our common stock and (ii) a five-year warrant to purchase 87,108 shares of our common stock at an exercise price of \$0.40 per share. At the initial closing, the accredited investors received an aggregate of 10,191,638 shares of common stock and warrants to purchase 10,191,638 shares of common stock. In addition, on November 12, 2004, \$595,000 aggregate principal amount of convertible promissory notes of Advaxis, including accrued interest, were converted into units on the same terms as those upon which the Units sold. The holders of these notes received an aggregate of 2,136,441 shares of common stock and warrants to purchase 2,136,441 shares of common stock upon conversion of these notes plus accrued interest thereon.

On December 8, 2004, we sold to accredited investors at a second closing of the Private Placement 8 units for an aggregate purchase price of \$200,000. At such closing, the accredited investors received an aggregate of 696,864 shares of common stock and warrants to purchase 696,864 shares of Common Stock.

On January 4, 2005, we sold to accredited investors at a third closing of the Private Placement 5.12 Units for an aggregate purchase price of \$128,000. At such closing, the accredited investors received an aggregate of 445,993 shares of common stock and warrants to purchase 445,993 shares of Common Stock.

Pursuant to the terms of a investment banking agreement, dated March 19, 2004, by and between us and Sunrise Securities, Corp. ("Sunrise" or the "Placement Agent"), we issued to the Placement Agent and its designees an aggregate of 2,283,445 shares of common stock and warrants to purchase up to an aggregate of 2,666,900 shares of common stock. The shares were issued as part consideration for the services of Sunrise, as our placement agent in the Private Placement. In addition, we paid Sunrise a total cash fee of \$50,530.

On January 12, 2005, we sold to one accredited investor at a closing of a subsequent private placement offering 44 units for an aggregate purchase price of \$1,100,000. As with the Private Placement, each Unit issued and sold in this subsequent private placement was sold at \$25,000 per unit and is comprised of (i) 87,108 shares of our common stock, and (ii) a five-year warrant to purchase 87,108 shares of our common stock at an exercise price of \$0.40 per share. At such closing, the accredited investor received an aggregate of 3,832,752 shares of common stock.

We are party to a license agreement, dated June 17, 2002, as amended, between Advaxis and The Trustees of the University of Pennsylvania, pursuant to which Advaxis has agreed to pay \$525,000 over a four-year period as a royalty after the first commercial sale of our products covered by the license. Advaxis is also obligated to pay annual license maintenance fees under this agreement ranging from \$25,000 to \$125,000 per year after the first commercial sale of a product under the license, as well as pay up to \$482,000 to the licensor upon receiving financing. The amount due is contingent upon the size of the financing.

For a description of material employment agreements to which we are party, see "Certain Relationships and Related Party Transactions".

### **Critical Accounting Policies**

The preparation of financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, the Company evaluates its estimates, based on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

The Company believes the following critical accounting policy involves significant estimate and judgment. The Company amortizes trademark and patent costs over their estimated useful lives. The Company may be required to adjust these lives based on advances in science and competitor actions. The Company reviews the recorded amounts of trademarks and patents at each period end to determine if their carrying amount is still recoverable based on expectations regarding potential licensing of the intangibles or sales of related products. Such an assessment, in the future, may result in a conclusion that the assets are impaired, with a corresponding charge against earnings.

Due to the limited nature of the Company's operations, the Company has not identified any other accounting policies involving estimates or assumptions that are material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and where the impact of the estimates and assumptions on financial condition or operating performance is material.

# **Impact of Inflation**

We believe that our results of operations are not dependent upon moderate changes in inflation rates.



### BUSINESS

#### General

We are a development stage biotechnology company utilizing multiple mechanisms of immunity with the intent to develop cancer vaccines that are more effective and safer than existing vaccines. To that end, we have licensed rights from Penn to use the Listeria System to secrete a protein sequence containing a tumor-specific antigen. Using the Listeria System, we believe we will force the body's immune system to process and recognize the antigen as if it were foreign, creating the immune response needed to attack the cancer. Our licensed Listeria System, developed at Penn over the past 10 years, provides a scientific basis for believing that this therapeutic approach induces a significant immune response to a tumor. Accordingly, we believe that the Listeria System is a broadly enabling platform technology that can be applied to many types of cancers. In addition, we believe there may be useful applications in infectious diseases and auto-immune disorders.

The therapeutic approach that comprises the Listeria System is based upon the innovative work of Yvonne Paterson, Ph.D., Professor of Microbiology at Penn, involving the creation of genetically engineered Listeria that stimulate the innate immune system and induce an antigen-specific immune response involving humoral and cellular components. We have obtained the Penn License to exploit the Listeria System.

We have focused our initial development efforts upon cancer vaccines targeting cervical, breast, melanoma, ovarian, lung and other cancers. Our lead products in development are as follows:

<u>Product</u> Lovaxin C	Indication Cervical and head and neck cancers	<u>Stage</u> Pre-clinical; Phase I study in cervical cancer anticipated to commence in the first half of 2005*
Lovaxin B	Breast cancer and melanoma	Pre-clinical; Phase I study anticipated to commence in 2006
Lovaxin NY	Ovarian, melanoma and lung cancer	Pre-clinical; Phase I study anticipated to commence in 2006
Lovaxin W	Wilms tumor and leukemia	Pre-clinical; Phase I study anticipated to commence in 2006
Lovaxin T	Cancer through control of telomerase	Pre-clincial
Lovaxin H	Prophylactic vaccine for HIV (AIDS)	Pre-clincial

\* Possible delays of up to three months may occur based on the production schedule of Cobra Biomanufacturing PLC of material, the length of time for Pharm Olam to complete toxicology studies and the issuance of required regulatory approval. See "Business - Research and Development Programs".

Since our formation, we have had a history of losses which as of January 31, 2005 aggregate \$1,903,996, and because of the long development period for new drugs, we expect to continue to incur losses for several years. Our business plan to date has been realized by substantial outsourcing of virtually all major functions of drug development including scaling up for manufacturing, research and development, grant applications and others. The expenses of these outsourced services account for most of our accumulated loss. We cannot predict when, if ever, any of our product candidates will become commercially viable or FDA approved. Even if one or more of our products becomes commercially viable and receives FDA approval, we are not certain that we will ever become a profitable business.

During the next 12 to 24 months our strategic focus will be to achieve several objectives. The foremost of these objectives are as follows:

- Initiate and complete Phase I clinical study of Lovaxin C;
- · Continue the pre-clinical development of our product candidates, as well as continue research to expand our technology platform; and
- · Initiate strategic and development collaborations with biotechnology and pharmaceutical companies.

There are many potential obstacles to the implementation of our proposed strategy. Among the potential obstacles we may encounter with respect to the Phase I clinical study of Lovaxin C are: difficulty in recruiting patients for the study; a material, adverse medical result in a patient during the study; and extended time for FDA approval of the IND (or foreign regulatory authority approval) required to proceed with the test.

Among the potential obstacles which we may encounter with respect to continuing preclinical development of our product candidates such as Lovaxin B or T are ambiguous animal data not sufficient to establish a proof of concept; insufficient or adverse preclinical data on future products; and unexpected higher costs or preclinical studies.

Among the potential obstacles which we may encounter in establishing strategic collaborations are: we may be perceived by desirable potential partners as too early stage; we may need to demonstrate more human safety or efficicacy data; or our technology may be perceived as a high risk for patents or to the environment.

*Initiate and Complete Phase I Clinical Study of Lovaxin C.* We have had several meetings with the FDA and the Recombinant Advisory Committee of the National Institutes of Health (the "NIH") and have designed a Phase I clinical study, which is primarily a study of the safety of Lovaxin C. We plan to commence this clinical study in the first quarter 2005 and complete this clinical study by the first quarter of 2006. We anticipate that the study will be conducted on 20 to 30 patients with advanced cervical cancer.

We have demonstrated that the therapeutic response works in concept. In preparation for the commencement of our Phase I study of Lovaxin C, we have done the following:

- · optimized the Listeria strain to be used;
- identified and contracted with a manufacturing partner for material manufactured in accordance with "good manufacturing practices" or "GMP" as established by the FDA;
- · identified a principal investigator for the trial;
- written a protocol; and
- · commenced preparing an investigational new drug application, or IND, with an external consulting group.

Following the completion of the Phase I study and assuming that the results of this study are favorable, we intend to prepare Phase II clinical studies to demonstrate sufficient induction of immunity and therapeutic efficacy, as well as to optimize the dosage and dosing regimen for the final vaccine formulation. Thereafter, and assuming that the results of this study are favorable, we intend to conduct Phase III clinical studies to demonstrate safety, efficacy and the potency of the investigational vaccine. Such studies are expected to occur in the next five to ten years. Throughout this process, we will be meeting with the FDA prior to and at the conclusion of each phase to reach a consensus before initiating any studies, in order to minimize regulatory risks during this clinical development process.

At the conclusion of the Phase III studies, we intend to prepare and file a BLA with the FDA. Prior to submission of the BLA, we intend to seek Fast Track designation from the FDA, which shortens the internal FDA review process for the BLA to six months. As we accrue clinical data demonstrating the safety, efficacy and potency of the product in Phase I and II clinical studies we will also explore other regulatory approval options with the FDA that could expedite the licensure of the final vaccine.

Continue Pre-Clinical Development of Our Products, as well as Continued Research to Expand Our Technology Platform. We intend to continue to devote a substantial portion of our resources to the continued pre-clinical development of our product candidates as well as the continued research to expand our technology platform. Specifically, we intend to focus upon research relating to combining our Listeria System with new and additional tumor antigens which, if successful may lead to additional cancer vaccines and other therapeutic products. These activities will require significant financial resources, as well as areas of expertise beyond those readily available. In order to provide additional resources and capital, we may enter into research, collaborative, or commercial partnerships, joint ventures, or other arrangements with competitive or complementary companies, including major international pharmaceutical companies, or with universities, such as its relationship with Penn and UCLA. See "Business - Partnerships and Agreements - Penn".

### Background

#### Cancer

Despite tremendous advances in science, cancer remains a major health problem, and for many it continues to be the most feared of diseases. Although age-adjusted mortality rates for all cancer fell during the 1990's, particularly for the major cancer sites (lung, colorectal, breast, and prostate), mortality rates are still increasing in certain sites such as liver and non-Hodgkin's lymphoma. The American Cancer Society estimates that more than eight million Americans were treated for cancer in 1999. According to the HCUP, in 2000, treatment of the top five cancers resulted in \$10.8 billion in hospital costs.

Cancer is the second largest cause of death in the United States, exceeded only by heart disease. Approximately 1,268,000 new cases of cancer were expected to be diagnosed in 2001, and 553,400 Americans were expected to die from the disease. Since 1990, nearly 15 million new cases have been diagnosed. The NIH estimates the overall cost for cancer in the year 2000 at \$180.3 billion: \$60 billion for direct medical costs, \$15 billion for indirect morbidity costs (loss of productivity due to illness) and, \$105.2 billion for indirect mortality costs (cost of lost productivity due to premature death). (Source: cancer facts & figures 2001, American Cancer Society).

## Immune System and Normal Antigen Processing

Living creatures, including humans, are continually confronted with potentially infectious agents. The immune system has developed multiple mechanisms that allows the body to recognize these agents as foreign, and to target a variety of immunological responses, including innate, antibody, and cellular immunity, that mobilize the body's natural defenses against these foreign agents that will eliminate them. In this regard, there are a host of cells involved in the recognition of and response to antigens, substances, typically proteins, that are recognized by the body's immune system and generate an immune response. Antigens are frequently found on the outside of invading cells like bacteria, but can also be found on the body's own cells when they are either infected by a virus or transformed into a cancer cell.

The combination of the antibody (also called humoral) system and the cell mediated system results in the immune response. Different disorders need a different mix of responses to eliminate the problem, e.g., a streptococcal infection is typically attacked primarily by the humoral system, and a cancer cell is typically attacked by the cell mediated system.

The first step in recognizing a foreign antigen is antigen processing. When cells involved in the recognition and response encounter an antigen that they do not recognize, they ingest the antigen. The antigen is then cut into small pieces and the pieces are combined with proteins called "MHCs" and pushed out to the cell surface. On the cell surface, the antigen is then able to interact with certain classes of cells created by the immune system that produce the specialized cells needed to help in the production of antibodies and the induction of cytotoxic lymphocytes, primarily with antibodies. This system is called the exogenous pathway, since it is the prototypical response to an exogenous antigen like a bacteria.

There exists another pathway, called the endogenous pathway. In this system, when one of the body's cells begins to create unusual proteins, the protein is processed and expelled to the surface cell and is the cytoplasm into fragments. These are directed into the endoplasmic reticulum, where they bind major Historocompatibility Complex proteins, and then traffic to the cell surface. This signal then calls immune cells to come to the site of the infection and kill the cell. The endogenous pathway is used by the body to eliminate cells that are creating unusual proteins (e.g., cancer cells or cells infected with a virus).

In clinical cancer, the body does not recognize the cancer cells as foreign. Our technology forces the body to recognize tumor-associated or tumor-specific antigens as foreign, thus creating the immune response needed to attack the cancer. It does this by combining elements of the endogenous and exogenous pathways utilizing a number of biologic characteristics of the Listeria bacteria.

# **Mechanism of Action**

Listeria is a bacteria well known to medical science because it can cause an infection in humans. When Listeria enters the body, it is seen as foreign by the antigen processing cells and ingested into cellular compartments called lysosomes, whose destructive enzymes kill most of the bacteria. A certain percentage of these bacteria, however, are able to break out of the lysosomes and enter into the cytoplasm of the cell, where they are relatively safe from the immune system. The bacteria multiply in the cell, and the Listeria is able to force the cell to move the bacteria to its cell surface so it can push into neighboring cells and spread. In this way, Listeria can cause various clinical conditions, including sepsis, meningitis and placental infections in pregnant women.

Listeria produces a substance known as listeriolysin ("LLO"), a protein that cuts a hole in the membrane of the lysosome and allows the bacteria to escape into the relatively safe cytoplasm. Once in the cytoplasm, however, LLO is also capable of cutting a hole in the cell membrane. This would destroy the cell, and spill the bacteria back out into the space between the cells, where it would be exposed to more immune cell attacks and destruction. To prevent this, LLO has a sequence of approximately 30 amino acids attached to it known as the PEST<sup>1</sup> sequence. This PEST sequence is used by normal cells to force the rapid turnover of proteins that need only have a short life in the cytoplasm. Listeria has evolved the ability to utilize this PEST sequence itself as a routing tag that tells the cells to grab the LLO in the cytoplasm and pull it into the endoplasmic reticulum, where it is processed just like a protein antigen in the endogenous pathway. The benefit for the Listeria is that the LLO is neutralized and the bacteria can continue to prosper inside the cell; the benefit provided by our technology is that we now have a path into the antigen processing system that causes an immune response of the tumor-specific antigen.

<sup>1</sup> PEST is a part of the LLO protein that is believed to faciliate rapid degradation of LLO in the cytoplasm. It appears to facilitate movement of the protein into the endoplasmic reticulum of the cell. In Advaxis' application, the PEST sequence enhances the cell-mediated response to an attached antigen, preumely by preferential movement of the antigen sequence in to the intracellular protein processing system of antigen processing cells such as macrophages and dendritic cells.

### **Research and Development Program**

## Overview

We use genetically engineered Listeria monocytogenes as a therapeutic agent. We start with an attenuated Listeria, and then add to this bacteria a plasmid that encodes a protein sequence that includes a portion of the LLO molecule (including the PEST sequence) and the tumor antigen of interest. This protein is secreted by the Listeria inside the antigen processing cells, which then results in the immune response as discussed above.

We can use different tumor antigens (or other antigens) in this system. By varying the antigen, we create different therapeutic agents. Our lead agent, Lovaxin C, uses a human papillomavirus derived antigen that is present in cervical cancers. Lovaxin B uses her2/neu, an antigen found in many breast cancer and melanoma cells, to induce an immune response that should be useful in treating these conditions. The table below shows a list of potential products and their current status:

<u>Product</u>	Indication	Stage
Lovaxin C	Cervical and neck cancers	Pre-clinincal; Phase I study in cervical cancer anticipated to commence in the first half of 2005*
Lovaxin B	Breast cancer and melanoma	Pre-clinical; Phase I study anticipated to commence in 2006
Lovaxin NY	Ovarian melanoma and lung cancer	Pre-clinical; Phase I study anticipated to commence in 2006
Lovaxin W	Wilms tumor and leukemia	Pre-clinical; Phase I study anticipated to commence in 2006
Lovaxin T	Cancer through control of telomerase	Pre-clinical
Lovaxin H	Prophylactic vaccine for HIV (AIDS)	Pre-clinical

\* Possible delays of up to three months based on the production schedule of Cobra Biomanufacturing PLC of materials, the length of time for Pharm Olam to complete toxicology studies, and the issuance of required regulatory approvals.

## **Partnerships and Agreements**

## Penn

We have entered into a 20-year exclusive worldwide license, with the right to grant sublicenses, with Penn with respect to the innovative work of Yvonne Paterson, Ph.D., Professor of Microbiology in the area of innate immunity, or the immune response attributable to immune cells, including dentritic cells, macrophages and natural killer cells, that respond to pathogens non-specifically. The license provides us with the exclusive rights to the patent portfolio developed at Penn in connection with Dr. Paterson and requires us to raise capital, pay various milestone and licensing payments and commercialize the technology. In exchange for the license, Penn received shares of our common stock currently representing approximately 10.68% of our common stock on a fully-diluted basis. In addition, Penn is entitled to receive a non-refundable license initial fee, royalty payments based on net sales and percentages of sublicense fees. Furthermore, upon the achievement of the first sale of a product in certain fields, Penn shall be entitled to certain milestone payments. However, Penn is not involved in management of our company or in exploitation of the patent portfolio. Based on the agreements with Penn, we will be responsible for filing new patents and maintaining the existing patents.

## **Dr. Yvonne Paterson**

Dr. Paterson is a Professor in the Department of Microbiology at Penn and the inventor of our licensed technology. She has been an invited speaker at national and international health field conferences and leading academic institutions. She has served on many federal advisory boards, such as the NIH expert panel to review primate centers, the Office of AIDS Research Planning Fiscal Workshop, and the Allergy and Immunology NIH Study Section. She has been Section Editor of the Journal of Immunology since 1994. She has written over 115 publications in immunology (including a recently published book) with emphasis during the last several years on the areas of HIV, AIDS and cancer research. Her instruction and mentorship has trained over 30 post-doctoral and doctoral students in the fields of Biochemistry and Immunology, many of whom are research leaders in academia and industry.

Dr. Paterson is currently the principal investigator on grants from the federal government and charitable foundations totaling approximately \$1.8 million dollars per year. Her research interests are broad, but her laboratory has been focused for the past ten years on developing novel approaches for prophylactic vaccines against infectious disease and immunotherapeutic approaches to cancer. The approach of the laboratory is based on a long-standing interest in the properties of proteins that render them immunogenic and how such immunogenicity may be modulated within the body.

*Consulting Agreement.* We entered into a renewed consulting agreement with Dr. Paterson in January 2005 which expires on January 31, 2006 with automatic renewals for up to six aditional periods of six months each pursuant to which we have had access to Dr. Paterson's consulting services for one full day per week. Dr. Paterson has advised us on an exclusive basis on various issues related to our technology, manufacturing issues, establishing our lab, knowledge transfer, and our long-term research and development program. Pursuant to the agreement, Dr. Paterson has received options to purchase 169,048 shares of our common stock subject to vesting. Dr. Paterson is to receive \$3,000 per month throughout the term of the Agreement; provided, that upon the closing of an additonal \$3 million in equity capital, Dr. Paterson shall receive \$5,000 per month; provided, further, that upon the closing of an additional \$6 million in equity capital, Dr. Paterson shall receive \$7,000 per month; and provided, further, that upon the closing of an addition, subject to the adoption of a new stock option plan by our stockholders, Dr. Paterson shall receive options to purchase 400,000 shares of common stock at an exercise price of \$0.28 per share with 40,000 fully vested when granted and the remaining 360,000 options vesting equally over 48 months; provided that Dr. Paterson remains a consultant over the four year period. As of March 31, 2005, Dr. Paterson is being paid \$3,000 per month, and holds options to purchase a total of 169,048 shares of Common stock. We intend to grant as options to purchase an additional 400,000 shares of common stock upon adoption of a new stock option plan by our stock upon adoption of a new stock option plan by the Company.

Sponsored Research Agreement. We entered into a sponsored research agreement which terminates on June 30, 2005 with Penn and Dr. Paterson and have paid approximately \$199,000 to sponsor her continued research in this area. We believe that Dr. Paterson's continuing research will serve as a source of ongoing findings and data that both supports and strengthen the existing patents. Her work will expand the claims of the patent portfolio (potentially including adding claims for new tumor specific antigens, the utilization of new vectors to deliver antigens, and applying the technology to new disease conditions) and create the infrastructure for the future filing of new patents.

We intend to enter into additional sponsored research agreements with Penn in the future with respect to research and development on our produce candidates.

Scientific Advisory Board. Dr. Paterson is also the chairman of our Scientific Advisory Board and one of our stockholders.

#### Dr. David Filer

We have entered a consulting agreement with Dr. David Filer, a biotech consultant. The Agreement commenced on January 7, 2005 and has a six month term, which may be extended upon the agreement of both parties. Dr. Filer shall provide to us for three days per month during the term of the agreement assistance on its development efforts, reviewing our scientific technical and business data and materials and introducing us to industry analysts, institutional investors collaborators and strategic partners. In consideration for the consulting services we will pay Dr. Filer \$2,000 per month. In addition, subject to the adoption of a new stock option plan by our stockholders, Dr. Filer will receive 40,000 options to purchase shares of common stock, vesting monthly over 12 months provided that the agreement is not terminated.

#### AccessBio, Inc (Joy Cavagnaro, Ph.D.)

We entered into an agreement with Joy Cavagnaro, Ph.D., to advise us on an on-going basis in the preparation of our science based regulatory strategy and submissions with an emphasis on the design and safety of pre-clinical safety evaluation programs to support initiation of clinical trials and integration of pre-clinical and clinical research programs to support uninterrupted clinical development, interpretation of FDA guidelines and development of global registration strategies. A former expert toxicologist with the FDA, Dr. Cavagnaro has a distinguished reputation within the industry and the agency. Pursuant to the terms an agreement between Dr. Cavagnaro and us, in exchange for its services, AccessBio is entitled to receive cash and accrued compensation totalling \$3,000 per month, as well as options to purchase our common stock. The agreement was to terminate on September 15, 2004 but has been extended until March 15, 2005.

# DNA Bridges, Inc. ("DNA")

We have entered into an agreement with DNA Bridges, Inc. to develop and manage our grant writing strategy and application program. Advaxis will pay DNA according to a fee structure based on achievement of milestones. In addition, DNA has received 16,200 options to purchase shares of our common stock. Either party may terminate this agreement upon 30 days' prior notice.

Eileen Gorman, Ph.D., a principal and owner of DNA, has extensive experience in accessing public financing opportunites, the national SBIR and related NIH/NCI programs with approximately 30 years of industry experience.

Under the DNA Agreement, DNA is compensated on a percentage basis for research grants made to us through its efforts. We are currently in arbitration with DNA concerning the timing of payments for the services rendered. See "Legal Matters."

## UCLA

We have entereed into a nonexclusive license and bailment agreement with the Regents of the University of California ("UCLA") to commercially develop products using the XFL7 strain of Listeria monoctyogenes in humans and animals. The agreement is effective for a period of 15 years and renewable by mutual consent of the parties. Advaxis is to pay UCLA an initial licensee fee and annual maintainence fees for use of the Listeria. We may not sell products using the XFL7 strain Listeria other than agreed upon products or sublicense the rights granted under the license agreement without the prior written consent of UCLA.

# David Carpi

We have entered into a consulting agreement with David Carpi, whereby Mr. Carpi will assist us in the prepartation and refinement of our marketing summary and presentation materials and introduce us to pharmaceutical and biotechnology companies which may be interested in strategic partnerships. Mr. Carpi will receive compensation payable in cash and options for our common stock upon completion of a transaction with a strategic partner introduced by Mr. Carpi. The agreement was to terminate on December 31, 2004 but we are in the process of renewing the agreement with Mr. Carpi and intend to extend the agreement until June 2005.

We have also entered into a government funding fee agreement with Mr. Carpi, whereby Mr. Carpi will assist us in obtaining government funding for clinicial studies for certain of our products. Mr. Carpi will receive options for our common stock if he is successful in obtaining government funding for us. The agreement expires on April 5, 2005 and thereafter continues on a month-to-month basis unless terminated in writing by either party.

### Cobra Biomanufacturing PLC

In July 2003, we entered into an agreement with Cobra Biomanufacturing PLC for the purpose of manufacturing our vaccines. Cobra has extensive experience in manufacturing gene therapy products for investigational studies. Cobra is a full service manufacturing organization that manufactures and supplies DNA-based therapeutics for the pharmaceutical and biotech industry. These services include the GMP manufacturing of DNA, recombinant protein, viruses, mammalian cells products and cell banking. Cobra's manufacturing plan for us calls for several manufacturing stages, including process development, manufacturing of non-GMP material for toxicology studies and manufacturing of GMP material for the Phase I trial. The agreement is to expire upon the delivery and completion of stability testing of the GMP material for the Phase I trial, now estimated to occur by December 31, 2005. We are currently in negotiations with Cobra to enter into agreement to manufacture our vaccines for future programs. Cobra has agreed to convert \$300,000 of its existing fees for manufacturing into future royalties from the sales of Lovaxin C at the rate of 1.5% of net sales, with payments not to exceed \$1,950,000.

#### Pharm-Olam International Ltd.

In January 2005, we entered a consulting agreement with Pharm-Olam International Ltd. ("POI"), a Texas limited partnership specializing in the management of pre clinical and toxicology programs. Pursuant to the agreement, POI shall execute and manage our toxicology studies, with certain third parties. The term of the agreement is 12 months. In consideration for providing the consulting services, POI will receive \$272,163.

# LVEP Management, LLC

We entered into a consulting agreement with LVEP Management, LLC ("LVEP") which is owned by Scott Flamm, one of our directors and a principal shareholder. LVEP employs Mr. Flamm and Mr. Roni Appel, our Chief Financial Officer, and a director and a principal shareholder of the Company. Pursuant to the consulting agreement, dated as of January 19, 2005, LVEP is to provide various financial and strategic consulting services to us. The initial term of the consulting agreement is until September 30, 2005 and thereafter the term of the consulting agreement shall be automatically extended for six month periods unless we notify LVEP at least 60 days prior to the end of term of our intent not to extend. In consideration for providing the consulting services, LVEP received an initial payment of \$4,500, receive \$7,000 per month during the term of the consulting agreement plus reimbursement of approved expenses in connection with providing the consulting services and will receive a payment at the end of 2005 of 2005 equal to 40% of the bonus earned by the Chief Executive Officer of the Company. Additionally, LVEP shall receive, 3,500 shares of common stock per month.

### Strategic Growth International, Inc.

We entered into an agreement with Strategic Growth International, Inc.("SGI") whereby SGI will serve as an investor relations consultant. The term of this agreement is for a period of 18 months commencing on the date of the effectiveness of this registration statement. In consideration for performing its services, SGI is to be paid \$7,000 per month, provided, that upon the effective date of this prospectus, SGI is to receive \$8,000 per month and \$7,000 of common stock with piggyback rights. In addition, SGI is to be issued a warrant to purchase 240,000 shares of common stock, exercisable for 5 years, with cashless exercise and piggyback rights. Furthermore, SGI is to be paid a finder's fee for any financing by us from an approved institution introduced to us by SGI.

### Patents and Licenses

Dr. Paterson and Penn have invested significant resources and time in developing a broad base of intellectual property around the cancer vaccine platform technology to which we have a 20-year exclusive worldwide license and a right to grant sublicenses to pursuant to our license agreement with Penn. Penn currently has eight issued and 12 pending patents in the United States and other countries including Japan, Canada, Israel, Australia, and the European Union, through the Patent Cooperation Treaty (PCT) system pursuant to which we have an exclusive license to exploit the patents. We believe that these patents will allow us to take a strong lead in the field of Listeria-based therapy.

The Penn patent portfolio is currently comprised of the following:

# **United States**

### Patents

U.S. Patent No. 6,051,237, issued April 18, 2000. Patent Application No. 08/336,372, filed November 8, 1994 for "Specific Immunotherapy of Cancer Using a Live Recombinant Bacterial Vaccine Vector." Filed November 8, 1994. Expires April 18, 2017.

U.S. Patent No. 6,565,852, issued May 20, 2003, Paterson, et al., CIP Patent Application No. 09/535,212, filed March 27, 2000 for "Specific Immunotherapy of Cancer Using a Live Recombinant Bacterial Vaccine Vector." Filed March 27, 2000. Expires May 20, 2020.

U.S. Patent No. 6,099,848, issued August 8, 2000. Frankel et al., Patent Application No. 08/972,902 "Immunogenic Compositions Comprising DAL/DAT Double-Mutant, Auxotrophic, Attentuated Strains of Listeria and Their Methods of Use." Filed November 18, 1997. Expires November 18, 2017.

U.S. Patent No. 6,504,020, issued January 7, 2003 of Divisional Application No. 09/520,207 "Isolated Nucleic Acids Comprising Listeria DAL And DAT Genes". Filed March 7, 2000., Frankel et al. Expires March 7, 2020.

U.S. Patent No. 6,635,749, issued October 21, 2003; Divisional U.S. Patent Application No. 10/136,253 for "Isolated Nucleic Acids Comprising Listeria DAL and DAT Genes." Filed May 1, 2002, Frankel, et al. Filed May 1, 2022.

U.S. Patent No. 5,830,702, issued November 3, 1998. Patent Application No. 08/366,477, filed December 30, 1994 for "Live, Recombinant Listeria SSP Vaccines and Productions of Cytotoxic T Cell Response" Portnoy, et al. Filed December 30, 1997. Expires November 3, 2015.

US Patent No. 6,767,542 issued July 27, 2004, Paterson, et al. Patent Application No. 09/735,450 for "Compositions and Methods for Enhancing Immunogenicity of Antigens." Filed December 13, 2000. Expires March 29, 2020.

## **Patent Applications**

U.S. Patent Application No. 10/441,851, "Methods And Compositions For Immunotherapy of Cancer," Filed May 20, 2003, Paterson et al.

U.S. Patent Application No. 10/239,703 for "Compositions and Methods for Enhancing Immunogenicity of Antigens." Filed September 24, 2002, Paterson, et al.

Patent Application No. 09/537,642 for "Fusion of Non-Hemolytic, Truncated Form of Listeriolysis o to Antigens to Enhance Immunogenicity." Filed March 29, 2000. Paterson, et al.

U.S. Patent Application No. 10/660,194, "Immunogenic Compositions Comprising DAL/DAT Double Mutant, Auxotrophic Attenuated Strains Of Listeria And Their Methods Of Use," Filed September 11, 2003, Frankel et al.

### International

### Patents

Australian Patent No. 730296, Patent Application No. 14108/99 for "Bacterial Vaccines Comprising Auxotrophic, Attenuated Strains of Listeria Expressing Heterologous Antigens." Filed May 18, 2000. Frankel, et al.

# **Patent Applications**

Canadian Patent Application No. 2,204,666, for "Specific Immunotherapy of Cancer Using a Live Recombinant Bacterial Vaccine Vector". Filed November 3, 1995, Paterson et al.

Canadian Patent Application No. 2,309,790 for "Bacterial Vaccines Comprising Auxotrophic, Attenuated Strains of Listeria Expressing Heterologous Antigens." Filed May 18, 2000, Frankel, et al.

Canadian Patent Application No. 2,404,164 for "Compositions and Methods for Enhancing Immunogenicity of Antigens." Filed March 26, 2001. Paterson, et al.

European Patent Application No. 95939926.2, for "Specific Immunotherapy of Cancer Using a Live Recombinant Bacterial Vaccine Vector". Filed November 3, 1995, Paterson, et al.

European Patent Application No. 01928324.1 for "Compositions and Methods for Enhancing Immunogenicity of Antigens." Filed March 26, 2001. Paterson, et al.

European Patent Application No. 98957980.0 for "Bacterial Vaccines Comprising Auxotrophic, Attenuated Strains of Listeria Expressing Heterologous Antigens." Filed May 18, 2000, Frankel, et al.

Israel Patent Application No. 151942 for "Compositions and Methods for Enhancing Immunogenicity of Antigens." Filed March 26, 2001, Paterson, et al.

Japanese Patent Application No. 515534/96, filed November 3, 1995 for "Specific Immunotherapy of Cancer Using a Live Recombinant Bacterial Vaccine Vector", Paterson, et al.

Japanese Patent Application No. 2001-570290 for "Compositions and Methods for Enhancing Immunogenicity of Antigens." Filed March 26, 2001, Paterson, et al.

In 2001, an issue arose regarding the inventorship of U.S. Patent 6,565,852 and U.S. Patent Application No. 09/537,642. These patent rights are included in the patent rights licensed by Advaxis from Penn. It is contemplated by GSK, Penn and us that the issue will be resolved through: (1) a correction of inventorship to add certain GSK inventors, (2) where necessary and appropriate, an assignment of GSK's possible rights under these patent rights to Penn, and (3) a sublicense from us to GSK of certain subject matter, which is not central to our business plan. To date, this arrangement has not been finalized and we cannot assure that this issue will ultimately be resolved in the manner described above.

Pursuant to our license with Penn, we have a three year option to license from Penn any new future invention conceived by either Dr. Yvonne Paterson or by Dr. Fred Frankel in the vaccine area. We intend to expand our intellectual property base by exercising this option and gaining access to such future inventions. Further, our consulting agreement with Dr. Paterson provides, among other things, that, to the extent that Dr. Paterson's consulting work results in new inventions, such inventions will be assigned to Penn, and we will have access to those inventions under license agreements to be negotiated.

Our approach to the our intellectual property portfolio is to aggressively create significant offensive and defensive patent protection for every product and technology platform that we develop. We work closely with our patent counsel to maintain a coherent and aggressive strategic approach to building our patent portfolio with an emphasis in the field of cancer vaccines.

We have become aware of a public company, Cerus Corporation, which has issued a press release claiming to have a proprietary Listeria-based approach to a cancer vaccine. We believe that through our exclusive license with Penn of U.S. Patent Nos. 5,830,702, 6,051,237 and 6,565,852, we have the earliest known and dominant patent position for the use of recombinant Listeria monocytogenes expressing proteins or tumor antigens as a vaccine for the treatment of infectious diseases and tumors. Based on searches of publicly available databases, we do not believe that Cerus or The University of California Berkeley (which is where Cerus' consulting scientist works) or any other third party owns any published Listeria patents or has any issued patent claims that might materially negatively affect our freedom to operate our business in the field of Listeria monocytogenes. For more information about Cerus Corporation and its claims with respect to listeria-based technology, you should visit their web site at www.cerus.com or to view its publicly filed documents, www.sec.gov.

### Trademarks

We have two trademark applications pending in the United States relating to the trademark of "Advaxis" and ten trademark applications pending relating to the trademark of "Lovaxin" in the United States and internationally. We work closely with our trademark counsel to build a brandname for ourself and potential products.

## **Governmental Regulation**

# The Drug Development Process

The FDA requires that pharmaceutical and certain other therapeutic products undergo significant clinical experimentation and clinical testing prior to their marketing or introduction to the general public. Clinical testing, known as *clinical trials* or *clinical studies*, is either conducted internally by pharmaceutical or biotechnology companies or is conducted on behalf of these companies by contract research organizations.

The process of conducting clinical studies is highly regulated by the FDA, as well as by other governmental and professional bodies. Below, we describe the principal framework in which clinical studies are conducted, as well as describe a number of the parties involved in these studies.

*Protocols*. Before commencing human clinical studies, the sponsor of a new drug must submit an investigational new drug application, or IND, to the FDA. The application contains what is known in the industry as a *protocol*. A protocol is the blueprint for each drug study. The protocol sets forth, among other things, the following:

- who must be recruited as qualified participants;
- how often to administer the drug;
- what tests to perform on the participants; and
- what dosage of the drug to give to the participants.

Institutional Review Board. An institutional review board is an independent committee of professionals and lay persons which reviews clinical research studies involving human beings and is required to adhere to guidelines issued by the FDA. The institutional review board does not report to the FDA, but its records are audited by the FDA. Its members are not appointed by the FDA. All clinical studies must be approved by an institutional review board. The institutional review board's role is to protect the rights of the participants in the clinical studies. It approves the protocols to be used, the advertisements which the company or contract research organization conducting the study proposes to use to recruit participants, and the form of consent which the participants will be required to sign prior to their participation in the clinical studies.

*Clinical Trials.* Human clinical studies or testing of a potential product are generally done in three stages known as Phase I through Phase III testing. The names of the phases are derived from the regulations of the FDA. Generally, there are multiple studies conducted in each phase.

*Phase I.* Phase I studies involve testing a drug or product on a limited number of healthy participants, typically 24 to 100 people at a time. Phase I studies determine a drug's basic safety and how the drug is absorbed by, and eliminated from, the body. This phase lasts an average of six months to a year.

*Phase II.* Phase II trials involve testing up to 200 participants at a time who may suffer from the targeted disease or condition. Phase II testing typically lasts an average of one to two years. In Phase II, the drug is tested to determine its safety and effectiveness for treating a specific illness or condition. Phase II testing also involves determining acceptable dosage levels of the drug. If Phase II studies show that a new drug has an acceptable range of safety risks and probable effectiveness, a company will continue to review the substance in Phase III studies.

*Phase III*. Phase III studies involve testing large numbers of participants, typically several hundred to several thousand persons. The purpose is to verify effectiveness and long-term safety on a large scale. These studies generally last two to three years. Phase III studies are conducted at multiple locations or sites. Like the other phases, Phase III requires the site to keep detailed records of data collected and procedures performed.

*New Drug Approval.* The results of the clinical trials are submitted to the FDA as part of a new drug application ("NDA"). Following the completion of Phase III studies, assuming the sponsor of a potential product in the United States believes it has sufficient information to support the safety and effectiveness of its product, it submits an NDA to the FDA requesting that the product be approved for marketing. The application is a comprehensive, multi-volume filing that includes the results of all clinical studies, information about the drug's composition, and the sponsor's plans for producing, packaging and labeling the product. The FDA's review of an application can take a few months to many years, with the average review lasting 18 months. Once approved, drugs and other products may be marketed in the United States, subject to any conditions imposed by the FDA.

*Phase IV.* The FDA may require that the sponsor conduct additional clinical trials following new drug approval. The purpose of these trials, known as Phase IV studies, is to monitor long-term risks and benefits, study different dosage levels or evaluate safety and effectiveness. In recent years, the FDA has increased its reliance on these trials. Phase IV studies usually involve thousands of participants. Phase IV studies also may be initiated by the company sponsoring the new drug to gain broader market value for an approved drug. For example, large-scale trials may also be used to prove effectiveness and safety of new forms of drug delivery for approved drugs. Examples may be using an inhalation spray versus taking tablets or a sustained-release form of medication versus capsules taken multiple times per day.

The drug approval process is time-consuming, involves substantial expenditures of resources, and depends upon a number of factors, including the severity of the illness in question, the availability of alternative treatments, and the risks and benefits demonstrated in the clinical trials.

On November 21, 1997, former President Clinton signed into law the Food and Drug Administration Modernization Act. That act codified the FDA's policy of granting "Fast Track" approval for cancer therapies and other therapies intended to treat serious or life threatening diseases and that demonstrate the potential to address unmet medical needs. The Fast Track program emphasizes close, early communications between FDA and the sponsor to improve the efficiency of preclinical and clinical development, and to reach agreement on the design of the major clinical efficacy studies that will be needed to support approval. Under the Fast Track program, a sponsor also has the option to submit and receive review of parts of the NDA or BLA on a rolling schedule approved by FDA, which expedites the review process.

The FDA's Guidelines for Industry Fast Track Development Programs require that a clinical development program must continue to meet the criteria for Fast Track designation for an application to be reviewed under the Fast Track Program. Previously, the FDA approved cancer therapies primarily based on patient survival rates or data on improved quality of life. While the FDA could consider evidence of partial tumor shrinkage, which is often part of the data relied on for approval, such information alone was usually insufficient to warrant approval of a cancer therapy, except in limited situations. Under the FDA's new policy, which became effective on February 19, 1998, Fast Track designation ordinarily allows a product to be considered for accelerated approval through the use of surrogate endpoints to demonstrate effectiveness. As a result of these provisions, the FDA has broadened authority to consider evidence of partial tumor shrinkage or other surrogate endpoints of clinical benefit for approval. This new policy is intended to facilitate the study of cancer therapies and shorten the total time for marketing approvals. Under accelerated approval, the manufacturer must continue with the clinical testing of the product after marketing approval to validate that the surrogate endpoint did predict meaningful clinical benefit. To the extent applicable we intend to take advantage of the Fast Track programs to obtain accelarated approval on our future products; however, it is too early to tell what effect, if any, these provisions may have on the approval of our product candidates.

The Orphan Drug Act provides incentives to develop and market drugs ("Orphan Drugs") for rare disease conditions in the United States. A drug that receives Orphan Drug designation and is the first product to receive FDA marketing approval for its product claim is entitled to a seven-year exclusive marketing period in the United States for that product claim. A drug which is considered by the FDA to be different than such FDA-approved Orphan Drug is not barred from sale in the United States during such exclusive marketing period even if it receives approval for the same claim. We can provide no assurance that the Orphan Drug Act's provisions will be the same at the time of the approval, if any, of our products.

# **Other Regulations**

Various Federal and state laws, regulations, and recommendations relating to safe working conditions, laboratory practices, the experimental use of animals, and the purchase, storage, movements, import, export, use, and disposal of hazardous or potentially hazardous substances, including radioactive compounds and infectious disease agents, are used in connection with our research or applicable to our 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 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. The extent of governmental regulation which might result from future legislation or administrative action cannot be accurately predicted.

# Manufacturing

The FDA requires that any drug or formulation to be tested in humans be manufactured in accordance with its GMP regulations. This has been extended to include any drug which will be tested for safety in animals in support of human testing. The GMPs set certain minimum requirements for procedures, record-keeping, and the physical characteristics of the laboratories used in the production of these drugs.

We have entered into an agreement with Cobra Biomanufacturing PLC for the purpose of manufacturing our vaccines. Cobra has extensive experience in manufacturing gene therapy products for investigational studies. Cobra is a full service manufacturing organization that manufactures and supplies DNA-based therapeutics for the pharmaceutical and biotech industry. These services include the GMP manufacturing of DNA, recombinant protein, viruses, mammalian cells products and cell banking. Cobra's manufacturing plan for us calls for several manufacturing stages, including process development, manufacturing of non-GMP material for toxicology studies and manufacturing of GMP material for the Phase I trial.

# Competition

The biotechnology and biopharmaceutical industries are characterized by rapid technological developments and a high degree of competition. As a result, our actual or proposed products could become obsolete before we recoup any portion of our related research and development and commercialization expenses. The biotechnology and biopharmaceutical industries are highly competitive, and this competition comes from both from biotechnology firms and from major pharmaceutical and chemical companies, including Antigenics, Inc., Avi BioPharma, Inc., Bachria, Biomira, Inc., Corixa Corporation, Dendreon Corporation, Epimmune, Inc., Genzyme Corp., Progenics Pharmaceuticals, Inc., Vical Incorporated, CancerVax Corporation, Genitope Corporation and Xcyte Therapies, Inc., each of which is pursuing cancer vaccines. Many of these companies have substantially greater financial, marketing, and human resources than we do (including, in some cases, substantially greater experience in clinical testing, manufacturing, and marketing of pharmaceutical products). We also experience competition in the development of our products from universities and other research institutions and compete with others in acquiring technology from such universities and institutions. In addition, certain of our products may be subject to competition from products developed using other technologies, some of which have completed numerous clinical trials.

We expect that our products under development and in clinical trials will address major markets within the cancer sector. Our competition will be determined in part by the potential indications for which drugs are developed and ultimately approved by regulatory authorities. Additionally, the timing of market introduction of some of our potential products or of competitors' products may be an important competitive factor. Accordingly, the relative speed with which we can develop products, complete pre-clinical testing, clinical trials and approval processes and supply commercial quantities to market are expected to be important competitive factors. We expect that competition among products approved for sale will be based on various factors, including product efficacy, safety, reliability, availability, price and patent position. See "Business - Research and Development Programs" and "Business - Competition".

We have become aware of a public company, Cerus Corporation, which has issued a press release claiming to have a proprietary Listeria-based approach to a cancer vaccine. We believe that through our exclusive license with Penn of U.S. Patent Nos. 5,830,702, 6,051,237 and 6,565,852, we have the earliest known and dominant patent position for the use of recombinant Listeria monocytogenes expressing proteins or tumor antigens as a vaccine for the treatment of infectious diseases and tumors. Based on searches of publicly available databases, we do not believe that Cerus or The University of California Berkeley (which is where Cerus' consulting scientist works) or any other third party owns any published Listeria patents or has any issued patent claims that might materially negatively affect our freedom to operate our business in the field of Listeria monocytogenes. For more information about Cerus Corporation and its claims with respect to listeria-based technology, you should visit their web site at <u>www.cerus.com</u> or to view its publicly filed documents, www.sec.gov.

#### Scientific Advisory Board

We maintain a scientific advisory board consisting of internationally recognized scientists who advise us on scientific and technical aspects of our business. The scientific advisory board meets periodically to review specific projects and to assess the value of new technologies and developments to us. In addition, individual members of the scientific advisory board meet with us periodically to provide advice in particular areas of expertise. The scientific advisory board consists of the following members, information with respect to whom is set forth below: Yvonne Paterson, Ph.D.; Carl June, M.D.; Pramod Srivastava, Ph.D; and Bennett Lorber, M.D.

Dr. Yvonne Paterson. For a description of our relationship with Dr. Paterson, please see "Business - Partnerships and Agreements".

*Carl June, M.D.* Dr. June is currently Director of Translational Research at the Abramson Cancer Center at Penn, and is an Investigator of the Abramson Family Cancer Research Institute. He is a graduate of the Naval Academy in Annapolis, and Baylor College of Medicine in Houston. He had graduate training in immunology and malaria with Dr. Paul-Henri Lambert at the World Health Organization, Geneva, Switzerland from 1978 to 1979, and post-doctoral training in transplantation biology with Dr. E. Donnell Thomas at the Fred Hutchinson Cancer Research Center in Seattle from 1983 to 1986. He is board certified in Internal Medicine and Medical Oncology. Dr. June founded the Immune Cell Biology Program and was head of the Department of Immunology at the Naval Medical Research Institute from 1990 to 1995. Dr. June rose to Professor in the Departments of Medicine and Cell and Molecular Biology at the Uniformed Services University for the Health Sciences in Bethesda, Maryland before assuming his current positions as of February 1, 1999. Dr. June maintains a research laboratory that studies various mechanisms of lymphocyte activation that relate to immune tolerance and adoptive immunotherapy.

*Pramod Srivastava, Ph.D.* Dr. Srivastava is Professor of Immunology at the University of Connecticut School of Medicine, where he is also Director of the Center for Immunotherapy of Cancer and Infectious Diseases. He holds the Physicians Health Services Chair in Cancer Immunology at the University. Professor Srivastava is the Scientific Founder of Antigenics, Inc. He serves on the Scientific Advisory Council of the Cancer Research Institute, New York, and was a member of the Experimental Immunology Study Section of the National Institutes of Health of the U.S. Government (1994 to 1999). He serves presently on the Board of Directors of two privately held companies: Ikonisys (New Haven, Connecticut) and CambriaTech (Lugano, Switzerland). In 1997, he was inducted into the Roll of Honor of the International Union Against Cancer and was listed in Who's Who in Science and Engineering. He is among the 20 founding members of the Academy of Cancer Immunology, New York. Dr. Srivastava obtained his bachelor's degree in biology and chemistry and a master's degree in botany (paleontology) from the University of Allahabad, India. He then studied yeast genetics at Osaka University, Japan. He completed his Ph.D. in biochemistry at the Center for Cellular and Molecular Biology, Hyderabad, India, where he began his work on tumor immunity, including identification of the first proteins that can mediate tumor rejection. He trained at Yale University and Sloan-Kettering Institute for Cancer Research. Dr. Srivastava has held faculty positions at the Mount Sinai School of Medicine and Fordham University in New York City.

Bennett Lorber, M.D. Dr. Lorver attended Swarthmore College where he studied zoology and art history. He graduated from the University of Pennsylvania School of Medicine and did his residency in internal medicine and fellowship in infectious diseases at Temple University, following which he joined the Temple faculty. At Temple he rose through the ranks to become Professor of Medicine and, in 1988, was named the first recipient of the Thomas Durant Chair in Medicine. He is also a Professor of Microbiology and Immunology and serves as the Chief of the Section of Infectious Diseases. He is a Fellow of the American College of Physicians, a Fellow of the Infectious Diseases Society of America, and a Fellow of the College of Physicians of Philadelphia where he serves as College Secretary and as a member of the Board of Trustees. Dr. Lorber's major interest in infectious diseases is in human listeriosis, an area in which he is regarded as an international authority. He has also been interested in the impact of societal changes on infectious disease patterns as well the relationship between infectious agents and chronic illness, and he has authored papers exploring these associations. He has been repeatedly honored for his teaching; among his honors are 10 golden apples, the Temple University Great Teacher Award, the Clinical Practice Award from the Pennsylvania College of Internal Medicine, and the Bristol Award from the Infectious Diseases Society of America. On two occasions the graduating medical school class dedicated their yearbook to Dr. Lorber. In 1996 he was the recipient of an honorary Doctor of Science degree from Swarthmore College. Dr. Lorber is also a professional painter and an accomplished guitarist.

## Employees

As of March 31, 2005, we have three employees, all of whom are on a full-time basis.

Additional senior employees have been identified and are anticipated to join Advaxis in the near future.

We anticipate increasing the number of employees in the research and development department significantly during the next two years, as well as increasing the number of employees in the general and administrative and business development department.

### Facilities

Our corporate offices are currently located at the corporate center at 212 Carnegie Center, Suite 206, Princeton, New Jersey 08540. We have entered into a lease effective April 1, 2005, which will continue on a monthly basis, at the Princeton Corporate Plaza, a biotech industrial park, located at 7 Deer Park Drive, Monmouth Junction, NJ 08852 for research and development offices and executive offices. We believe that our facility will be sufficient for our purposes for the foreseeable future. Our monthly payment on this facility will be approximately \$2,500 per month. In the event that our facility should, for any reason, become unavailable, we believe that alternative facilities are available at competitive rates.

# Litigation

There are no material legal proceedings threatened against us. In the ordinary course of our business we may become subject to litigation regarding our products or our compliance with applicable laws, rules, and regulations. We are currently in an arbitration proceeding with DNA Bridges, Inc. over the timing of payment of a fee of approximately \$90,000 which is due to DNA Bridges, Inc. for services in connection with securing research grants for us. We believe payment is not due until we get paid. DNA Bridges believes payment was due upon execution of the research agreement.

### MANAGEMENT

### **Executive Officers, Directors, and Key Employees**

The following are our executive officers and directors and their respective ages and positions as of January 1, 2005:

Name	<u>Age</u>	Position
J. Todd Derbin(3)	52	President, Chief Executive Officer, and Director
Dr. James Patton(1)	47	Chairman of the Board of Directors
Roni A. Appel(3)	38	Chief Financial Officer, Secretary and Director
Dr. Thomas McKearn(2)	55	Director
Dr. Steven Roth	62	Director
Scott Flamm(1) (2)	50	Director

(1) Member of the Audit Committee.

(2) Member of the Compensation Committee.

(3) Member of the Nominating and Corporate Governance Committee.

*J. Todd Derbin.* Mr. Derbin has served as our President, Chief Executive Officer and a director since November 2004. Prior thereto he served as the President, Chief Executive Officer and a director of Advaxis since November 2002. From 1996 until June, 2001, Mr. Derbin was the founder and Chairman of the Board of Directors, President, and Chief Executive Officer of Micrus Corporation, a market leader in the design and development of highly differentiated and proprietary interventional neuroradiology devices and delivery systems. From 1992 until 1996, he served as Director of Corporate Business Development, Commercial Director - Cardiovascular and Director of Strategic Planning, Mergers & Share Exchanges with Biocompatibles International, plc, a UK biotechnology/biomedical Company. Prior to this, Mr. Derbin served as Chief Executive Officer of Syncare Corporation, developers of synthetic wound care products and drug delivery systems. His 20 year tenure in life sciences includes senior management, strategic and operational positions with CollaTec, Inc., a subsidiary of Marion Merrell Dow, and American Medical Products Corporation's domestic and international divisions. He began his career at Procter & Gamble and American Hospital Supply Corporation (Baxter) where he held marketing positions. Mr. Derbin is an alumnus of Wilkes College and the Wharton School of the University of Pennsylvania.

*Dr. James Patton.* Dr. Patton has served as Chairman of our Board and Directors since November 2004. Prior thereto, Dr. Patton served as Chairman of Advaxis' Board of Directors since February 2002 and as Advaxis' Chief Executive Officer from February 2002 to November 2002. Additionally, since February 1999, Dr. Patton has served as the President of Comprehensive Oncology Care, LLC, which owns and operates a cancer treatment facility in Exton, Pennsylvania and as Vice President of Millennium Oncology Management, Inc., which provides technical services for oncology care to four sites. From February 1999 to September 2003, Dr. Patton served as a consultant to LibertyView Equity Partners SBIC, LP, a venture capital fund based in Jersey City, New Jersey ("LibertyView"). From July 2000 to December 2002, Dr. Patton served as a director of Pinpoint Data Corp. From February 2000 to November 2000, Dr. Patton served as a director of Healthware Solutions. From June 2000 to June 2003, Dr. Patton served as a director of LifeStar Response. He earned his B.S. from the University of Michigan, his Medical Doctorate from Medical College of Pennsylvania, and his M.B.A. from the University of Pennsylvania's Wharton School. Dr. Patton was also a Robert Wood Johnson Foundation Clinical Scholar. He has published papers regarding scientific research in human genetics, diagnostic test performance and medical economic analysis.

Roni A. Appel. Mr. Appel has served as a member of our Board of Directors and as our Secretary and Chief Financial Officer since November 2004. Prior thereto he has served as Advaxis' Secretary and Chief Financial Officer since it was formed. Since January 1999, Mr. Appel has been a partner and managing director in LV Equity Partners (fka LibertyView Equity Partners). From 1998 until 1999, he was a founder and the director of business development at Americana Financial Services, Inc. From 1994 to 1998, he was an attorney and completed his MBA at Columbia University.

*Dr. Thomas McKearn.* Dr. McKearn has served as a member of our Board of Directors since November 2004. Prior thereto he served as an Advaxis director since July 2002. He brings to Advaxis a 20 plus year experience in the translation of biotechnology science into innovative products that address unmet medical needs in oncology. First as one of the founders of Cytogen Corporation, then as an Executive Director of Strategic Science and Medicine at Bristol-Myers Squibb and now as the VP. Medical Affairs at GPC-Biotech, McKearn has always worked at bringing the most innovative scientific findings into the clinic and through the FDA regulatory process for the ultimate benefit of patients who need better ways to cope with their afflictions. Prior to entering the then-nascent biotechnology industry in 1981, McKearn did his medical, graduate and post-graduate training at the University of Chicago and served on the faculty of the Medical School at the University of Pennsylvania.

*Dr. Steven Roth.* Dr. Roth has served as a member of our Board of Directors since November, 2004. Prior thereto he had served as an Advaxis director since November 2002. He is a co-founder of Neose Technologies, a publicly traded biotechnology Company, since 1990, and has served as its chief executive and board chairman since 1994. Between 1980 and 1992 he was a professor of biology at University of Pennsylvania and was appointed department chairman in 1982, serving in that role until 1987. At the University of Pennsylvania, Dr. Roth helped form its Plant Science Institute. Between 1992 and 1994 he was the chief scientific officer and VP, R&D, of Neose Technologies. From 1970 through 1980, Dr. Roth was assistant and associate professor of biology at The Johns Hopkins University. His scholarly interests centered on the roles of complex carbohydrates in embryonic morphogenesis and in malignancy, topics on which he authored or co-authored nearly 100 articles and one book. He has received several research awards and prizes, and is an inventor on 18 patents and six patent applications. Dr. Roth received an A.B. degree from Johns Hopkins in 1964, a Ph.D. from Case Western Reserve University in 1968, and did postdoctoral work in carbohydrate chemistry at Hopkins from 1968-1970. Currently, Dr. Roth is a member of the board of visitors of the School of Arts and Sciences of the University of Pennsylvania, a member of the board of visitors of the School of Arts and Sciences of Case Western Reserve University, a member of the scientific advisory boards of Quaker BioVentures and Birchmere Ventures, a member of the editorial board of The Quarterly Review of Biology, a director of Neose Technologies and a director of Chiral Quest.

Scott Flamm. Mr. Flamm has served as a member of our Board of Directors since November, 2004. Mr. Flamm is one of Advaxis' founders and has served as an Advaxis director since its inception. Since June 1998, Mr. Flamm has been the president and general partner of LV Equity Partners (fka Liberty View Equity Partners). Among his prior positions are Senior Managing Director of Trilon Dominion Partners, a \$100 million venture fund, and Executive Vice President of Charterhouse Environment Capital Group, a subsidiary of the private equity investment firm Charterhouse Group International. From 1988 until January 1993, he was Executive Vice President, Chief Operating Officer and a Director of Catalyst Energy, a \$2 billion independent power producer. He received his masters in public health from Yale University.

Vafa Shahabit, Ph.D. Dr. Shahabit has been Head of Dreictor of Science effective March 1, 2005, terminable on 30 days notice. Her duties are to work on and/or manage research and development projects as specified by the Company. The compensation is \$100,000 per annum.

*Dr. John Rothman, Ph.D.* Dr. Rothman has been hired as Vice President of Clinical Development effective March 7, 2005 for a term of one year ending February 28, 2006. His compensation is \$170,000 per annum, to increase to \$180,000 upon the closing of a \$15 million equity financing. Upon meeting incentives to be set by the Company, he will receive a bonus of up to \$45,000.

*Richard Berman (Director Nominee).* Mr. Berman has agreed to join the Board by mid May. For the past five years, Mr. Berman has been Chairman and CEO of Internet Commerce Corporation, an internet supply chain company. He is also Chairman of a financial services company and Candidate Resources, Inc., a company which delivers human resources services over the web. He is a Director of seven public companies, Dyadic International, Inc., International Microcomputer Software, Inc., Internet Commerce Corporation, MediaBay, Inc., NexMed, Inc., GVI Security Solutions, Inc., and Financial Services Co., which he serves as chairman. Previously, Mr. Berman worked at Goldman Sachs; was Senior Vice President of Bankers Trust Company, where he started the M&A and Leverage Buyout Departments. He is a past Director of the Stern School of Business of NYU where he earned a B.S. and an M.B.A. He also has law degrees from Boston College and The Hague Academy of International Law. Mr. Berman will receive a director's fee of \$2,000 per month and options for the purchase of 400,000 shares of Common Stock vesting over four years on a quarterly basis.

# **Board of Directors and Officers**

Messrs. McKearn and Roth have each received an option package of 82,763 options to purchase shares of our common stock.

Each director is elected for a period of one year at our annual meeting of stockholders and serves until the next such meeting and until his or her successor is duly elected and qualified. Officers are elected by, and serve at the discretion of, our board of directors. Our directors do not presently receive any compensation for their services as directors. The board of directors may also appoint additional directors up to the maximum number permitted under our by-laws. A director so chosen or appointed will hold office until the next annual meeting of stockholders.

Each of our executive officers serves at the discretion of its board of directors and holds office until his or her successor is elected or until his or her earlier resignation or removal in accordance with our articles of incorporation and by-laws.

## Meetings and Committees of the Board of Directors

During the year ended December 31, 2003, our board of directors held four meetings and took action by written consent on four occasions. During the year ended December 31, 2004, our board of directors held three meetings and took action by written consent on 7 occasions.

# Audit Committee

Effective in November 2004, we established the audit committee of the board of directors which consists of Messrs. Flamm and Patton.

The audit committee is responsible for the following:

· reviewing the results of the audit engagement with the independent registered public accounting firm;

- · identifying irregularities in the management of our business in consultation with our independent accountants, and suggest an appropriate course of action;
- reviewing the adequacy, scope, and results of the internal accounting controls and procedures;
- reviewing the degree of independence of the auditors, as well as the nature and scope of our relationship with our independent registered public accounting firm;
- reviewing the auditors' fees; and
- recommending the engagement of auditors to the full board of directors.

## **Compensation Committee**

Effective on November 2004, we established a compensation committee of the board of directors which initially consists of Messrs. Flamm and McKearn. The compensation committee determines the salaries and incentive compensation of our officers and provides recommendations for the salaries and incentive compensation of our other employees and consultants.

The compensation of our executive officers is determined by the compensation committee of our board of directors, subject to applicable employment agreements. Our compensation programs will enable us to attract, motivate, reward and retain the management talent required to achieve corporate objectives and thereby increase stockholder value. It is our policy to provide incentives to our senior management to achieve both short-term and long-term objectives and to reward exceptional performance and contributions to the development of our business. To attain these objectives, our executive compensation program includes a competitive base salary, cash incentive bonuses and stock-based compensation.

Stock options have been granted to our senior executive officer by the board of directors or the compensation committee under the 2004 Stock Option Plan. We believe that stock options provide an incentive that focuses the executive's attention on managing us from the perspective of an owner with an equity stake in the business. Options are awarded with an exercise price equal to the market value of common stock on the date of grant, have a maximum term of ten years and generally become exercisable, in whole or in part, starting one year from the date of grant. Among our executive officers, the number of shares subject to options granted to each individual generally depends upon the level of that officer's responsibility. The largest grants are awarded to the most senior officers who, in our view, have the greatest potential impact on our profitability and growth. Previous grants of stock options are reviewed but are not considered the most important factor in determining the size of any executive's stock option award in a particular year.

From time to time, the compensation committee may utilize the services of independent consultants to perform analyses and to make recommendations to the committee relative to executive compensation matters. No compensation consultant has so far been retained.

# Relationship of Compensation to Performance and Compensation of our executive officers

The compensation committee will annually establish, subject to the approval of the board of directors and any applicable employment agreements, the salaries that will be paid to our executive officers during the coming year. In setting salaries, the compensation committee takes into account several factors, including competitive compensation data, the extent to which an individual may participate in the stock plans maintained by us, and qualitative factors bearing on an individual's experience, responsibilities, management and leadership abilities and job performance.

# Nominating and Corporate Governance Committee

Effective on November 2004, we established a nominating and corporate governance committee of our board of directors which initially consists of Messers. Derbin and Appel. The functions of the nominating and corporate governance include the following:

- · identifying and recommending to the board of directors individuals qualified to serve as directors of the Company and on the committees of the board;
- · advising the board with respect to matters of board composition, procedures and committees;
- · developing and recommending to the board a set of corporate governance principles applicable to us and overseeing corporate governance matters generally; and
- $\cdot$  overseeing the annual evaluation of the board and our management.
- The nominating and corporate governance committee shall be governed by a charter, which we intend to adopt.

# **Code of Ethics**

We have adopted a code of ethics that applies to our officers, employees and directors, including our principal executive officers, principal financial officers and principal accounting officers. The code of ethics sets forth written standards that are designated to deter wrongdoing and to promote:

- · Honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;
- · Full, fair, accurate, timely and understandable disclosure in reports and documents that a we file with, or submit to, the SEC and in other public communications made by us;
- · Compliance with applicable governmental laws, rules and regulations;
- · The prompt internal reporting of violations of the code to an appropriate person or persons identified in our code of ethics; and
- · Accountability for adherence to our code of ethics.

A copy of our code of ethics has been filed with the SEC as an exhibit to our Form 8K dated November 12, 2004.

# **Compensation of Officers and Directors**

The aggregate compensation paid to our directors and executive officers, including stock based compensation, for the year ended December 31, 2003 and December 31, 2004 was approximately \$183,692 and \$238,795, respectively. This amount includes \$0 set aside or accrued to provide pension, severance, retirement, or similar benefits or expenses, but does not include business travel, relocation, professional and business association dues and expenses reimbursed to office holders and other benefits commonly reimbursed or paid by similarly situated companies. None of our directors has so far received any compensation for his or her services as a director other than stock options and reimbursement of expenses.

# **Compensation Committee Interlocks And Insider Participation**

There were no interlocking relationships between us and other entities that might affect the determination of the compensation of its directors and executive officers.

# **Executive Compensation**

The following table sets forth the compensation earned during the years ended December 31, 2003 and 2004 by our former and current chief executive officer:

# Summary Compensation Table For Last Fiscal Year

		Annual Comp	ensation	Long Term Compensation Awards
Name And Principal Position	Year	Salary(\$)	Bonus(\$)	Securities Underlying Options
J. Todd Derbin	2004	\$168,270	\$45,000**	
President, Chief Executive Officer, and Director	2003	\$150,000	\$60,000**	1,172,727
Dr. James Patton	2004	\$-*		29,583
Chairman of the Board of Directors	2003	\$-*		33,810

\*Dr. Patton was paid consulting fees by Advaxis of \$18,000 in 2003 and \$15,750 in 2004.

Mr. Patton's compensation related to his consulting agreement which terminated on November 2004.

\*\*Mr. Derbin's stock option award was based in his employment contract. His 2003 bonus of \$60,000 was paid in Common Stock of the Company on the basis of a volume of \$0.1452 per share and was two-third's of his maximum bonus of \$90,000. The basis for this bonus was the successful conclusion of several matters of great importance to the Company including:

- negotiating and executing an arrangement with GSK in 2003;
- extending the patent portfolio and moving it to the care of competent patent counsel;
- creating grant opportunities for the company;
- scaling up manufacturing;
- creating certain collaboration opportunities.

In determining Mr. Debin's bonus, the Board of Directors acted in part on a discretionary basis.

# **Option Grants In Recent Fiscal Years**

The following table sets forth each grant of stock options during the years ended December 31, 2003 and 2004 to our current and former Chief Executive Officer under a predecessor stock option plan. The assumed 5% and 10% rates of stock price appreciation are provided in accordance with rules of the SEC and do not represent our estimate or projection of our common stock price. Actual gains, if any, on stock option exercises are dependent on the future performance of our common stock, overall market conditions and the option holders' continued employment through the vesting period. Unless the market price of our common stock appreciates over the option term, no value will be realized from the option grants made to these executive officers. The potential realizable values shown in the table are calculated by assuming that the estimated fair market value of our common stock on the date of grant increases by 5% and 10%, respectively, during each year of the option term.

The outstanding stock options described above became options for our common stock upon the Share Exchange.

			Individual Gr				
		Number Of Securities Underlying	Percent Of Total Options Granted To			Value Annual F Price App	al Realizable At Assumed Rates of Stock preciation For n Term(\$)
Name	Year	Options Granted	Employees In Fiscal Year)	Exercise Price	Expiration Date	5%	10%
J. Todd Derbin <sup>(1)</sup> President, Chief Executive Officer, and Director	2004 2003						
Dr. James Patton Chairman of the Board of Directors	2004 2003	29,583 33,810	46.6% 53.3%	\$0.35 \$0.35	11/1/2012 11/1/2012	\$2,190 \$2,503	\$7,845 \$8,966

(1) The initial option grant was in the year 2002.

# Aggregate Option Exercises In Last Fiscal Year And Fiscal Year-End Option Values

The following table sets forth information concerning the options exercised by Advaxis' current and former Chief Executive Officer in the years ended December 31, 2003 and 2004 and the year-end number and value of unexercised options with respect to each of these executive officers.

				Underlying Und	Of Securities exercised Options Year-End <sup>(2)</sup>	Value Of Unexercised In-The-Money Options At Fiscal Year-End(\$) <sup>(3)</sup>	
Name	Year	Shares Acquired On Exercise	Value Realized <sup>(1)</sup>	Exercisable	Unexercisable	Exercisable	Unexercisable
J. Todd Derbin President, Chief Executive Officer, and Director	2004 2003	0 0	0 0	586,382 293,191	586,382 879,575	51,015 0	51,015 0
Dr. James Patton Chairman of the Board of Directors	2004 2003	0 0	0 0	29,583 33,810	0 0	0 0	0 0

(1) Based on the fair market value of our common stock on the date of exercise, less the exercise price payable for such shares.

(2) Certain of the options are immediately exercisable for all the option shares as of the date of grant but any shares purchased are subject to repurchase by us at the original exercise price paid per share if the optione ceases service with us before vesting in such shares.

(3) Based on the fair market value of our common stock at fiscal year end of \$0.20 per share, determined by the board to be equal to our Private Placement price per share less the exercise price payable for such shares.

#### 2004 Stock Option Plan

In November 2004, our board of directors and stockholders adopted the 2004 Stock Option Plan ("Plan"). The Plan provides for the grant of options to purchase up to 2,381,525 shares of our common stock to employees, officers, directors and consultants. Options may be either "incentive stock options" or non-qualified options under the Federal tax laws. Incentive stock options may be granted only to our employees, while non-qualified options may be issued to non-employee directors, consultants and others, as well as to our employees.

The Plan is administered by "disinterested members" of the board of directors or the compensation committee, who determine, among other things, the individuals who shall receive options, the time period during which the options may be partially or fully exercised, the number of shares of common stock issuable upon the exercise of each option and the option exercise price.

Subject to a number of exceptions, the exercise price per share of common stock subject to an incentive option may not be less than the fair market value per share of common stock on the date the option is granted. The per share exercise price of the common stock subject to a non-qualified option may be established by the board of directors, but shall not, however, be less than 85% of the fair market value per share of common stock on the date the option is granted. The aggregate fair market value of common stock for which any person may be granted incentive stock options which first become exercisable in any calendar year may not exceed \$100,000 on the date of grant.

No stock option may be transferred by an optionee other than by will or the laws of descent and distribution, and, during the lifetime of an optionee, the option will be exercisable only by the optionee. In the event of termination of employment or engagement other than by death or disability, the optionee will have no more than three months after such termination during which the optionee shall be entitled to exercise the option, unless otherwise determined by the board of directors. Upon termination of employment or engagement of an optionee by reason of death or permanent and total disability, the optionee's options remain exercisable for one year to the extent the options were exercisable on the date of such termination. No similar limitation applies to non-qualified options.

We must grant options under the Plan within ten years from the effective date of the Plan. The effective date of the Plan was November 12, 2004. Subject to a number of exceptions, holders of incentive stock options granted under the Plan cannot exercise these options more than ten years from the date of grant. Options granted under the Plan generally provide for the payment of the exercise price in cash and may provide for the payment of the exercise price by delivery to us of shares of common stock already owned by the optionee having a fair market value equal to the exercise price of the options being exercised, or by a combination of these methods. Therefore, if it is provided in an optionee's options, the optionee may be able to tender shares of common stock to purchase additional shares of common stock and may theoretically exercise all of his stock options with no additional investment other than the purchase of his original shares.

Any unexercised options that expire or that terminate upon an employee's ceasing to be employed by us become available again for issuance under the Plan.

#### **Employment Agreements**

We have entered into an amended and restated employment agreement with J. Todd Derbin, dated December 20, 2004 pursuant to which Mr. Derbin is employed as our President and Chief Executive Officer. The effective date of the agreement is January 1, 2005. The term of the agreement is for one year and will be further renewed if mutually agreed to by Mr. Derbin and us. Mr. Derbin's annual base salary shall be \$200,000; provided that it shall be increased to \$225,000 or \$250,000 based upon certain milestones as set forth in the agreement. In addition, Mr. Derbin shall be entitled to bonuses in the form of equity and/or cash as set forth in the agreement and he shall be entitled to receive non-qualified stock options to purchase our common stock, the amount of which when added to his existing 1,172,767 options shall equal 5% of the our total issued and outstanding common stock, as of March 31, 2005. One-half of the options shall vest on the grant date and one-half of the options shall vest monthly over four years at a rate of 1/48<sup>th</sup> per month. The grant of the options is subject to us adopting a new stock option plan, which is subject to stockholder approval.



*Vafa Shahabit, Ph.D.* Dr. Shahabit has been Head of Director of Science effective March 1, 2005, terminable on 30 days. Her duties are to work on and/or manage research and development projects as specified by the Company. The compensation is \$100,000 per annum with a potential bonus of \$20,000. In addition, Dr. Shahabi will be granted 150,000 options.

*Dr. John Rothman*, *Ph.D.* Dr. Rothman has been hired as Vice President of Clinical Development effective March 7, 2005 for a term of one year ending February 28, 2006 and terminable on 30 days notice. His compensation is \$170,000 per annum, to increase to \$180,000 upon the closing of a \$15 million equity financing. Upon meeting incentives to be set by the Company, he will receive a bonus of up to \$45,000. In addition, Dr. Rothman will be granted 360,000 stock options.

# Compliance with Section 16(a) of the Securities Exchange Act of 1934

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires our directors and executive officers and persons who own more than ten percent of a registered class of our equity securities (collectively, "Reporting Persons") to file with the SEC initial reports of ownership and reports of changes in ownership of our common stock and our other equity securities. Reporting Persons are required by SEC regulation to furnish us with copies of all Section 16(a) forms that they file. To our knowledge, based solely on a review of the copies of such reports furnished to us, we believe that during calendar year ended December 31, 2004, all of the Reporting Persons complied with all applicable filing requirements, except for (i) the former officers and directors prior to November 12, 2004 who, to our knowledge, never filed Form 3s with the SEC, (ii) Messers. Appel and Flamm who haven't filed Form 4s with the SEC to reflect new option issuances, (iii) The Trustees of the University of Pennsylvania who were late in filing their Form 3 with the SEC and (iv) Harvest Advaxis LLC who has not filed a Form 3 with the SEC.

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# PRINCIPAL AND MANAGEMENT STOCKHOLDERS

The following table sets forth,

- each person who is known by us to be the owner of record or beneficial owner of more than 5% of our outstanding common stock;
- · each of our directors and each of our executive officers;
- · all of our directors and executive officers as a group; and
- the number of shares of common stock beneficially owned by each such person and such group and the percentage of the outstanding shares owned by each such person and such group.

As used in the table below and elsewhere in this prospectus, the term *beneficial ownership* with respect to a security consists of sole or shared voting power, including the power to vote or direct the vote and/or sole or shared investment power, including the power to dispose or direct the disposition, with respect to the security through any contract, arrangement, understanding, relationship, or otherwise, including a right to acquire such power(s) during the next 60 days following the date of this prospectus. Except as otherwise indicated, the stockholders listed in the table have sole voting and investment powers with respect to the shares indicated.

Except as otherwise noted below, the address of each of the persons in the table is 212 Carnegie Center, Suite 206, Princeton, New Jersey 08540.

Name and Address	Number of Shares of Registrant Common <u>Stock Beneficially Owned</u>	Percentage of Class <u>Beneficially Owned<sup>(1)</sup></u>
Name and Address of Beneficial Owner	Shares of Common Stock Beneficially Owned	Percentage of Class Beneficially Owned
J. Todd Derbin(1)(2)	1,837,348 (3)	4.81%
Roni Appel(1)(2)	3,041,622 (4)	8.22%
Scott Flamm(1)	2,914,989 (5)	7.90%
Dr. Steve Roth(1)	82,763 (6)	0.02%
Dr. James Patton(1)	2,913,476 (7)	7.92%
Dr. Thomas McKearn(1)	306,601 (8)	0.08%
The Trustees of the University of Pennsylvania Center for Technology Transfer, University of Pennsylvania 3160 Chestnut Street, Suite 200 Philadelphia, PA 19104-6283	6,339,282	17.2%
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Sunrise Equity Partners, LP		
641 Lexington Ave-25fl		
New York, NY 10022	1,838,783 (9)	4.99%
Level Counter, LLC		
c/o Sunrise Securities Corp.		
641 Lexington Ave-25fl		
New York, NY 10022	1,838,783 (10)	4.99%
Marilyn Adler		
c/o Sunrise Securities Corp.		
641 Lexington Ave-25fl		
New York, NY 10022	1,838,783 (11)	4.99%
Nathan Low		
c/o Sunrise Securities Corp.		
641 Lexington Ave-25fl		
New York, NY 10022	3,346,311 (12)	9.10%
Amnon Mandelbaum		
c/o Sunrise Securities Corp.		
641 Lexington Ave-25fl		
New York, NY 10022	2,932,803 (13)	7.97%
Emigrant Capital Corp.		
6 East 43 Street, 8th Fl.		
New York, NY 10017	1,838,783 (14)	4.99%
Harvest Advaxis LLC		
30052 Aventura, Suite C		
Rancho Santa Margarita, CA 92688	3,832,753(15)	10.4%
All Directors and Officers as a Group (6 people)	11,096,799	28.95%
	,,	

\* Based on 36,690,056 shares of common stock outstanding as of January 31, 2005.

<sup>(1)</sup> Director

<sup>(2)</sup> Officer

<sup>(3)</sup> Reflects 295,766 shares of common stock, 1,172,767 options to purchase shares of common stock and 368,815 warrants to purchase shares of common stock.

<sup>(4)</sup> Reflects 14,449 warrants to purchase shares of common stock and 2,522,166 shares of common stock owned by Mr. Appel but does not reflect 58,580 warrants to purchase shares of common stock because such warrants are not under the current circumstances, exercisable within the next 60 days. Also reflects 355,528 shares of common stock and 149,480 options and warrants to purchase shares of common stock beneficially owned by Carmel Ventures, Inc. of which Mr. Appel is a controlling person but does not reflect 355,528 warrants to purchase shares of common stock owned by Carmel Ventures, Inc. because such warrants are not under the current circumstances, exercisable within the next 60 days.

<sup>(5)</sup> Reflects 125,772 shares of common stock and 122,751 options and warrants to purchase shares of common stock owned by Mr. Flamm but does not reflect 125,722 warrants to purchase shares of common stock because such warrants are not under the current circumstances, exercisable within the next 60 days. Also reflects 2,621,325 shares of common stock and 45,141 warrants to purchase shares of common stock beneficially owned by Flamm Family Partners LP of which Mr. Flamm is a partner.

<sup>(6)</sup> Reflects options to purchase shares of common stock.

<sup>(7)</sup> Reflects 56,349 options to purchase shares of common stock, 36,551 warrants to purchase shares of common stock and 2,820,576 shares of common stock but does not reflect 147,716 warrants to purchase shares of common stock because such warrants are not under the current circumstances, exercisable within the next 60 days.

<sup>(8)</sup> Reflects 195,586 options and warrants to purchase shares of common stock and 111,015 shares of common stock.

<sup>(9)</sup> Reflects 1,742,160 shares of common stock held by Sunrise Equity Partners, LP ("SEP") and warrants to purchase 96,623 shares of common stock, but does not include warrants to purchase 1,645,537 shares of common stock issuable upon exercise of warrants held by SEP because such warrants are not, under the current circumstances, exercisable within the next 60 days. The General Partner of SEP is Level Counter, LLC ("LC"), the managers of which are Nathan Low, Marilyn Adler and Amnon Mandelbaum (the "Managers"). Decisions regarding voting and disposition require the unanimous vote of all three managers. The 1,838,783 shares of common stock held by SEP also does not include: (1) 1,124,253 shares of common stock directly owned by Nathan Low or warrants directly owned by Mr. Low to purchase up to 761,971 shares of common stock (which warrants are not, under the circumstances, exercisable within the next 60 days); (2) 1,094,020 shares of directly owned by Amnon Mandelbaum or warrants directly owned by Mr. Mandelbaum to purchase up to 672,539 shares of common stock (which warrants are not, under the circumstances, exercisable within the next 60 days); and (3) shares of common stock held by Imited partners of SEP or LC who may have a direct or indirect pecuniary interest, but have no authority to vote or dispose of the shares of common stock held by SEP.

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- (10) Reflects 1,742,160 shares of common stock held by SEP and warrants to purchase 96,623 shares of common stock, but does not include warrants to purchase 1,645,537 shares of common stock issuable upon exercise of such warrants held by SEP because such warrants are not, under the circumstances, exercisable within the next 60 days. LC is the general partner of SEP and as such, is deemed to have beneficial ownership of the securities held by SEP for purposes of calculating percentage interest. However, LC disclaims beneficial interest in such shares except to the extent of its pecuniary interest therein.
- (11) Reflects 1,742,160 shares of common stock held by SEP and warrants to purchase 96,623 shares of common stock, but does not include warrants to purchase 1,645,537 shares of common stock issuable upon exercise of such warrants held by SEP because such warrants are not, under the circumstances, exercisable within the next 60 days. Ms. Adler is a manager of LC, the general partner of SEP, and as such, is deemed to have beneficial ownership of the securities held by SEP for purposes of calculating percentage interest. However, Ms. Adler disclaims beneficial interest in such shares except to the extent of her pecuniary interest therein.
- (12) Reflects 1,742,160 shares of common stock held by SEP and warrants to purchase 96,623 shares of common stock, but does not include warrants to purchase 1,645,537 shares of common stock issuable upon exercise of such warrants held by SEP because such warrants are not, under the circumstances, exercisable within the next 60 days. Mr. Low is a manager of LC, the general partner of SEP, and as such, is deemed to have beneficial ownership of the securities held by SEP for purposes of calculating percentage interest. However, Mr. Low disclaims beneficial interest in such shares except to the extent of his pecuniary interest therein. Also reflects 1,124,253 shares of common stock owned by Mr. Low but does not reflect warrants to purchase 761,971 shares of common stock issuable upon exercise of such warrants because such warrants are not, under the circumstances, exercisable within the next 60 days. Also includes 383,275 shares of common stock held by Sunrise Securities Corp., a corporation of which Mr. Low is sole stockholder and director, but does not include warrants to purchase 348,432 shares of common stock held by Sunrise Securities Corp. because such warrants are not, under the circumstances, exercisable within the next 60 days. Mr. Low's beneficial ownership does not include shares of common stock held by Sunrise Foundation Trust, a charitable trust of which Mr. Low is a trustee. Mr. Low disclaims beneficial ownership does not include shares of common stock held by Sunrise Foundation Trust.
- (13) Reflects 1,742,160 shares of common stock held by SEP and warrants to purchase 96,623 shares of common stock, but does not include warrants to purchase 1,645,537 shares of common stock issuable upon exercise of such warrants held by SEP because such warrants are not, under the circumstances, exercisable within the next 60 days. Mr. Mandelbaum is a manager of LC, the general partner of SEP, and as such, is deemed to have beneficial ownership of the securities held by SEP for purposes of calculating percentage interest. However, Mr. Mandelbaum disclaims beneficial interest in such shares except to the extent of his pecuniary interest therein. Also reflects 1,094,020 shares of common stock owned by Mr. Mandelbaum but does not reflect warrants to purchase 672,539 shares of common stock issuable upon exercise of such warrants are not, under the circumstances, exercisable within the next 60 days.
- (14) Reflects 1,742,160 shares of common stock held by Emigrant Capital Corp. ("Emigrant") and warrants to purchase 16,623 shares of common stock, but does not include warrants to purchase 1,645,537 shares of common stock issuable upon exercise of warrants held by Emigrant because such warrants are not, under the current circumstances, exercisable within the next 60 days.
- (15) Reflects 3,832,753 shares of common stock but does not reflect warrants to purchase 3,832,753 shares of common stock because such warrants are not currently exercisable within the next 60 days.

# CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Our policy is to enter into transactions with related parties on terms that, on the whole, are no more favorable, or no less favorable, than those available from unaffiliated third parties. Based on our experience in the business sectors in which we operate and the terms of our transactions with unaffiliated third parties, we believe that all of the transactions described below met this policy standard at the time they occurred.

### **Consulting Agreement with Carmel Ventures, Inc.**

Carmel Ventures, Inc. ("Carmel") is owned by Roni Appel, our Chief Financial Officer, director and a principal shareholder. Pursuant to a consulting agreement, dated as of November 1, 2002, Carmel provided various consulting services to us principally in management, business development and recruiting strategies. Carmel has been paid consulting fees of \$5,000 per month since November 1, 2002 which fees have accrued but not been paid. As of December 31, 2004, such accrued fees amounted to \$130,000 of which 30,000 was paid in cash. Carmel has assigned \$35,000 of such fees to Mr. Scott Flamm, one of our directors and principal shareholders. Carmel and Mr. Flamm have converted the \$65,000 and \$35,000 respectively into shares of common stock and warrants. In addition, we granted Carmel a bonus of \$35,000 which was converted into Units in the Private Placement and we granted Carmel options to purchase shares of our common stock at the rate of 7,044 options per month since November 11, 2002. The total number of options received by Carmel was 183,134. The exercise price of these options is \$0.35 per share. Carmel has assigned 91,567 of these options to Mr. Flamm. The contract with Carmel was terminated as of December 31, 2004.

# **Consulting Agreement with LVEP Management, LLC**

LVEP is owned by Scott Flamm, one of our directors and a principal shareholder. LVEP employs Mr. Flamm and Mr. Roni Appel, our Chief Financial Officer, director and a principal shareholder. Pursuant to a consulting agreement, dated as of January 19, 2005, LVEP is to provide financial management and strategic business development consulting services to us. The initial term of the agreement is until September 30, 2005 and thereafter the term of the agreement shall be automatically extended for six month periods unless we notify LVEP at least 60 days prior to the end of term of our intent not to extend. In consideration for providing the consulting services, LVEP received an initial payment of \$4,500 and shall receive \$7,000 per month during the term of the agreement plus reimbursement of approved expenses in connection with providing the consulting services. Additionally, LVEP shall receive 3,500 restricted shares of common stock per month.

# Amended and Restated Employment Agreement with J. Todd Derbin

J. Todd Derbin is of Chief Executive Officer and a director. On December 20, 2004, we entered into an amended and restated employment agreement with J. Todd Derbin, pursuant to which Mr. Derbin is employed as our President and Chief Executive Officer. The effective date of the employment agreement is January 1, 2005. The term of the employment agreement is for one year and will be further renewed if mutually agreed to by Mr. Derbin and us. Mr. Derbin's annual base salary shall be \$200,000; provided that it shall be increased to \$225,000 or \$250,000 based upon certain milestones as set forth in the employment agreement. In addition, Mr. Derbin shall be entitled to bonuses in the form of equity and/or cash as set forth in the employment agreement and he shall be entitled to receive non-qualified stock options to purchase our common stock, the amount of which when added to his existing 1,172,767 options shall equal 5% of the our total issued and outstanding common stock, as of March 31, 2005. One-half of the options shall vest on the grant date and one-half of the options shall vest monthly over four years at a rate of 1/48<sup>th</sup> per month. The grant of the options is subject to us adopting a new stock option plan, which is subject to stockholder approval.

# Sentinel Consulting, Inc.

Sentinel Consulting Inc. is owned by Robert Harvey, an observer to our Board and the manager of Harvest Advaxis LLC, one of our principal stockholders. Sentinel provided financial consulting, scientific validation and business strategy advice to us. The term of the agreement was for six months commencing as of September 5, 2004 with each party having the right to terminate it after four months under the agreement. We have paid Sentinel \$33,000 for services performed and we have the obligation to issue to them a warrant to purchase 191,638 shares of our common stock at an exercise price of an \$0.40 per share, plus 287,451 shares of our common stock, a retainer of \$5,000, a video preparation fee of \$10,000 and expenses of \$6,000 in connection with the preparation of a scientific review.

## SELLING STOCKHOLDERS

This prospectus relates to the resale from time to time of up to a total of 56,320,114 shares of common stock by selling stockholders, comprising:

- 36,690,056 shares of our common stock that were issued to selling stockholders pursuant to transactions exempt from registration under the Securities Act of 1933; and
- 19,630,588 shares of common stock underlying warrants that were issued to selling stockholders pursuant to transactions exempt from registration under the Securities Act of 1933.

The following table set forth certain information regarding the beneficial ownership of our common stock as to the selling stockholders and the shares offered by them in this prospectus. Beneficial ownership is determined in accordance with the rules of the SEC. In computing the number of shares beneficially owned by a selling stockholders and the percentage of ownership of that selling stockholder, shares of common stock underlying shares of convertible preferred stock, options or warrants held by that selling stockholder that are convertible or exercisable, as the case may be, within 60 days of January 31, 2005 are included. Those shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other selling stockholder. Each selling stockholder's percentage of ownership in the following table is based upon 36,690,056 shares of common stock outstanding as of January 31, 2005.

Except as described below, none of the selling stockholders within the past three years has had any material relationship with us or any of our affiliates:

- · J. Todd Derbin has served as our Chief Executive Officer and a director since November 12, 2004;
- Roni Appel has served as our Chief Financial Officer and a director since November 12, 2004; Carmel Ventures, Inc., of which Mr. Appel is the principal stockholder has provided consulting services to us; LVEP by which Mr. Appel is employed, is providing consulting services to us;
- Scott Flamm has served as a director since November 12, 2004 and LVEP of which Mr. Flamm is a principal stockholder and an employee of, is providing consulting services to us;
- · Thomas McKearn has served as a director since November 12, 2004;
- · Dr. James Patton has served as a director since November 12, 2004 and has served as a consultant to us in the past;
- · Dr. Yvonne Patton has served as a consultant;
- · The Trustees of the University of Pennsylvania own the patents which we have an exclusive license;
- Sunrise Securities Corp. acted as placement agent in the Private Placement. Nathan Low, Amnon Mandelbaum, Marcia Kucher, Derek Caldwell, Richard Stone and David Goodfriend are all affiliated with or employed by Sunrise Securities Corp., the placement agent in the Private Placement. Sunrise Equity Partners, LP and Sunrise Foundation Trust are also affiliates of Sunrise Securities Corp.; and

• Dr. David Filer is a consultant for us and provided consulting services to the Sunrise Securities Corp.

The term "selling stockholders" also includes any transferees, pledges, donees, or other successors in interest to the selling stockholders named in the table below. To our knowledge, subject to applicable community property laws, each person named in the table has sole voting and investment power with respect to the shares of common stock set forth opposite such person's name.

The selling stockholders named below are selling the securities. The table assumes that all of the securities will be sold in this offering. However, any or all of the securities listed below may be retained by any of the selling stockholders, and therefore, no accurate forecast can be made as to the number of securities that will be held by the selling stockholders upon termination of this offering. These selling stockholders acquired their shares by purchase exempt from registration under section 4(2) of the Securities Act of 1933 or Regulation D under the Securities Act of 1933. We believe that the selling stockholders listed in the table have sole voting and investment powers with respect to the securities indicated. We will not receive any proceeds from the sale of the securities by the selling stockholders. No selling stockholders are broker-dealers or affiliates or employees of broker-dealers other than Sunrise Securities Corp., David Goodfriend, Amnon Mandelbaum, Marcia Kucher, Derek Caldwell, Richard Stone Nathan Low, Sunrise Equity Partners LP and Sunrise Foundation Trust. The securities included in this list include securities which would otherwise become soleable from time to time pursuant to Rule 144 as currently in effect.

Name	Total Shares Owned	Shares Registered	% Before Offering	% After Offering	Relationship (if any)
Adele Pfenninger					
12 Spring Brook Road					
Annandale, NJ 08801	79,600 (1)	70,790 (1)	0.22%	0.02%	
AI International Corporate Holdings, Ltd. c/o FCIM Corp. 1 Rockefeller Plaza Suite 1730					
New York, NY 10020	174,216 (2)	174,216 (2)	0. 47%	0.0%	
Alan Gelband Company Defined Contribution Pension Plan and Trust 30 Lincoln Plaza					
New York, NY 10023	348,432 (3)	348,432 (3)	0.95%	0.0%	
Alan Kestenbaum 18 Clover Drive Great Neck, NY 11021	348,432 (3)	348,432 (3)	0.95%	0.0%	-
Beretz Family Partners LP 48 South Drive Great Neck, NY 11021	174,216 (2)	174,216 (2)	0.47%	0.0%	
		68			

Name	Total Shares Owned	Shares Registered	% Before Offering	% After Offering	Relationship (if any)
Bridges & Pipes, LLC 830 Third Avenue					
14 <sup>th</sup> Floor New York, NY 10022	1,393,728 (4)	1,393,728 (4)	3.73%	0.0%	
Bruce Fogel 218 Everglade Avenue Palm Beach, FL 33480	348,432 (3)	348,432 (3)	0.95%	0.0%	
C. Leonard Gordon 551 Fifth Avenue New York, NY 10176	174,216 (2)	174,216 (2)	0.47%	0.0%	
Carmel Ventures, Inc 22 Ruth Lane Demarest, NJ 07627	860,537 (5)	711,057 (5)(a)	2.32%	0.41%	5(b)
Catherine Janus 4817 Creak Dr. Western Spring, IL 60558	118,832 (6)	105,767 (6)	0.32%	0.04%	
Chaim Cymerman c/o Tomer Cymerman Paamoni 10, Apt. 19 Bavli, Tel Aviv Israel	196,371 (7)	174,593 (7)(a)	0.53%	0.06%	
Charles Kwon 834 Monror Street Evanston, Il 60202	491,233 (8)	482,322 (8)(a)	1.33%	0.02%	
Cranshire Capital, LP 666 Dundee Road Sute 1901 Northbrook, IL 60602	1,045,296 (9)	1,045,296 (9)	2.81%	0.0%	
Crestwood Holdings, LLC c/o Ran Nizan 109 Boulevard Drive Danburg, CT 06910	360,253 (10)	227.079.(10)(2)	0.099/	0.06%	
Danbury, CT 06810 David Stone 228 St. Charles Avenue Suite 1024	300,233 (10)	337,978 (10)(a)	0.98%	0.0070	
Suite 1024 New Orleans, LA 70130	348,432 (3)	348,432 (3)	0.95%	0.0%	
David Tendler 401 East 60 <sup>th</sup> Street New York, NY 10022	696,864 (11)	696,864 (11)	1.88%	0.0%	
		69			

Name	Total Shares Owned	Shares Registered	% Before Offering	% After Offering	Relationship (if any)
Design Investments, LTD 9 Tanbark Circuit Suite 1442 Werrington Downs					
NSW 2747 Australia	696,864 (11)	696,864 (11)	1.88%	0.0%	
Emigrant Capital Corp. 6 East 43 <sup>rd</sup> Street 8 <sup>th</sup> Floor					
New York, NY 10017	3,484,320 (12)	3,484,320 (12)	9.07%	0.0%	
Eugene Mancino Blau Mancino 12 Roszel Road, Suite C-101 Princeton, NJ 08540	255,000 (12)	212 544 (12)(2)	0.96%	0.39%	
Princeton, NJ 08540	355,099 (13)	212,544 (13)(a)	0.96%	0.39%	
Fawdon Investments Ltd. 4 Ibn Shaprut Street Jerusalem, Israel 92478	1,393,728 (4)	1,393,728 (4)	3.73%	0.0%	
Flamm Family Partners, LP. c/o Scott Flamm 70 West Road	2 666 466 41 0		7.00%	0.020/	
Short Hills, NJ 07078	2,666,466 (14)	2,657,556 (14)(a)	7.26%	0.02%	(14)(b)
Fred Berdon Co, LP 717 Post Road Suite 105					
Sacrsdale, NY 10583	348,432 (3)	348,432 (3)	0.95%	0.0%	
Gina Ferarri 36 Stone Run Road Bedmingter, NJ 07921	79,932 (15)	71,022 (15)(a)	0.22%	0.2%	
Hal H. Beretz 48 South Drive					
Great Neck, NY 11021	522,648 (16)	522,648 (16)	1.41%	0.0%	
Howard Kaye Family Fund 2 Mohican Trail Scarsdale, NY 10583	522,648 (16)	522,648 (16)	1.41%	0.0%	
IRA FBO / Walter S. Grossman Pershing LLC Custodian 277 North Ave.					
Westport, CT 06880	696,864 (11)	696,864 (11)	1.88%	0.0%	
		70			

Name	Total Shares Owned	Shares Registered	% Before Offering	% After Offering	Relationship (if any)
Itai Portnio 26 Yakinton St.					
Haifa, Isreal 34406	157,608 (17)	14,186 (17)(a)	0.43%	0.05%	
J. Todd Derbin 840 Pretty Brook Road					
Princeton, NJ 08540	1,837,348 (18)	591,532 (18)(a)	4.81%	3.28%	(18)(b)
James Patton 1937 Swedesford					
Malvern, PA 19355	3,061,192 (19)	2,968,291(19)(a)	8.29%	0.25%	(19)(b)
James Paul					
c/o Fulwider Patton					
Howard Hughes Center 6060 Center Drive, 10 <sup>th</sup> Floor					
Los Angeles, CA 90045	39,215 (20)	34,861 (20)(a)	0.11%	0.01%	
Jonas Grossman 59 Huratio St.					
New York, NY 10014	80,640 (21)	71,731 (21)(a)	0.22%	0.02%	
V. D					
Kerry Propper 59 Huratio St.					
New York, NY 10014	201,600 (22)	179,326 (22)(a)	0.55%	0.06%	
Lilian Flamm c/o Scott Flamm					
70 West Road	107 220 (22)	107 229 (22)	0 5 40/	0.00/	
Short Hills, NJ 07078	197,328 (23)	197,328 (23)	0.54%	0.0%	
Marilvn Mendell					
1203 River Road,					
Apt. Penthouse 4 Edgewater, NJ 07020	284,500 (24)	253,316 (24)(a)	0.77%	0.08%	
Mary Ann Ryan Francis					
1115 Beanaqt Ave. Seaside Park, NJ 08752	79,071 (25)	70,360 (25)(a)	0.22%	0.02%	
MEA Group, LLC					
145 Talmadge Road Edison, NJ 08817	348,432 (3)	348,432 (3)	0.95%	0.0%	
Mordechai Mashiach 8 Shlomzion Hamalka					
Haifa, Isreal 34406	157,608 (17)	140,186 (17)(a)	0.43%	0.05%	
		71			
		71			

Name	Total Shares Owned	Shares Registered	% Before Offering	% After Offering	Relationship (if any)
New Bank Ltd					
Levinstein Tower #21 <sup>st</sup> 23 Menahem Begin Road Tel Aviv, Israel	1,393,728 (4)	1,393,728 (4)	3.73%	0.0%	
Open Ventures LLC 127 West Chestnut Hill Ave. Philadelphia, PA 19118	17,422	17,422	0.05%	0.0%	
Peggy Fern 1548 Herlong Court Rock Hill, SC 29732	79,712 (26)	70,081 (26)(a)	0.22%	0.02%	
Penn Footware Retirement Trust Line & Grove Streets					
PO Box 87 Nanticoke, PA 18634	348,432 (3)	348,432 (3)	0.95%	0.0%	
Richard Yelovich 603 Milleson Lane					
West Chester, PA 19380	151,289	151,289	0.41%	0.0%	
Roni Appel 22 Ruth Lane Demarest, NJ 07627	2,595,193 (27)	2,580,745 (27)(a)	7.06%	0.04%	(27)(b)
RP Capital, LLC 10900 Wilshire Blvd.					
Suite 500 Los Angeles, CA 90024	174,216 (2)	174,216 (2)	0.47%	0.0%	
Scott Flamm c/o Scott Flamm 70 West Road Short Hills, NJ 07078	374,296 (28)	251,545 (28)(a)	1.01%	0.33%	(28)(b)
Shai Stern	574,250 (20)	201,040 (20)(a)	1.01/0	0.5576	(20)(0)
43 Maple Aenue Cedarhurst, NY 11516	174,216 (2)	174,216 (2)	0.47%	0.0%	
SRG Capital, LLC 120 Broadway 40 <sup>th</sup> Floor					
New York, NY 10271	696,864 (11)	696,864 (11)	1.88%	0.0%	
Sunrise Equity Partners, LP 641 Lexington Avenue 25 <sup>th</sup> Floor					
New York, NY 10022	3,484,320 (12)	3,484,320 (12)	9.07%	0.0%	-
		72			

Name	Total Shares Owned	Shares Registered	% Before Offering	% After Offering	Relationship (if any)
-					
Thomas McKearn 6040 Lower Mountain Road New Hope, PA 18938	374,876 (29)	269,839 (29)(a)	1.02%	0.29%	(29)(b)
Titan Capital Management, LLC (TCMP3 Partners) 7 Centure Drive					
Suite 201 Parsippany, NJ 07054	696,864 (11)	696,864 (11)	1.88%	0.0%	
TT 37					
Tracy Yun 90 LaSalle St., Apt. #13G New York, NY 10027	60,197	60,197	0.16%	0.0%	
Trinita, LLC					
c/o Morten Kielland 22 Painters Lane					
Chesterbrook, PA 19087	151,289	151,289	0.41%	0.0%	
The Trustees of the University of Pennsylvania Center for Technology Transfer University of Pennsylvania 3160 Chestnut Street Suite 200					
Philadelphia, PA 19104-6283 Attn: Managing Director	6,339,282	6,339,282	17.28%	0.0%	(41)
	0,333,202	0,553,202	17.2070	0.070	(41)
William Kahn 7903 Longmeadow Road Baltimore, MD 21208	151,517	151,517	0.41%	0.0%	
Yair Talmor 517 Old Chappaqua Road Briarcliff Manor, NY 10510	174,216 (2)	174,216 (2)	0.47%	0.0%	_
	17 1,210 (2)	( <u>_</u> )		01070	
Yoav Millet 950 Third Avenue New York, NY 10022	174,216 (2)	174,216 (2)	0.47%	0.0%	
1100 1010, 111 10022	17 1,210 (2)	174,210 (2)	0.1770	0.070	
Yvonne Paterson 514 South 46 St.					
Philadelphia, PA 19143	873,412(30)	704,365	2.37%	0.46%	
Amnon Mandelbaum c/o Sunrise Securities Corp. 641 Lexington Avenue 25 <sup>th</sup> Floor					
New York, NY 10022	1,766,559 (31)	1,766,559 (31)	4.73%	0.0%	
		73			

of Sumire Scattiles Corp.       194,193 (32)       194,193 (32)       0.53%       0.0%       -         David Filer       165 East 25 Street       382,772 (33)       382,772 (33)       1.04%       0.0%       (32)(a)         Marcia Kucher       0''       0''       382,772 (33)       382,772 (33)       1.04%       0.0%       (32)(a)         Marcia Kucher       0''       0''       1.04%       0.0%       -       -         Vice York, NY 10012       4,140 (34)       4,140 (34)       0.01%       0.0%       -         New York, NY 10022       4,140 (34)       4,140 (34)       0.01%       -       -         Status Low       0''       0'''       -       -       -         O' Surise Securities Corp.       641 Lexington Avenue       25'' Floor       -       -         New York, NY 10022       1,886,224 (35)       1,886,224 (35)       5,04%       0.0%       -         Deck Caldwell       0''o Surise Securities Corp.       641 Lexington Avenue       25'' Floor       0.0%       -         Surise Securities Corp.       641 Lexington Avenue       25'' Floor       -       -       -         New York, NY 10022       731,707(37)(37A)       731,707 (37)       1,98%       0.0%	Name	Total Shares Owned	Shares Registered	% Before Offering	% After Offering	Relationship (if any)
of Number Securities Corp.       194,193 (32)       194,193 (32)       0.53%       0.0%          Devel York, NY 10022       194,193 (32)       0.53%       0.0%          Devel Tork, NY 10022       194,193 (32)       0.53%       0.0%          Devel Tork, NY 10022       194,193 (32)       0.53%       0.0%          Marcia Kucher       00%       0.0%       (32)(a)          o're Sumits Securities Corp.       4,140 (34)       0.01%       0.0%          Nathen Low       0're Sumits Securities Corp.            o're Sumits Securities Corp.       1,886,224 (35)       1,886,224 (35)       5.04%       0.0%          New York, NY 10022       1,886,224 (35)       1,886,224 (35)       0.42%       0.0%          Sumits Securities Corp.              Sumits Securities Corp.        153,658 (36)       0.42%       0.0%          Sumits Securities Corp.              Sumits Securities Corp.              Sumits Securities Corp.						
David Filer         165 East 32 Strett         382,772 (33)         382,772 (33)         1.04%         0.0%         (32)(a)           Marcia Kucher         r0 Sunise Securities Corp.         631 Lexington Neenue         25° Floor         0.0%         -           Nathan Low         r0 Sunise Securities Corp.         631 Lexington Neenue         25° Floor         -           Nathan Low         r0 Sunise Securities Corp.         631 Lexington Neenue         25° Floor         -           New York, NY 10022         1,886,224 (35)         1,086,224 (35)         5.04%         0.0%         -           Deck Caldwell         r0 Sunise Securities Corp.         631 Lexington Avenue         25° Floor         -         -           New York, NY 10022         153,658 (36)         153,658 (36)         0.42%         0.0%         -           Sunise Securities Corp.         631 Lexington Avenue         25° Floor         -         -         -           New York, NY 10022         731,707(37)(37A)         731,707 (37)         1.98%         0.0%         -           Sunise Securities Corp.         631 Lexington Avenue         25° Floor         -         -           New York, NY 10022         307,317(38)         307,317(39)         0.83%         0.0%         -	641 Lexington Avenue					
165 Ear 32 Street       382.772 (33)       382.772 (33)       1.04%       0.0%       (32)(a)         Marcia Kucher       00 Sunties Securities Corp.       414 (24)       0.01%       0.0%          Marcia Kucher       1.040(34)       0.01%       0.0%           Marcia Kucher       1.040(34)       0.01%       0.0%          161 Lexington Avenue       25 Floor           New York, NY 10022       1,886,224 (35)       1.896,224 (35)       5.04%       0.0%          Derek Caldwell               Visite Securities Corp.       13,558 (36)       153,658 (36)       0.42%       0.0%          Sumise Securities Corp.       131,707 (37)       1.98%       0.0%          Sumise Securities Corp.       731,707 (37)       731,707 (37)       1.98%       0.0%          Sumise Securities Corp.              Sumise Securities Corp.              Sumise Securities Corp.              Sumise Se	New York, NY 10022	194,193 (32)	194,193 (32)	0.53%	0.0%	
of Sundres Securities Corp.       4,140 (34)       4,140 (34)       0.01%       0.0%          Nathan Low       of Sundres Securities Corp.            Nathan Low       of Sundres Securities Corp.            Sundres Securities Corp.            Sundres Securities Corp.            Securities Corp. </td <td></td> <td>382,772 (33)</td> <td>382,772 (33)</td> <td>1.04%</td> <td>0.0%</td> <td>(32)(a)</td>		382,772 (33)	382,772 (33)	1.04%	0.0%	(32)(a)
New York, NY 10022         4,140 (34)         4,140 (34)         0.01%         0.0%            Nathan Low c'o Sunrise Securities Corp. 641 Lexington Avenue 25 <sup>o</sup> Riom New York, NY 10022         1,886,224 (35)         1,886,224 (35)         5.04%         0.0%            Derek Caldwell c'o Sunrise Securities Corp. 641 Lexington Avenue 25 <sup>o</sup> Riom New York, NY 10022         153,658 (36)         153,658 (36)         0.42%         0.0%            Sunrise Securities Corp. 641 Lexington Avenue 25 <sup>o</sup> Floor New York, NY 10022         731,707(37)(37A)         731,707 (37)         1,98%         0.0%         (37)(a)           Sunrise Securities Corp. 641 Lexington Avenue 25 <sup>o</sup> Floor New York, NY 10022         731,707(37)(37A)         731,707 (37)         1,98%         0.0%         (37)(a)           Richard Stone c'o Sunrise Securities Corp. 641 Lexington Avenue 25 <sup>o</sup> Floor New York, NY 10022         307,317(38)         307,317(38)         0.83%         0.0%            Sunrise Securities Corp. 641 Lexington Avenue 25 <sup>o</sup> Sionrise Securities Corp. 641 Lexington Avenue 25 <sup>o</sup> Floor New York, NY 10022         71,497(38)(a)         71,497         0.19%         0.0%	641 Lexington Avenue					
of Sumise Securities Corp.       1,886,224 (35)       1,886,224 (35)       5.04%       0.0%          Derek Caldwell       c/o Sumise Securities Corp.            641 Lexington Avenue       25 <sup>th</sup> Floor       0.0%          New York, NY 10022       153,658 (36)       0.42%       0.0%          Sumise Securities Corp.             <		4,140 (34)	4,140 (34)	0.01%	0.0%	
Derek Caldwell (of Sumise Securities Corp. 641 Lexington Avenue 25 <sup>m</sup> Floor New York, NY 10022         153,658 (36)         153,658 (36)         0.42%         0.0%            Sumise Securities Corp. 641 Lexington Avenue 25 <sup>m</sup> Floor New York, NY 10022         731,707(37)(37A)         731,707 (37)         1.98%         0.0%         (37)(a)           Richard Stone c/o Sumise Securities Corp. 641 Lexington Avenue 25 <sup>m</sup> Floor New York, NY 10022         307,317(38)         307,317(38)         0.83%         0.0%            Sumise Securities Corp. 641 Lexington Avenue 25 <sup>m</sup> Floor New York, NY 10022         307,317(38)         307,317(38)         0.83%         0.0%            Sumise Securities Corp. 641 Lexington Avenue 25 <sup>m</sup> Floor New York, NY 10022         71,497(38)(a)         71,497         0.19%         0.0%	641 Lexington Avenue 25 <sup>th</sup> Floor					
c/o Sumise Securities Corp.       641 Lexington Avenue         25 <sup>th</sup> Floor       New York, NY 10022         Sumise Securities Corp.       641 Lexington Avenue         25 <sup>th</sup> Floor       731,707(37)(37A)         New York, NY 10022       731,707(37)(37A)         731,707 (37)       1.98%       0.0%         (c) Sumise Securities Corp.       641 Lexington Avenue         25 <sup>th</sup> Floor       0.0%       (37)(a)         Richard Stone       0.0%       (37)(a)         (c) Sumise Securities Corp.       641 Lexington Avenue       0.0%         25 <sup>th</sup> Floor       0.0%          New York, NY 10022       307,317(38)       307,317(38)       0.83%       0.0%          Sumise Foundation Trust       c'o Sumise Securities Corp.       641 Lexington Avenue       25 <sup>th</sup> Floor          New York, NY 10022       71,497(38)(a)       71,497       0.19%       0.0%	New York, NY 10022	1,886,224 (35)	1,886,224 (35)	5.04%	0.0%	
641 Lexington Avenue         25 <sup>th</sup> Floor         New York, NY 10022       731,707(37)(37A)       731,707 (37)       1.98%       0.0%       (37)(a)         Richard Stone	641 Lexington Avenue 25 <sup>th</sup> Floor	153,658 (36)	153,658 (36)	0.42%	0.0%	-
c/o Sunrise Securities Corp. 641 Lexington Avenue 25 <sup>th</sup> Floor New York, NY 10022 307,317(38) 307,317(38) 0.83% 0.0% Sunrise Foundation Trust c/o Sunrise Securities Corp. 641 Lexington Avenue 25 <sup>th</sup> Floor New York, NY 10022 71,497(38)(a) 71,497 0.19% 0.0%	25 <sup>th</sup> Floor	731,707(37)(37A)	731,707 (37)	1.98%	0.0%	(37)(a)
c/o Sunrise Securities Corp. 641 Lexington Avenue 25 <sup>th</sup> Floor New York, NY 10022 307,317(38) 307,317(38) 0.83% 0.0% Sunrise Foundation Trust c/o Sunrise Securities Corp. 641 Lexington Avenue 25 <sup>th</sup> Floor New York, NY 10022 71,497(38)(a) 71,497 0.19% 0.0%						
c/o Sunrise Securities Corp. 641 Lexington Avenue 25 <sup>th</sup> Floor New York, NY 10022 71,497(38)(a) 71,497 0.19% 0.0%	641 Lexington Avenue 25 <sup>th</sup> Floor	307,317(38)	307,317(38)	0.83%	0.0%	-
New York, NY 10022 71,497(38)(a) 71,497 0.19% 0.0%	641 Lexington Avenue					
74		71,497(38)(a)	71,497	0.19%	0.0%	
			74			

Name	Total Shares Owned	Shares Registered	% Before Offering	% After Offering	Relationship (if any)
Martin Trust Agreement U/A/ DTD 11/05/01 Peter L. Martin TTE 3757 Wedbster St, Apt 203					
San Francisco, CA 94123	348,432 (3)	348,432 (3)	0.95%	0.0%	
A. Heifetz Technologies Ltd 22 Kanfey Nesharim St Jerusalem, Israel 95464	348,432 (3)	348,432 (3)	0.95%	0.0%	
Balestra Spectrum Partners, LLC 1185 Avenue of the Americas 32 <sup>nd</sup> Floor					
New York, NY 10036	1,045,296 (9)	1,045,296 (9)	2.81%	0.0%	
Reitler Brown Holdings, LLC 800 Third Avenue 21st Floor New York, NY 10022	60,000 (39)	60,000 (39)	0.16%	0.0%	(39)(a)
Harvest Advaxis LLC 30052 Aventura, Suite C Rancho Santa Margarita, CA 92688	7,665,506 (40)	7,665,506 (40)	18.92%	0.0%	
Miles Wynn P.O. Box 440842 Aurora , CO 80044	696,700	696,700	1.90%	0.0%	
Teresa Waz 3679 S. Dawson St. Aurora, CO 80444	26,900	26,900	0.07%	0.0%	-
Ormonde Frew 19996 E. Greenwood Drive Aurora, CO 80013	12,000	12,000	0.03%	0.0%	
Ralph Grills 4042 S. Atchison Way Aurora, CO 80014	12,000	12,000	0.03%	0.0%	
Daniel Unrein 281 S. Leyden St. Denver, CO 80220	2,500	2,500	0.01%	0.0%	
Frederick Malkhe 4105 E. Florida Ave. Suite 100 Denver, CO 80222	2 500	2 500	0.01%	0.0%	
Denver, CO 00222	2,500	2,500	0.01%	0.0%	
		75			

(1)	Reflects 35,395 shares of common stock 44,205 warrants to purchase shares of common stock.
(2)	Reflects 87,108 shares of common stock and 87,108 warrants to purchase shares of common stock.
(3)	Reflects 174,216 shares of common stock and 174,216 warrants to purchase shares of common stock.
(4)	Reflects 696,864 shares of common stock and 696,864 warrants to purchase shares of common stock.
(5)	Reflects 355,528 shares of common stock, 413,441 warrants to purchase shares of common stock and 91,567 options exercisable for shares of common stock.
(5)(a)	Reflects 355,528 shares of common stock and 355,528 warrants to purchase shares of common stock
(5)(b)	Carmel Ventures, Inc. has performed consulting services for us and is owned by Roni Appel, our chief financial officer, director and principal shareholder.
(6)	Reflects 52,833 shares of common stock and 52.883 warrants to purchase shares of common stock.
(7)	Reflects 87,297 shares of common stock and 109,074 warrants to purchase shares of common stock.
(7)(a)	Reflects 87,297 shares of common stock and 87,297 warrants to purchase shares of common stock.
(8)	Reflects 271,260 shares of common stock and 219,973 warrants to purchase shares of common stock.
(8)(a)	Reflects 271,260 shares of common stock and 211,063 warrants to purchase shares of common stock.
(9)	Reflects 522,648 shares of common stock and 522,648 warrants to purchase shares of common stock.
(10)	Reflects 244,933 shares of common stock and 115,320 warrants to purchase shares of common stock.
(10)(a)	Reflects 266,933.shares of common stock and 93,046 warrants to purchase shares of common stock.
(11)	Reflects 348, 432 shares of common stock and 348,432 warrants to purchase shares of common stock.
(12)	Reflects 1,742,160 shares of common stock and 1,742,160 warrants to purchase shares of common stock.
(13)	Reflects 106,272 shares of common stock and 248,827 warrants to purchase shares of common stock.
(13)(a)	Reflects 106,272 shares of common stock and 106,272 warrants to purchase shares of common stock.
(14)	Reflects 2,585,094 shares of common stock and 45,141 warrants to purchase shares of common stock.
(14)(a)	Reflects 2,621,325 shares of common stock and 36,231 warrants to purchase shares of common stock.
(14)(b)	The general partner of Flamm Family Partners is Scott Flamm a director and principal shareholder.
(15)	Reflects 35,511 shares of common stock and 44,421 warrants to purchase shares of common stock.
(15)(a)	Reflects 35,511 shares of common stock and 35,511 warrants to purchase shares of common stock.
(16) (17)	Reflects 261,324 shares of common stock and 261,324 warrants to purchase shares of common stock. Reflects 70,093 shares of common stock and 87,515 warrants to purchase shares of common stock.
(17) (17)(a)	Reflects 70,093 shares of common stock and 70,093 warrants to purchase shares of common stock.
(17)(a) (18)	Reflects 295,766 shares of common stock and 1,172,767 options to purchase shares of common stock and 368,815 shares of common stock issuable upon exercise of
(10)	warrants.
(18)(a)	Reflects 295,766 shares of common stock and 295,766 warrants to purchase shares of common stock.
(18)(b)	Mr. Derbin is one of our directors and the chief executive officer.
(10)(0)	Reflects 56,349 options to purchase shares of common stock, 36,551 warrants to purchase shares of common stock and 2,820,576 shares of common stock but does not
(10)	reflect 147,716 warrants to purchase shares of common stock because such warrants are not currently exercisable within the next 60 days.
(19)(a)	Reflects 2,820,576 shares of common stock and 14,7716 warrants to purchase shares of common stock.
(19)(b	Dr. Patton is one of our directors.
(20)	Reflects 17,430 shares of common stock and 21,785 warrants to purchase shares of common stock.
(20)(a)	Reflects 17,430 shares of common stock and 17,430 warrants to purchase shares of common stock.
(21)	Reflects 35,865 shares of common stock and 44,775 warrants to purchase shares of common stock.
(21)(a)	Reflects 35,865 shares of common stock and 35,865 warrants to purchase shares of common stock.
(22)	Reflects 89,663 shares of common stock and 111,937 warrants to purchase shares of common stock.
(22)(a)	Reflects 89,663 shares of common stock and 89,663 warrants to purchase shares of common stock.
(23)	Reflects 98,664 shares of common stock and 98,664 warrants to purchase shares of common stock.
(24)	Reflects 126,658 shares of common stock and 157,842 warrants to purchase shares of common stock.
(24)(a)	Reflects 126,658 shares of common stock and 126,658 warrants to purchase shares of common stock.
(25)	Reflects 35,180 shares of common stock and 43,981 warrants to purchase shares of common stock.
(25)(a)	Reflects 35,180 shares of common stock and 35,180 warrants to purchase shares of common stock.
(26)	Reflects 35,401 shares of common stock and 44,311 warrants to purchase shares of common stock.
(26)(a)	Reflects 35,401 shares of common stock and 35,401 warrants to purchase shares of common stock.
(27)	Reflects 2,522,164 shares of common stock and 73,029 warrants to purchase shares of common stock
(27)(a)	Reflects 2,522,164 shares of common stock and 58,580 warrants to purchase shares of common stock
(27)(b)	Mr. Appel is one of our directors and our chief financial officer and owner of Carmel Ventures, Inc., one of our stockholders and is employed by LVEP Management,
	LLC one of our consultants.
(28)	Reflects 125,772 shares of common stock, 156,956 warrants to purchase shares of common stock and 91,567 options.

(28)(a) Reflects 125,772 shares of common stock and 125,772 warrants to purchase shares of common stock.

- (28)(b) Mr. Flamm is one of our directors and also the general partner of Flamm Family Partners, one of our stockholders and is the beneficial owner of LVEP Management, LLC one of our consultants.
- (29) Reflects 179,290 shares of common stock, 82,763 options and 112,823 warrants to purchase shares of common stock.
- (29)(a) Reflects 179,290 shares of common stock and 90,549 warrants to purchase shares of common stock.
- (29)(b) Mr. McKearn is one of our directors.
- (30) Refelcts 704,365 shares of common stock and 169,048 options to purchase shares of common stock.
- (31) Reflects 1,094,020 shares of common stock owned by Mr. Mandelbaum and warrants to purchase 672,539 shares of common stock owned by Mr. Mandelbaum, all of which securities were received as compensation in the ordinary course of business of Sunrise Securities Corp. as Placement Agent.
- (32) Reflects 119,466 shares of common stock and 74,727 warrants to purchase shares of common stock, all of which securities were received as compensation in the ordinary course of business of Sunrise Securities Corp. as Placement Agent.
- (33) Reflects 97,561 shares of common stock and 285,211 warrants to purchase shares of common stock, all of which securities were received as compensation in the ordinary course of business of Sunrise Securities Corp. as Placement Agent.
- (34) Reflects 2,070 shares of common stock and 2,070 warrants to purchase shares of common stock, all of which securities were received as compensation in the ordinary course of business of Sunrise Securities Corp. as Placement Agent.
- (35) Reflects 1,124,253 shares of common stock owned by Mr. Low and warrants to purchase 761,971 shares of common stock owned by Mr. Low, all of which securities were received as compensation in the ordinary course of business of Sunrise Capital as Placement Agent.
- (36) Reflects 80,488 shares of common stock and 73,170 warrants to purchase shares of common stock, all of which securities were received as compensation in the ordinary course of business of Sunrise Securities Corp. as Placement Agent.
- (37) Reflects 383,275 shares of common stock and 348,432 warrants to purchase shares of common stock. Nathan Low is the sole director and stockholder, with 100% beneficial ownership and voting and disposition rights.
- (37)(a) Our placement agent in connection with the Private Placement discussed in this prospectus.
- (38) Reflects 160,976 shares of common stock and 146,341 warrants to purchase shares of common stock, all of which securities were received as compensation in the ordinary course of business of Sunrise Securities Corp. as Placement Agent.
- (38)(a) Sunrise Foundation Trust is a charitable trust of which Nathan Low, owner of Sunrise Securities Corp., is a trustee.
- (39) Reflects 60,000 warrants to purchase shares of common stock.
- (39)(a) Reitler Brown Holdings, LLC is an affiliate of our legal counsel in connection with this prospectus.
- (40) Reflects 3,832,753 shares of common stock and warrant to purchase 3,832,753 shares of common stock.
- (41) We license our intellectual property from Penn through an exclusive license.

### Blue Sky

Thirty-five states have what is commonly referred to as the "standard manual exemption" for secondary trading of securities such as those to be resold by selling stockholders under this registration statement. In these states, so long as we obtain and maintain a listing in one of the commonly accepted standard manuals e.g. Standard and Poor's Corporate Manual, and the manual sets forth certain information: (1) the names of our officers and directors, (2) our balance sheet, and (3) our profit and loss statement for either the fiscal year preceding the balance sheet or for the most recent fiscal year of operations, secondary trading can occur without any filing, review or approval by state regulatory authorities in these states. These states are: Alaska, Arizona, Arkansas, Colorado, Connecticut, Delaware, District of Columbia, Delaware, Hawaii, Idaho, Indiana, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, Texas, Utah, Washington, West Virginia, and Wyoming. We cannot secure this listing, and thus this qualification, until after this registration statement is declared effective. Once we secure this listing, secondary trading can occur in these states without further action.

We currently do not intend to and may not be able to qualify securities for resale in other states which require shares to be qualified before they can be resold by our stockholders; provided however that we intend to take appropriate action to qualify securities for resale in the State of New York.

We are required to pay certain fees and expenses incurred by us incident to the registration of the shares. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act of 1933.

Because selling stockholders may be deemed to be "underwriters" within the meaning of the Securities Act of 1933, they will be subject to the prospectus delivery requirements of the Securities Act of 1933. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act of 1933 may be sold under Rule 144 rather than under this prospectus. Each selling stockholder has advised us that they have not entered into any agreements, understandings or arrangements with any underwriter or broker-dealer regarding the sale of the resale shares. There is no underwriter or coordinating broker acting in connection with the proposed sale of the resale shares by the selling stockholders.

We agreed to keep this prospectus effective until the earlier of the date which is three years after this registration has been declared effective by the SEC, or such earlier date as of which all of the common stock registered for resale hereunder has been sold. The resale shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Securities Exchange Act of 1934, any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to our common stock for a period of two business days prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of our common stock by the selling stockholder or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale.

#### General

#### DESCRIPTION OF CAPITAL STOCK OF THE COMPANY

At the date hereof we are authorized by our articles of incorporation to issue an aggregate of 500,000,000 shares of common stock, par value \$0.001 per share and 5,000,000 shares of "blank check" preferred stock, par value \$0.001 per share. 36,690,056 shares of common stock are outstanding and held of record by 83 stockholders and no shares of convertible preferred stock will be outstanding.

#### **Common Stock**

Holders of common stock are entitled to one vote for each share held of record on each matter submitted to a vote of stockholders. There is no cumulative voting for the election of directors. Subject to the prior rights of any class or series of preferred stock which may from time to time be outstanding, if any, holders of common stock are entitled to receive ratably, dividends when, as, and if declared by our board of directors out of funds legally available for that purpose and, upon our liquidation, dissolution, or winding up, are entitled to share ratably in all assets remaining after payment of liabilities and payment of accrued dividends and liquidation preferences on the preferred stock, if any. Holders of common stock have no preemptive rights and have no rights to convert their common stock into any other securities. The outstanding common stock is validly authorized and issued, fully-paid and nonassessable.

The shares of common stock offered in this prospectus have been fully paid and not liable for further call or assessment. Holders of the common stock do not have cumulative voting rights, which means that the holders of more than one half of the outstanding shares of common stock, subject to the rights of the holders of the preferred stock, if any, can elect all of our directors, if they choose to do so. In this event, the holders of the remaining shares of common stock would not be able to elect any directors. Except as otherwise required by Colorado law, and subject to the rights of the holders of preferred stock, if any, all stockholder action is taken by the vote of a majority of the outstanding shares of common stock voting as a single class present at a meeting of stockholders at which a quorum consisting of a majority of the outstanding shares of common stock is present in person or proxy.

#### **Preferred Stock**

We are authorized to issue up to 5,000,000 shares of "blank check" preferred stock. Preferred stock may be issued in one or more series and having the rights, privileges and limitations, including voting rights, conversion privileges and redemption rights, as may, from time to time, be determined by the board of directors. Preferred stock may be issued in the future in connection with acquisitions, financings, or other matters as the board of directors deems appropriate. In the event that any shares of preferred stock are to be issued, a certificate of designation containing the rights, privileges and limitations of such series of preferred stock shall be filed with the Secretary of State of the State of Colorado. The effect of such preferred stock is that, subject to Federal securities laws and Colorado law, the board of directors alone, may be able to authorize the issuance of preferred stock which could have the effect of delaying, deferring, or preventing a change in control of the Company without further action by the stockholders, and may adversely affect the voting and other rights of the holders of the common stock. The issuance of preferred stock with voting and conversion rights may also adversely affect the voting power of the holders of common stock, including the loss of voting control to others.

### Stock Symbol; No Trading of common stock

Currently there is no market for our securities, however Vfinance Investment has filed a form 15c2ll with NASD to become a market maker.

We have applied for trading on the OTC Bulletin Board. At this time there is no symbol.

# Transfer Agent and Registrar

The transfer agent and registrar for the common stock is Securities Transfer Corporation, 2591 Dallas Parkway, Suite 102, Frisco, TX 75034.

### Directors' Limitation of Liability

Our articles of incorporation and by-laws include provisions to (1) indemnify the directors and officers to the fullest extent permitted by the Colorado Revised Statutes, including circumstances under which indemnification is otherwise discretionary and (2) eliminate the personal liability of directors and officers for monetary damages resulting from breaches of their fiduciary duty, except for liability for breaches of the duty of loyalty, acts, or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, violations under Section 7-108-704 of Colorado Law, or for any transaction from which the director derived an improper personal benefit. We believe that these provisions are necessary to attract and retain qualified persons as directors and officers.

We will enter into an indemnification agreement with each of our directors which provides that we will indemnify our directors and advance expenses to our directors, to the extent permitted by the laws of the State of Colorado.

We have directors and officers liability insurance in an amount of \$1 million.

Insofar as indemnification for liability arising under the Securities Act of 1933 may be permitted to our directors, officers and controlling persons as stated in the foregoing provisions or otherwise, we have been advised that, in the opinion of the SEC, this indemnification is against public policy as expressed in the Act and is, therefore, unenforceable.

### SHARES OF THE COMPANY ELIGIBLE FOR FUTURE SALE

Prior to the date of this prospectus, there has been a limited public market for our common stock. Sales of substantial numbers of shares of our common stock in the public market following this Offering, or the perception that such sales may occur, could adversely affect prevailing market prices of our shares.

Assuming no exercise of options outstanding, or up 671,994 warrants to purchase shares of our common stock, and assuming exercise of 19,630,588 warrants to purchase shares of our common stock, there are 56,320,644 shares of our common stock issued and outstanding as of the date of this prospectus. These shares of common stock will be deemed to be *"restricted securities"* under Rule 144. Restricted securities may only be sold in the public market pursuant to an effective registration statement under the Act or pursuant to an exemption from registration under Rule 144, Rule 701 or Rule 904 under the Act. These rules are summarized below.

### Eligibility of Restricted Shares for Sale in the Public Market

As of the date of this prospectus no shares may be eligible for resale, 46,586,560 shares of common stock may become eligible for resale under Rule 144 on November 12, 2005, 1,671,080 shares of common stock may be eligible for resale under Rule 144 on December 8, 2005, 1,069,491 shares of common stock may be eligible for resale under Rule 144 on January 4, 2006 and 7,665,606 shares of common stock may be eligible for resale under Rule 144 on January 12, 2006, in each case subject to volume, manner of sale and other limitations under Rule 144.

All shares of Common Stock of shareholders whose shares are included in the foregoing calculations are included in the shares of Common Stock being registered in this Registration Statement.

### Rule 144

In general, under Rule 144 as currently in effect, a person who has beneficially owned shares of common stock for at least one year is entitled to sell within any three-month period a number of shares that does not exceed the greater of:

- 1.0% of the number of shares of common stock outstanding, which is approximately 366,900 shares of common stock; or
- the average weekly trading volume of the shares of common stock during the four calendar weeks preceding the filing of a notice on Form 144 in connection with the sale.

Sales under Rule 144 are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us. In addition, under Rule 144(k) as currently in effect, a person:

- who is not considered to have been one of our affiliates at any time during the 90 days preceding a sale; and
- who has beneficially owned the shares proposed to be sold for at least two years, including the holding period of any prior owner other than an affiliate,

is entitled to sell his shares without complying with the manner of sale, public information, volume limitation or notice provisions of Rule 144.

#### Rule 701

In general, under Rule 701, any of our employees, directors, officers, consultants, or advisors (other than affiliates) who purchased shares of common stock from us under a compensatory stock option plan or other written agreement before the closing of the Share Exchange is entitled to resell these shares. These shares can be resold 90 days after the effective date of the Share Exchange in reliance on Rule 144, without having to comply with restrictions, including the holding period, contained in Rule 144. However, the 2004 Plan has a lock-up provision and shares issued under it are not eligible for resale at this time. Pursuant to such lock-up provision any common stock or other equity securities issued or issuable upon exercise of an option may not be sold, transferred or disposed of until the earlier of (i) the date that this registration statement has been filed with and declared effective by the SEC, and (ii) November 12, 2005, unless (a) such sale, transfer or distribution is approved in writing by a majority of the investors in the Private Placement, and (b) the transferee of such sold, transferred or distributed securities agrees in writing to be bound by the terms of such lock-up provision to the same extent as if they had originally been a party hereto.

The Securities and Exchange Commission has indicated that Rule 701 will apply to typical share options granted by an issuer before it becomes subject to the reporting requirements of the Securities Exchange Act of 1934, along with the shares acquired upon exercise of these options, including exercises after the date of this prospectus. Securities issued in reliance on Rule 701 are restricted securities and, subject to the contractual restrictions described above, beginning 90 days after the date of this prospectus, may be sold:

- by persons other than affiliates subject only to the manner of sale provisions of Rule 144; and
- by affiliates under Rule 144 without compliance with its one year minimum holding period requirement.

### Options

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We intend to file one or more registration statements on Form S-8 under the Act to register 2,381,525 shares of common stock reserved for issuance under our stock option plans. The registration statement on Form S-8 will become effective automatically upon filing. As of the date of this prospectus, options to purchase 2,182,894 shares of common stock were issued and outstanding, of which options to purchase approximately 1,400,988 shares of common stock had vested and had not been exercised. Shares of common stock issued upon exercise of a share option and registered under the Form S-8 registration statement will, subject to vesting provisions and Rule 144 volume limitations applicable to our affiliates and the lock-up provision described above, be available for sale in the open market immediately.

### Lock Up of Certain Shares

We have secured the agreement of all persons who received their shares of common stock by reason of securities ownership in Advaxis prior to the Share Exchange to not sell, transfer, pledge or otherwise dispose of such shares during the period from November 12, 2004 until the earlier of (i) the date that this registration statement has been filed with and declared effective by the SEC, and (ii) the first year anniversary of the date hereof, unless (a) such sale, transfer or distribution is approved in writing by a majority of the investors in the Private Placement, and (b) the transferee of such sold, transferred or distributed securities agrees in writing to be bound by the terms of the standstill agreement to the same extent as if they had originally been a party hereto. A total of 17,734,163 shares of Common Stock and 2,808,434 shares of Common Stock underlying exercisable warrants are subject to such agreement.

### PLAN OF DISTRIBUTION

The selling stockholders, and any of their pledgees, asignees and successors-in-interest, may from time to time, sell any or all of their shares of our common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholders may use any one or more of the following methods when selling shares:

- · ordinary brokerage transactions and transactions in which the broker-dealer solicits Investors;
- · block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- · an exchange distribution in accordance with the rules of the applicable exchange;
- · privately negotiated transactions;
- short sales (other than short sales established prior to the effectiveness of the Registration Statement to which this Prospectus is a part)
- · broker-dealers may agree with the Selling Stockholders to sell a specified number of such shares at a stipulated price per share;
- $\cdot\,$  a combination of any such methods of sale; and
- · any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 under the Securities Act of 1933, if available, rather than under this prospectus.

Broker-dealers engaged by selling stockholders may arrange for other broker-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. Each selling stockholder does not expect these commissions and discounts relating to its sales of shares to exceed what is customary in the types of transactions involved.

The selling stockholders may from time to time pledge or grant a security interest in some or all of the registrable securities owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell shares of common Stock from time to time under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933 amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus.

Upon us being notified in writing by a selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of common stock through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, a supplement to this prospectus will be filed, if required, pursuant to Rule 424(b) under the Securities Act of 1933, disclosing (i) the name of each such selling stockholder and of the participating broker-dealer(s), (ii) the number of shares involved, (iii) the price at which such the shares of common stock were sold, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (v) that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and (vi) other facts material to the transaction. In addition, upon us being notified in writing by a selling stockholder that a donee or pledge intends to sell more than 500 shares of common stock, a supplement to this prospectus will be filed if then required in accordance with applicable securities law.

The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling stockholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be "underwriters" within the meaning of the Securities Act of 1933 in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act of 1933. Each selling stockholder has represented and warranted to us that it does not have any agreement or understanding, directly or indirectly, with any person to distribute the common stock.

We are required to pay all fees and expenses incident to the registration of the shares. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act of 1933.

### LEGAL MATTERS

The validity of the common stock offered by this prospectus will be passed upon for us by Frascona, Joiner, Goodman and Greenstein, PC.

### EXPERTS

The financial statements appearing in this prospectus and registration statement have been audited by Goldstein Golub Kessler LLP, independent accountants; to the extent and for the periods indicated in their report appearing elsewhere herein, and are included in reliance upon such report and upon the authority of such firms as experts in accounting and auditing.

### ADDITIONAL INFORMATION

We filed with the SEC a registration statement on Form SB-2 under the Securities Act of 1933 for the shares of common stock in this offering. This prospectus does not contain all of the information in the registration statement and the exhibits and schedule that were filed with the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and the exhibits that were filed with the registration statement. Statements contained in this prospectus about the contents or any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and we refer you to the full text of the contract or other document filed as an exhibit to the registration statement and the exhibits and schedules that were filed with the registration statement may be inspected without charge at the Public Reference Room maintained by the SEC at 450 Fifth Street, N.W., Washington, DC 20549, and copies of all or any part of the registration statement may be obtained from the SEC upon payment of the prescribed fee. Information regarding the operation of the Public Reference Room may be obtained by calling the SEC at 800-SEC-0330. The SEC maintains a web site that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the site is <u>www.sec.gov</u>.

We are subject to the information and periodic reporting requirements of the Securities Exchange Act of 1934, and in accordance with the Securities Exchange Act of 1934, we file annual, quarterly and special reports, and other information with the SEC. These periodic reports, and other information are available for inspection and copying at the regional offices, public reference facilities and website of the SEC referred to above.

# FINANCIAL STATEMENTS

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### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors of Advaxis, Inc.

We have audited the accompanying balance sheets of Advaxis, Inc. (a development stage company) as of December 31, 2002 and 2003, and the related statements of operations, shareholders' equity (deficiency), and cash flows for the period March 1, 2002 (inception) to December 31, 2002, the year ended December 31, 2003, and the period March 1, 2002 (inception) to December 31, 2003. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Advaxis, Inc. as of December 31, 2002 and 2003, and the results of its operations and its cash flows for the period March 1, 2002 (inception) to December 31, 2002, the year ended December 31, 2003, and the period March 1, 2002 (inception) to December 31, 2003 in conformity with United States generally accepted accounting principles.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has incurred losses from operations, has a working capital deficiency and has a shareholders' deficiency that raise substantial doubt about its ability to continue as a going concern. Management's plan in regard to these matters is also described in Note 1. These financial statements do not include any adjustments that may result from the outcome of this uncertainty.

GOLDSTEIN GOLUB KESSLER LLP New York, New York

April 22, 2004, except for Note 5, Note 8, and the last paragraph of Note 4, as to which the date is March 7, 2005

	Decem	ber 3	1,	J	anuary 31,
	2002		2003		2005
					(unaudited)
ASSETS					
Current Asset - cash	\$ 204,382	\$	47,160	\$	3,217,430
Intangible Assets			277,243		666,447
Other Assets					2,450
Total Assets	\$ 204,382	\$	324,403	\$	3,886,327
LIABILITIES AND SHAREHOLDERS' EQUITY (DEFICIENCY)					
EMILITIES MAD SIMMEHOEDERS EQUIT (DEFICIENCI)					
Current Liabilities:					
Accounts payable	\$ 85,825	\$	1,018,936	\$	435,280
Notes payable, current portion			25,408		258,237
Total current liabilities	85,825		1,044,344		693,517
Notes Payable, net of current portion	40,000		86,794		230,000
Total liabilities	125,825		1,131,138		923,517
Commitments and Contingencies					
Shareholders' Equity (Deficiency):					
Common stock - \$0.001 par value; authorized 500,000,000 shares, issued					
and outstanding 36,690,057 shares	16,350		16,350		36,690
Additional paid-in capital	229,143		253,596		4,830,116
Deficit accumulated during the development stage	(166,936)		(1,076,681)		(1,903,996)
Shareholders' equity (deficiency)	78,557		(806,735)		2,962,810
Total Liabilities and Shareholders' Equity (Deficiency)	\$ 204,382	\$	324,403	\$	3,886,327

# ADVAXIS, INC. (a development stage company) STATEMENT OF OPERATIONS

	Period from March 1, 2002 (inception) to December 31, 2002	Year ended December 31, 2003	Period from March 1, 2002 (inception) to December 31, 2003	Three-month period ended January 31, 2004 (unaudited)	Three-month period ended January 31, 2005 (unaudited)	Period from March 1, 2002 (inception) to January 31, 2005 (unaudited)
Research and development expenses	\$ 50,899	\$ 491,508	\$ 542,407	\$ 86,842	\$ 218,951	\$ 887,300
General and administrative expenses	117,003	405,568	522,571	45,399	26,175	1,073,113
Interest expense		17,190	17,190	10,655	2,968	24,387
Other income	966	4,521	5,487	430	2,739	124,688
Net loss	(166,936)	(909,745)	(1,076,681)	(142,466)	(245,355)	(1,860,112)
Dividends attributed to preferred stock						43,884
Net loss applicable to common stock	\$ (166,936)	\$ (909,745)	\$ (1,076,681)	\$ (142,466)	\$ (245,355)	\$ (1,903,966)
Basic and diluted net loss per share	\$ (0.01)	\$ (0.06)	\$ (0.07)	\$ (0.01)	\$ (0.01)	\$ (0.11)
Weighted-average number of shares	16,350,312	16,350,312	16,350,312	16,350,323	31,271,317	17,636,857

The accompanying notes and the report of independent registered public accounting firm should be read in conjunction with the financial statements. F-4

# STATEMENT OF SHAREHOLDERS' EQUITY (DEFICIENCY)

# Period from March 1, 2002 (inception) to September 30, 2004

	Preferred St	ock	Common St	ock		Deficit	
	Number of Shares Outstanding	Amount	Number of Shares Outstanding	Amount	Additional Paid-in Capital	Accumulated During the Development Stage	Shareholders' Equity (Deficiency)
Preferred stock issued	3,418.18 \$	235,000				9	235,000
Common stock issued			40,000 \$	40 \$	6 (40)		
Options granted to consultants and professionals					10,493		10,493
Net loss						\$ (166,936)	(166,936)
Retroactive restatement to reflect recapitalization on November 12, 2004	(3,418.18)	(235,000)	16,310,312	16,310	218,690		
Balance at December 31, 2002	- 0 -	- 0 -	16,350,312	16,350	229,143	(166,936)	78,557
Note payable converted into preferred stock	232.27	15,969					15,969

The accompanying notes and the report of independent registered public accounting firm should be read in conjunction with the financial statements.

Options granted to consultants and professionals					8,484		8,484
Net loss						(909,745)	(909,745)
Retroactive restatement to reflect recapitalization on November 12, 2004	(232.27)	(15,969)			15,969		
Balance at December 31, 2003	- 0 -	- 0 -	16,310,312	16,350	253,596	(1,076,681)	(806,735)
(Unaudited):							
Common Stock issued to Placement Agent on recapitalization			752,600	753	(753)		
Stock dividend on preferred stock	638.31	43,884				(43,884)	
Options granted to consultants and professionals					5,315		5,315
Conversion of Note payable to Common Stock			2,136,441	2,136	611,022		613,158
Issance of Common Stock for cash, net of shares to Placement Agent			17,450,693	17,451	4,335,549		4,353,000
Issuance Costs					(329,673)		(329,673)
155000100 00505					(323,073)		(323,073)
Net loss						(783,431)	(783,431)

Retroactive restatement to reflect recapitalization on							
November 12, 2004	(638.31)	(43,884)			44,940		(88,884)
Balance at January 31, 2005	\$ -0-\$	- 0 -	36,690,057 \$	36,690 \$	4,880,116 \$	(1,903,996) \$	(2,962,810)

	Period from March 1, 2002 (inception) to December 31, 2002	Year ended December 31, 2003	Period from March 1, 2002 (inception) to December 31, 2003	Three-month period ended January 31, 2004 (unaudited)	Three-month period ended January 31, 2005 (unaudited)	Period from March 1, 2002 (inception) to January 31, 2005 (unaudited)
Cash flows from operating activities:						
Net loss	\$ (166,936	6) \$ (909,745)	\$ (1,076,681)	\$ (142,466)	\$ (245,355)	\$ (1,860,112)
Adjustments to reconcile net loss						
to net cash provided by (used in) operating activities:						
Value assigned to options given						
as payment to consultants and						
professionals	10,493	3 8,484	18,977	8,484		24,292
Amortization expense	-,	, -	- )-	800	6,817	22,635
Accrued interest on notes					-,	,
payable		3,171	3,171		7,968	40,139
Increase in Other Assets					(2,450)	(2,450)
Increase (decrease) in accounts						
payable	85,825	5 933,111	1,018,936	102,909	(356,756)	111,432
Net cash provided by (used in) operating						
activities	(70,618	8) 35,021	(35,597)	(30,723)	(589,776)	(1,664,064)
CASH FLOWS USED IN						
INVESTING ACTIVITIES:						
Cash paid on acquisition of Great					(44.0.40)	(11.0.10)
Expectations		(255 2 42)	(077.040)	(20.220)	(44,940)	(44,940)
Cost of Intangible Assets		(277,243)	(277,243)	(30,228)	(203,460)	(329,082)
Net cash used in Investing Activities		(277,243)	(277,243)	(30,228)	(248,400)	(374,022)
Cash flows from financing activities:						
Proceeds from notes payable	40,000	0 85,000	125,000	87,203		997,189
Net proceeds on issuance of preferred stock	235,000	0	235,000			235,000
Net Proceeds on Issuance of Common	255,000	U	255,000			255,000
Stock					4,023,327	4,023,327
Cash provided by financing					1,020,027	1,020,027
activities	275,000	0 85,000	360,000	87,203	4,023,327	5,255,516
	,			,		
Net increase (decrease) in cash	204,382	2 (157,222)	47,160	26,702	3,185,151	3,217,430
Cash at beginning of period		204,382		1,380	32,279	
Cash at end of period	\$ 204,382	2 \$ 47,160	\$ 47,160	\$ 28,082	\$ 3,217,430	\$ 3,217,430

	Period from March 1, 2002 (inception) to December 31, 2002	Year ended December 31, 2003	Period from March 1, 2002 (inception) to December 31, 2003	Three months ended January 31, 2005	Three months ended January 31, 2004	Period from March 1, 2002 (Inception) January 31, 2005
SUPPLEMENTAL SCHEDULE OF NONCASH INVESTING AND FINANCING ACTIVITIES:						
Common Stock issued to founders	\$ 40		\$ 40			\$ 40
Notes Payable and Accrued Interest Converted to Preferred Stock		\$ 15,969	\$ 15,969			\$ 15,969
Stock Dividend on Preferred Stock						\$ 43,884
Notes Payable and Accrued Interest Converted to Common					\$ 631,158	\$ 613,158
Intangible Assets Acquired with Notes Payable						\$ 360,000

PRINCIPAL BUSINESS ACTIVITY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

1.

Advaxis, Inc. (the "Company") was incorporated in 2002 and is a biotechnology company researching and developing new cancer-fighting techniques.

The Company is in the development stage and its operations are subject to all of the risks inherent in an emerging business enterprise. The accompanying financial statements have been prepared assuming the Company will continue as a going concern. As shown in the financial statements, the Company has incurred losses from operations, and has a working capital (deficit) of \$(971,776) and \$2,523,913, and a shareholders' equity (deficiency) of \$(806,735) and \$2,962,810 at December 31, 2003 and January 31, 2005, respectively. Management intends to raise additional funds through equity and to develop technologies that will generate revenue that will allow the Company to continue as a going concern. These financial statements do not include any adjustments that might result from the outcome of this uncertainty.

In accordance with Securities and Exchange Commission (SEC) Staff Accounting Bulletin (SAB) No. 104, revenue from license fees and grants is recognized when the following criteria are met; persuasive evidence of an arrangement exists, services have been rendered, the contract price is fixed or determinable, and collectibility is reasonably assured. In licensing arrangements, delivery does not occur for revenue recognition purposes until the license term begins. Nonrefundable upfront fees received in exchange for products delivered or services performed that do not represent the culmination of a separate earnings process will be deferred and recognized over the term of the agreement.

For revenue contracts that contain multiple elements, the Company will determine whether the contract includes multiple units of accounting in accordance with EITF No. 00-21, *Revenue Arrangements with Multiple Deliverables*. Under that guidance, revenue arrangements with multiple deliverables are divided into separate units of accounting if the delivered item has value to the customer on a standalone basis and there is objective and reliable evidence of the fair value of the undelivered item.

The Company maintains its cash in bank deposit accounts which, at times, may exceed federally insured limits.

Intangible assets, which consist primarily of legal costs in obtaining trademarks and patents, are being amortized on a straight-line basis over 15 and 17 years, respectively.

The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An asset is considered to be impaired when the sum of the undiscounted future net cash flows expected to result from the use of the asset and its eventual disposition exceeds its carrying amount. The amount of impairment loss, if any, is measured as the difference between the net book value of the asset and its estimated fair value.

Basic loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding during the periods. Diluted earnings per share gives effect to dilutive options, warrants and other potential common stock outstanding during the period. Potential common stock has not been included in the computation of diluted loss per share, as the effect would be antidilutive.

Deferred income taxes are provided for the differences between the bases of assets and liabilities for financial reporting and income tax purposes. A valuation allowance is established when necessary to reduce deferred tax assets to the amount expected to be realized.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the use of estimates by management. Actual results could differ from these estimates.

The estimated fair value of the notes payable approximates the carrying amount based on the rates available to the Company for similar debt.

Accounts payable consists entirely of trade accounts payable.

Research and development costs are charged to expense as incurred.

Management does not believe that any recently issued, but not yet effective, accounting standards if currently adopted would have a material effect on the accompanying financial statements.

The Company has elected to apply APB Opinion No. 25 and related interpretations in accounting for its stock options granted to employees and has adopted the disclosure-only provisions of SFAS No. 123. Had the Company elected to recognize compensation cost based on the fair value of the options granted at the grant date as prescribed by SFAS No. 123, the Company's net loss would have been as follows:

	of i	a 1, 2002 (date nception) to nber 31, 2002	Year ended ember 31, 2003	3	months ended January 31 2004	3	3 months ended January 31, 2005
Net Loss as reported	\$	(166,936)	\$ (909,745)	\$	(142,466)	\$	(245,355)
Deduct stock option compensation expense determined under fair value							
based method		(8,566)	(32,923)		(22,612)		(18,573)
Adjusted Net Loss	\$	(175,502)	\$ 942,668)	\$	(165,078)	\$	(263,928)
Net Loss per share as reported	\$	(0.01)	\$ (0.06)	\$	(0.01)	\$	(0.01)
Net Loss per share pro forma	\$	(0.01)	\$ (0.06)	\$	(0.01)	\$	(0.01)

The Company accounts for nonemployee stock-based awards in which goods or services are the consideration received for the equity instruments issued based on the fair value of the equity instruments in accordance with the guidance provided in the consensus opinion of the Emerging Issues Task Force ("EITF") Issue 96-18, Accounting for Equity Instruments that Are Issued to Other than Employees for Acquiring, or in Conjunction With Selling Goods or Services.

The accompanying unaudited interim financial statements have been prepared in accordance with generally accepted accounting principles for interim financial information and the requirements of item 310(b) of Regulation S-B. Accordingly, certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to the rules and regulations of the Securities and Exchange Commission. The results of operations for the three-month period ended January 31, 2005 are not necessarily indicative of the results of operations expected for the year ended October 31, 2005.

In the opinion of management, the accompanying unaudited interim financial statements for the nine-month periods ended September 30, 2004 and 2003 include all adjustments (consisting only of those of a normal recurring nature) necessary for a fair statement of the results of the interim period.

\$

\$

8,243 269,000

277,243

# NOTES TO FINANCIAL STATEMENTS (information related to the three-month periods ended January 31, 2005 and 2004 is unaudited)

### 2. INTANGIBLE ASSETS:

Intangible assets consist of the following:

December 31, 2003		
Trademarks		
Patent		

Estimated amortization expense is as follows:

Year ending December 31,	
2004	\$ 18,483
2005	18,483
2006	18,483
2007	18,483
2008	18,483

During the three-month period ended January 31, 2005, the Company acquired \$203,460 of new patents. Amortization expense during the period amounted to \$6,817.

## 3. NOTES PAYABLE: Notes payable consist of the following:

December 31,	2003	2002
Note payable with interest at 6% per annum, due on December 31, 2005. The amount is mandatorily convertible at the time of the closing of the Company's contemplated \$2,000,000 equity financing into the same class of shares issued at the equity financing at a conversion price per share equivalent to the price per share in the equity financing. Upon closing of an equity financing which is less than \$2,000,000, the holder has the right to convert, at the holder's option, into the same class of shares issued at the equity financing at a conversion price per share equivalent to the price per share in the equity financing.	\$ 10,060	
Note payable with interest at 8% per annum, due on November 10, 2008.	10,112	
Note payable with interest at 8% per annum, due on December 17, 2008.	40,122	
Note payable with interest at 6% per annum, due on December 31, 2004. The amount is mandatorily convertible at the time of the closing of the Company's contemplated \$2,000,000 equity financing into the same class of shares issued at the equity financing at a conversion price per share equivalent to the price per share in the equity financing. Upon closing of an equity financing which is less than \$2,000,000, the holder has the right to convert, at the holder's option, into the same class of shares issued at the equity financing at a conversion price per share equivalent to the price per share in the equity financing.	25.408	

(continued)

# ADVAXIS, INC. (a development stage company)

# NOTES TO FINANCIAL STATEMENTS (information related to the three-month periods ended January 31, 2005 and 2004 is unaudited)

December 31,	2003	2002
Note payable with interest at 6% per annum, due on June 30, 2005. The amount is convertible at the holder's option into Series A convertible preferred stock at a price per		
share of \$68.75.	\$ 26,500	\$ 25,000
Note payable with interest at 6% per annum, due and payable on June 30, 2005. The amount		
is convertible at the holder's option into Series A convertible preferred stock at a price per		
share of \$68.75. The full amount of this note plus accrued interest of \$969 was converted		
into 232.27 shares of Series A preferred stock on September 22, 2003.		15,000
	112,202	40,000
Less current portion	25,408	
	\$ 86,794	\$ 40,000

Aggregate maturities of notes payable at December 31, 2003 are as follows:

Year ending December 31,	
2004	\$ 25,408
2005	36,560
2006	
2007	
2008	50,234
	\$ 112,202

During the nine-month period ended September 30, 2004, the Company entered into various convertible loan agreements amounting to \$872,489, which accrue interest at 8% per annum and expire at various dates through 2008. A portion of these loans was converted into common stock at the time of the Company's recapitalization (see Note 8).

4

**STOCK OPTIONS:** The Company has adopted the Advaxis, Inc. 2002 Stock Option Plan (the "Plan"), which allows for grants up to 8,000 shares of the Company's common stock. The Plan shall be administered and interpreted by the Company's board of directors.

Stock option activity during the periods indicated is as follows:

	Options Granted	Weighted- average Exercise Price
Granted from the period March 1, 2002 (inception) to December 31, 2002	4,522	\$ 73.63
Outstanding at December 31, 2002 Granted	4,522 1,286	73.63 97.47
Outstanding at December 31, 2003	5,808	\$ 78.91
Vested and exercisable at December 31, 2003	2,835	\$ 89.55

At December 31, 2003, the weighted exercise prices and weighted-average remaining contractual life of outstanding options were \$78.91 and 8.87 years, respectively.

The fair value of each option is estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions used for grants in 2003 and 2002: dividend yield of 0%; average risk-free interest rates of 6%; volatility of 0%; and an expected life of 10 years in each year.

Also under the Plan, the Company has granted 3,430 options to purchase the Company's common stock that are being accounted for under variable plan accounting because these options have an exercise price that is subject to a one-time price adjustment following the next round of equity financing. Accordingly, each period, increases in the stock price of the Company will result in a charge to operations for the increase in the Company's stock price multiplied by the number of these options still outstanding. However, there has been no fluctuation in the Company's stock price from inception to December 31, 2003 and, as such, no charge has been taken on the accompanying statement of operations.

On November 12, 2004, in connection with the recapitalization (see Note 8), the above options were canceled, and employees and consultants were granted options of Great Expectations. The pro forma disclosures in Note 1 are presented for the options outstanding prior to the recapitalization. The cancellation and replacement had no accounting consequence since the aggregate intrinsic value of the options immediately after the cancellation and replacement was not greater than the aggregate intrinsic value immediately before the cancellation and replacement, and the ratio of the exercise price per share to the fair value per share was not reduced. Additionally, the original options were not modified to accelerate vesting or extend the life of the new options.

5.	SHAREHOLDERS' EQUITY:	Prior to the recapitalization (see Note 8), the Company had convertible preferred stock with \$.001 par value and 50,000 shares authorized. 6,000 of those shares were designated as Series A and 3,418.18, 3,650.45, and 3.640.45 were issued and outstanding at December 31, 2002, December 31, 2003 and September 30, 2004, respectively. The Company also had 100,000 shares authorized of \$.001 par value common stock with 40,000 shares issued and outstanding at December 31, 2002 and 2003, and at September 30, 2004.
6.	COMMITMENTS	The preferred stock and common stock amounts were retroactively restated to reflect the effects of the recapitalization on November 12, 2004 (see Note 8). Pursuant to multiple consulting agreements and a licensing agreement, the Company is contingently liable for the following:
	AND CONTINGENCIES:	The Company is obligated to pay \$35,500 to two consultants upon receiving financing of \$1,000,000 or greater.
		The Company is obligated to pay \$20,000 to two consultants upon receiving financing of \$500,000 or greater and an additional \$20,000 upon receiving financing of \$2,000,000 or greater. The Company is obligated to pay \$91,000 to two consultants upon receiving financing of \$4,000,000 or greater.
		Under a licensing agreement, the Company has agreed to pay \$525,000 over a four-year period as a royalty after the first commercial sale of a product under the license. The Company is also obligated to pay annual license maintenance fees ranging from \$25,000 to \$125,000 per year after the first commercial sale of a product under the license. The Company is also obligated to pay annual license maintenance fees ranging from \$25,000 to \$125,000 per year after the first commercial sale of a product under the license. The Company is also obligated to pay up to \$660,000 to the licensor upon receiving financing.
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As of December 31, 2003, the Company has an employment agreement with a key executive through December 31, 2004. The agreement shall be automatically renewed for one-year periods unless the Company or the key executive gives the other party written consent of its intent not to renew at least 30 days prior to the end of the term of the contract. The agreement provides for an annual base salary of \$150,000, which will be adjusted to \$225,000 to \$250,000 per annum once the Company closes on its next round of equity financing.

The Company is also obligated under two employment agreements to pay approximately \$220,000 per annum to two employees upon the closing of the next round of equity financing.



7.

**INCOME TAXES:** 

The Company has a net operating loss carryforward of approximately \$1,800,000 available to offset taxable income through 2023.

The tax effects of loss carryforwards give rise to a deferred tax asset and a related valuation allowance as follows:

Net operating losses	\$ 720,000
Less valuation allowance	(720,000)
Deferred tax asset	\$ - 0 -

The difference between income taxes computed at the statutory federal rate of 34% and the provision for income taxes relates to the following:

	Period from March 1, 2002		Nine-r	
	(inception) to	Year ended	period	ended
	December 31,	December 31,	Septem	ber 30,
	2002	2003	2004	2003
			(unaudi	ited)
Provision at federal statutory rate	34%	34%	34%	34%
Valuation allowance	(34)	(34)	(34)	(34)
	-0-%	-0-%	-0-%	-0-%

### SUBSEQUENT EVENTS:

8.

On November 12, 2004, Great Expectations and Associates, Inc. ("Great Expectations") acquired the Company through a share exchange and reorganization (the "Recapitalization"), pursuant to which the Company became a wholly owned subsidiary of Great Expectations. Great Expectations acquired (i) all of the issued and outstanding shares of common stock of the Company and the Series A preferred stock of the Company in exchange for an aggregate of 15,597,723 shares of authorized, but theretofore unissued, shares of common stock, no par value, of Great Expectations; (ii) all of the issued and outstanding warrants to purchase the Company's common stock, in exchange for warrants to purchase 584,885 shares of Great Expectations; and (iii) all of the issued and outstanding options to purchase the Company's common stock in exchange for an aggregate of 2,381,525 options to purchase of Great Expectations, constituting approximately 96% of the common stock of Great Expectations prior to the issuance of shares of common stock of Great Expectations in the private placement described below. Prior to the closing of the Recapitalization, Great Expectations performed a 200-for-1 reverse stock split, thus reducing the issued and outstanding shares of common stock of Great Expectations. Yes,600 shares of common stock of Great Expectations, respectations, the reapitalization, there are 17,102,923 common shares outstanding in Great Expectations.



As a result of the transaction, the former shareholders of Advaxis are the controlling shareholders of the Company. Additionally, prior to the transaction, Great Expectations had no substantial assets. Accordingly, the transaction is treated as a recapitalization of a public shell, rather than a business combination. The historical financial statements of Advaxis are now the historical financial statements of the Company. Historical shareholders' equity (deficiency) of Advaxis has been restated to reflect the recapitalization, and include the shares received in the transaction.

Pro forma information has not been presented since the transaction is not a business combination.

November 12, 2004, the Company completed an initial closing of a private placement offering (the "Private Placement"), whereby it sold an aggregate of \$2.925 million worth of units to accredited investors. Each unit was sold for \$25,000 (the "Unit Price") and consisted of (a) 87,108 shares of common stock and (b) a warrant to purchase, at any time prior to the fifth anniversary following the date of issuance of the warrant, to purchase 87,108 shares of common stock included at a price equal to \$0.40 per share of common stock (a "Unit"). In consideration of the investment, the Company granted to each investor certain registration rights and anti-dilution rights. Also, in November 2004, the Company converted approximately \$618,000 of aggregate principal promissory notes and accrued interest outstanding into Units.

On December 8, 2004, the Company completed a second closing of the Private Placement, whereby it sold an aggregate of \$200,000 of Units to accredited investors.

On January 4, 2005, the Company completed a third and final closing of the Private Placement, whereby it sold an aggregate of \$128,000 of Units to accredited investors.

Pursuant to the terms of a investment banking agreement, dated March 19, 2004, by and between the Company and Sunrise Securities, Corp. (the "Placement Agent"), the Company issued to the Placement Agent and its designees an aggregate of 2,283,445 shares of common stock and warrants to purchase up to an aggregate of 2,666,900 shares of common stock. The shares were issued as part consideration for the services of the Placement Agent, as placement agent for the Company in the Private Placement. In addition, the Company paid the Placement Agent a total cash fee of \$50,530.

On January 12, 2005, the Company completed a second private placement offering whereby it sold an aggregate of \$1,100,000 of units to a single investor. As with the Private Placement, each unit issued and sold in this subsequent private placement was sold at \$25,000 per unit and is comprised of (i) 87,108 shares of common stock, and (ii) a five-year warrant to purchase 87,108 shares of our common stock at an exercise price of \$0.40 per share. Upon the closing of this second private placement offering the Company issued to the investor 3,832,753 shares of common stock and warrants to purchase up to an aggregate of 3,832,753 shares of common stock.

The aggregate sale from the four private placements was \$4,353,000, which was netted against transaction costs of \$329,673 for net proceeds of \$4,023,327.

Pursuant to the Recapitalization and the first closing of the private placement, there are 2,381,525 options to purchase the Company's common stock outstanding. These options have a 10-year life and vest ratably over a four-year period. A summary of the options outstanding are as follows:

Options	Exercise Price
1,966,939	\$0.1952
14,087	\$0.2839
35,639	\$0.2870
227,509	\$0.3549
137,351	\$0.4259
2,381,525	

Pursuant to the Recapitalization and the first closing of the private placement, there are 14,951,292 warrants to purchase the Company's common stock outstanding. A summary of the warrants outstanding are as follows:

## NOTES TO FINANCIAL STATEMENTS (information related to the three-month periods ended January 31, 2005 and 2004 is unaudited)

Amount	Exercise Price	Expiration
2,543,553	\$0.20	2009
35,218	\$0.28	2011
142,555	\$0.29	2007
2,038,328	\$0.29	2009
10,191,638	\$0.40	2009
14,951,292		

On December 20, 2004, the Company entered into an Amended and Restated Employment Agreement with J. Todd Derbin, its current chief executive officer and president ("Employment Agreement"). Pursuant to the terms of the Employment Agreement, Mr. Derbin shall serve as the Company's chief executive officer and president for a period of one year commencing on January 1, 2005. The Employment Agreement may be extended, in writing, by the Company and Mr. Derbin. Mr. Derbin's salary shall be \$200,000, provided that it shall be increased to \$225,000 or \$250,000 based upon certain milestones of the Company as set forth in the Employment Agreement. In addition, Mr. Derbin shall be entitled to bonuses in the form of equity and/or cash as set forth in the Employment Agreement and he shall be entitled to receive non-qualified stock options to purchase common stock of the Company (the "Options"), the amount of which when added to his existing 1,172,767 options shall equal 5% of the total issued and outstanding common stock of the Company, as of March 31, 2005. One-half of the Options shall vest monthly over four years at a rate of 1/48th per month. The grant of the Options is subject to the Company adopting a 2005 Stock Option Plan, which is subject to stockholder approval.

The Company entered into an employment agreement with Dr. Vafa Shahabit Ph.D to become Head of Director of Science effective March 1, 2005, terminable on 30 days notice. Her duties are to work on and/or manage research and development projects as specified by the Company. The compensation is \$100,000 per annum with a potential bonus of \$20,000. In addition, Dr. Shahabi will be granted 150,000 options.

The Company entered into an employment agreement with Dr. John Rothman, Ph.D to become Vice President of Clinical Development effective March 7, 2005 for a term of one year ending February 28, 2006 and terminable on 30 days notice. His compensation is \$170,000 per annum, to increase to \$180,000 upon the closing of a \$15 million equity financing. Upon meeting incentives to be set by the Company, he will receive a bonus of up to \$45,000. In addition, Dr. Rothman will be granted 360,000 stock options.

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56,320,114 Shares

# ADVAXIS, INC.

**Common Stock** 

PROSPECTUS \_\_\_\_\_, 2005

Until [\_\_\_\_\_], 2005, all dealers that buy, sell, or trade the common stock, may be required to deliver a prospectus, regardless of whether they are participating in this offering. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

### PART II

#### INFORMATION NOT REQUIRED IN PROSPECTUS

### INDEMNIFICATION OF DIRECTORS AND OFFICERS

Our articles of incorporation and by-laws include provisions to (1) indemnify the directors and officers to the fullest extent permitted by the Colorado Revised Statutes, including circumstances under which indemnification is otherwise discretionary and (2) eliminate the personal liability of directors and officers for monetary damages resulting from breaches of their fiduciary duty, except for liability for breaches of the duty of loyalty, acts, or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, violations under Section 7-108-704 of Colorado Law, or for any transaction from which the director derived an improper personal benefit. We believe that these provisions are necessary to attract and retain qualified persons as directors and officers.

We will enter into an indemnification agreement with each of our directors which provides that we will indemnify our directors and advance expenses to our directors, to the extent permitted by the laws of the State of Colorado.

We have directors and officers liability insurance in an amount not less than \$1 million.

Insofar as indemnification for liability arising under the Act may be permitted to our directors, officers and controlling persons as stated in the foregoing provisions or otherwise, we have been advised that, in the opinion of the SEC, this indemnification is against public policy as expressed in the Act and is, therefore, unenforceable.

### OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, if any, payable by the Registrant relating to the sale of common stock being registered. All amounts are estimates except the SEC registration fee.

\$ 6,628.94*
\$ 10,000*
\$ 25,000*
\$ 5,000*
\$ 10,000*
\$ 3,371.06*
\$ 60,000*
\$ \$ \$ \$ \$ \$ \$ \$ \$

\* Estimates only.

### RECENT SALES OF UNREGISTERED SECURITIES

During the last three years, we have issued unregistered securities to the persons, as described below. None of these transactions involved any underwriters, underwriting discounts or commissions, except as specified below, or any public offering, and we believe that each transaction was exempt from the registration requirements of the Securities Act of 1933 by virtue of Section 4(2) thereof and/or Regulation D promulgated thereunder. All recipients had adequate access, though their relationships with us, to information about us.

We issued on November 12, 2004 pursuant to the Share Exchange, 16,350,323 shares of our common stock, 2,381,525 options to purchase shares of common stock and 584,885 warrants to purchase shares of common stock.

We issued on November 12 ,2004 pursuant to the conversion of \$595,000 principal amount of outstanding promissory notes, 2,136,441 shares of our common stock and warrants to purchase 2,136,441 shares of our common stock.

On November 12, 2004 in connection with the first closing of the Private Placement we issued 12,248,798 shares of our common stock and 12,229,966 warrants to purchase shares of our common stock.

On November 12, 2004 we issued a warrant to purchase 60,000 shares of common stock to RB Holdings, LLC, an affilate of Reitler Brown & Rosenblatt LLC in connection with legal services rendered.

On December 8, 2004, in connection with the second closing of the Private Placement we issued 834,843 shares of our common stock and 836,237 warrants to purchase shares of our common stock.

On January 4, 2005, in connection with the third and final closing of the Private Placement we issued 534,299 shares of our common stock and 535,192 warrants to purchase shares of our common stock.

On January 12, 2005, in connection with the closing of a second private placement offering, we issued 3,832,752 shares of our common stock and 3,832,752 warrants to purchase shares of our common stock.

### EXHIBITS

EXHIBIT <u>NUMBER</u>	DESCRIPTION OF EXHIBIT
Exhibit 3.1	Amended and Restated Articles of Incorporation. Incorporated by reference to Exhibit 3.1 to Report on Form 8K filed with the SEC on December 27, 2004.
Exhibit 3.2	Amended and Restated Bylaws. Incorporated by reference to Exhibit 3.1 to Report on Form 8K filed with the SEC on December 27, 2004.
Exhibit 4.1	Form of Warrant issued to purchasers. Incorporated by reference to Exhibit 4.1 to Report on Form 8K filed with the SEC on November 18, 2004.
Exhibit 4.2	Form of Warrant issued to Placement Agent. Incorporated by reference to Exhibit 4.2 to Report on Form 8K filed with the SEC on November 18, 2004.
Exhibit 5.1	Opinion of Frascona, Joiner, Goodman and Greenstein, PC

Exhibit 10.1	Share and Exchange Agreement, dated as of August 25, 2004, by and among the Company, Advaxis and the shareholders of Advaxis. Incorporated by reference to Exhibit 10.1 to Report on Form 8K filed with the SEC on November 18, 2004.
Exhibit 10.2	Form of Securities Purchase Agreement, by and among the Company and the purchasers listed as signatories thereto. Incorporated by reference to Exhibit 10.2 to Report on Form 8K filed with the SEC on November 18, 2004.
Exhibit 10.3	Form of Registration Rights Agreement, by and among the Company and the persons listed as signatories thereto. Incorporated by reference to Exhibit 10.3 to Report on Form 8K filed with the SEC on November 18, 2004.
Exhibit 10.4	Form of Standstill Agreement, by and among the Company and persons listed on Schedule 1 attached thereto. Incorporated by reference to Exhibit 10.4 to Report on Form 8K filed with the SEC on November 18, 2004.
Exhibit 10.5	Amended and Restated Employment Agreement, dated December 20, 2004, by and between the Company and J.Todd Derbin. Incorporated by reference to Exhibit 10.1 to Report on Form 8K filed with the SEC on December 23, 2004.
Exhibit 10.6	2004 Stock Option Plan of the Company. Incorporated by reference to Exhibit 10.1 to Report on Form 8K filed with the SEC on December 27, 2004.
Exhibit 10.7	License Agreement, dated as of June 17, 2002, by and between Advaxis and The Trustees of the University of Pennsylvania*.
Exhibit 10.8	Non-Exclusive License and Bailment, dated as of March 17, 2004, betweeen The Regents of the University of California and Advaxis, Inc.
Exhibit 10.9	Consultancy Agreement, dated as of January 19, 2005, by and between LVEP Management, Inc. and the Company.
Exhibit 10.10	Government Funding Agreement, dated as of April 5, 2004, by and between David Carpi and Advaxis, Inc.
Exhibit 10.11	Amended and Restated Consulting and Placement Agreement, dated as of May 28, 2003, by and between David Carpi and Advaxis, Inc., as amended
Exhibit 10.12	Consultancy Agreement, dated as of January 22, 2005, by and between Dr. Yvonne Paterson and Advaxis, Inc.
Exhibit 10.13	Consultancy Agreement, dated as of March 15, 2003, by and between Dr. Joy A. Cavagnaro and Advaxis, Inc.

Exhibit 10.14	Grant Writing Agreement, dated June 19, 2003, by and between DNA Bridges, Inc. and Adavaxis, Inc.	
Exhibit 10.15	Consulting Agreement, dated as of July 2, 2004, by and between Sentinel Consulting Corporation and Advaxis, Inc.	
Exhibit 10.16	Agreement, dated July 7, 2003, by and between Cobra Biomanufacturing PLC and Advaxis, Inc.*	
Exhibit 10.17	Securities Purchase Agreement, dated as of January 12, 2005, by and between the Company and Harvest Advaxis LLC. Incorporated by reference to Exhibit 10.1 to Report on Form 8K filed with the SEC on January 18, 2005.	
Exhibit 10.18	Registration Rights Agreement, dated as of January 12, 2005, by and between the Company and Harvest Advaxis LLC. Incorporated by reference to Exhibit 10.2 to Report on Form 8K filed with the SEC on January 18, 2005.	
Exhibit 10.19	Letter Agreement, dated as of January 12, 2005 by and between the Company and Robert T. Harvey. Incorporated by reference to Exhibit 10.3 to Report on Form 8K filed with the SEC on January 18, 2005.	
Exhibit 10.20	Consultantcy Agreement, dated as of January 15, 2005, by and between Dr. David Filer and the Company.	
Exhibit 10.21	Consultancy Agreement, dated as of January 15, 2005, by and between Pharm-Olam International Ltd. and the Company.	
Exhibit 10.22	Agreement, dated February 1, 2004, by and between Strategic Growth International Inc. and the Company.	
Exhibit 10.23	Letter Agreement, dated February 10, 2005, by and between Richard Berman and the Company.	
Exhibit 10.24	Employment Agreement, dated February 8, 2005, by and between Vafa Shahabi and the Company.	
Exhibit 10.25	Employment Agreement, dated March 1, 2005, by and between John Rothman and the Company.	
Exhibit 14.1	Code of Ethics. Incorporated by reference to Exhibit 14.1 to Report on Form 8K filed with the SEC on November 18, 2004.	
Exhibit 21.1	Advaxis, Inc., a Delaware corporation	
Exhibit 23.1	Consent of Goldstein Golub Kessler LLP	
Exhibit 23.2	Consent of Frascona, Joiner, Goodman and Greenstein, PC (included in Exhibit 5.1 above)	
Exhibit 24.1	Power of Attorney (Included on the signature page)	
* Confidential Treatment sought.		

#### UNDERTAKINGS

The undersigned small business issuer hereby undertakes to:

(1) For determining any liability under the Securities Act of 1933, treat the information omitted from this 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 small business issuer under Rule 424(b) (1), or (4) or 497(h) under the Securities Act of 1933 as part of this registration statement as of the time the SEC declared it effective.

(2) For determining any liability under the Securities Act of 1933, treat each post-effective amendment that contains a form of prospectus as a new registration statement for the securities offered in this registration statement, and that offering of the securities at that time as the initial BONA FIDE offering of those securities.

The undersigned small business issuer hereby undertakes with respect to the securities being offered and sold in this offering:

- (1) To file, during any period in which it offers or sells securities, a post-effective amendment to this Registration Statement to:
  - (a) Include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(b) Reflect in the prospectus any facts or events which, individually or together, represent a fundamental change in the information in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(c) Include any additional or changed material information on the plan of distribution.

(2) For determining liability under the Securities Act of 1933, treat each post-effective amendment as a new registration statement of the securities offered, and the offering of the securities at that time to be the initial bona fide offering.

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

Insofar as indemnification by the undersigned small business issuer for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the small business issuer pursuant to the foregoing provisions, or otherwise, the small business issuer has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act of 1933, and is, therefore, unenforceable.

### SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Princeton, Mercer County, State of New Jersey, on the 7th day of April, 2005.

## ADVAXIS, INC.

By: /s/ J. Todd Derbin

J. Todd Derbin Chief Executive Officer

## POWER OF ATTORNEY

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

SIGNATURE	TITLE	<u>DATE</u>
/s/ J. Todd Derbin J. Todd Derbin	Chief Executive Officer and Director (Principal Executive Officer	April 7, 2005
* Roni Appel	Chief Financial Officer and Director (Principal Financial and Accounting Officer)	April 7, 2005
* Scott Flamm	Director	April 7, 2005
* Thomas McKearn	Director	April 7, 2005
* James Patton	Director	April 7, 2005
* Steven Roth	Director	April 7, 2005
*by: /s/ J. Todd Derbin J. Todd Derbin Attorney-in-fact		



# Frascona, Joiner, Goodman and Greenstein, P.C.

Oliver E. Francous Gary S. Joiner Joanthan A. Goodman Gregg A. Greenstein G. Roge Bock Joyce M. Bergmann of Gomsel Joseph Adams Cope Janice II. Louden Attorneys at Law A Professional Corporation 4750 Table Mena Drive, Boulder, Colorado 80305-5541 Facsimile (303) 494-6309 Telephone (303) 494-3000 www.francoma.com c-mailigary@francoma.com Karen J. Radakaviah Mirian Abrons Goodman Ginthia M. Mamano Janzen R. Hill David A. Farus William A. Rohinnon Erie R. Jauroraki Kevin A. Gain B.J. Sanches

April 7, 2005

Advaxis, Inc. 212 Carnegic Center Suite 206 Princeton, NJ 08540

RE: Amendment No. 1 to Registration Statement on Form SB-2

Gentlemen:

We have acted as special counsel to Advaxis, Inc., a Colorado corporation (the "Company") with respect to Colorado law in connection with the above Registration Statement on Form SB-2 of the Company, as amended ("Registration Statement") relating to shares of its Common Stock (the "Shares"), namely: (i) outstanding shares of Common Stock held by certain stockholders of the Company, and (ii) shares of Common Stock to be offered upon exercise of certain outstanding Warrants.

We have reviewed a copy of the Company's Amended and Restated Articles of Incorporation on file with the Colorado Secretary of State, as well as copies of its By-laws, as amended, the Warrants, the minutes of the relevant corporate proceedings and such other documents as we deemed pertinent to this opinion.

We have assumed the accuracy of the information set forth in the Registration Statement without an independent investigation.

Based on the foregoing, it is our opinion that the Shares when offered by means of the prospectus which is part of the Registration Statement will be legally issued, fully paid and nonassessable.

We hereby consent to the reference to our firm under the caption "Legal Matter" in the prospectus and the filing of this opinion as an exhibit to the Registration Statement.

Sincerely yours, FUIScona, Jonen, Condinan & Greenstein, P.C. Frascona, Joiner, Goodman and Greenstein, P.C.

LICENSE AGREEMENT

BETWEEN

ADVAXIS, INC.

(COMPANY)

AND

THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA

(PENN)

EFFECTIVE DATE: JUNE 17,2002

- 1. Definitions
- 2. License Grant
- 3. Fees and Royalties
- 4. Confidentiality
- 5. Term and Termination
- 6. Patent Maintenance and Reimbursement
- 7. Infringement And Litigation
- 8. Disclaimer Of Warranties; Indemnification
- 9. Use Of PENN's Name
- 10. Additional Provisions
- Attachment 1 List of Intellectual Property
- Attachment 2 Joinder Agreement
- Attachment 3 Development Plan
- Attachment 4 Stock Purchase Agreement
- Attachment 5 Shareholders Agreement
- Attachment 6- Form NDA
- Attachment 7 Client and Billing Agreement
- Attachment 8 Required Territories

#### LICENSE AGREEMENT

This License Agreement ("AGREEMENT") is between The Trustees of the University of Pennsylvania, a Pennsylvania nonprofit corporation, with offices located at 3700 Market Street, Suite 300, Philadelphia, Pennsylvania 19104-3147 ("PENN") and Advaxis, Inc., a corporation organized and existing under the laws of Delaware ("COMPANY"), having a place of business at 250 West Lancaster Avenue, Ste 100, Paoli, PA 19301.

This AGREEMENT shall be and become effective on the date (the "EFFECTIVE DATE") on which COMPANY raises two-hundred fifty thousand dollars (\$250,000) of equity capital or convertible debt, whereupon the COMPANY shall be deemed to have exercised its rights under the Option (as defined below).

#### BACKGROUND

A. PENN owns issued and pending U.S. and foreign patent applications based upon information in PENN Dockets D751, H1219, H1219 - CIP, J1598, M2244, M2244 - CIP, N2483 (which was joined with M2244), O2876 and O2883 naming Dr. Yvonne Paterson and colleagues of PENN's School of Medicine, as inventors; and,

B. PENN and COMPANY have entered into a Exclusive Negotiation and Option Agreement (the "Option") with an effective date of March 15, 2002 and extendable upon agreement of the parties, which grants COMPANY exclusive rights to negotiate for a license to such pending U.S. and foreign patents and patent applications; and,

C. COMPANY desires to fund further research by Dr. Paterson relating to therapeutic vaccines based on LLO-antigen fusion proteins under a sponsored research agreement between PENN and COMPANY; and,

D. COMPANY desires to obtain the exclusive right and license to use and exploit the intellectual property developed by Dr. Paterson, et al, as described in Attachment 1, in accordance with the DEVELOPMENT PLAN (as defined below); and,

E. PENN has determined that commercial exploitation of the intellectual property developed by Dr. Paterson in accordance with the terms of this AGREEMENT is in the best interest of PENN and is consistent with its educational and research missions; and,

NOW, THEREFORE, in consideration of the promises and covenants contained in this AGREEMENT and intending to be legally bound, the parties agree as follows:

### 1. DEFINITIONS

1.1 AFFILIATE means, any legal entity directly or indirectly controlling, controlled by or under common control with COMPANY that has executed a Joinder Agreement substantially in the form of Attachment 2 or such other form as PENN and COMPANY may hereafter agree in writing. For purposes of this AGREEMENT, "control" means the direct or indirect ownership of more than fifty percent (50%) of the outstanding voting securities of a legal entity, or the right to receive more than fifty percent (50%) of the profits or earnings of a legal entity, or the right to control the policy decisions of a legal entity.

1.2 CALENDAR QUARTER means each three calendar month period beginning on January 1, April 1, July 1 and October 1, or any portion thereof, arising during the term of this AGREEMENT.

1.3 DEVELOPMENT PLAN means a plan for the development and/or marketing of the PENN PATENT RIGHTS and/or PENN LICENSED PRODUCTS that reasonably demonstrates COMPANY's capability to bring such patent rights, technical information and/or products to practical application, as more fully described in the Attachment 3, consisting of the following:

1.3.1 development activities to be undertaken, including proposed dates of completion of all major milestones to develop and commercialize PENN LICENSED PRODUCTS;

1.3.2 a list of all government regulatory approvals, including the nature of submissions and government agencies involved in pre-market clearance;

1.3.3 a list of current competitors and their competitive products, including competitors' known plans for further development of competing technologies; and

1.3.4 anticipated dates of first SALE of each PENN LICENSED PRODUCT described in the DEVELOPMENT PLAN.

1.4 FAIR MARKET VALUE means the cash consideration which COMPANY, an AFFILIATE, or any sublicensee would realize from an unaffiliated, unrelated buyer in an arm's length sale of an identical item sold in the same quantity and at the same time and place of the transaction.

1.5 FIELD OF USE means therapeutic use in humans and other mammals.

1.6 NET SALES means the consideration or FAIR MARKET VALUE attributable to the SALE of any PENN LICENSED PRODUCT(S), less the qualifying costs set forth below that are directly attributable to such SALE and actually identified on the invoice and borne by COMPANY, an AFFILIATE, or any sublicensee. Such qualifying costs shall be limited to the following:

1.6.1 Discounts, in amounts customary in the trade, for quantity purchases, prompt payments and for wholesalers and distributors.

1.6.2 Credits or refunds, not exceeding the original invoice amount, for claims or returns.

1.6.3 Prepaid outbound transportation expenses and transportation insurance premiums.

1.6.4 Sales and use taxes and other fees, duties, and imports imposed by any governmental agency.

1.7 PENN LICENSED PRODUCT(S) means products which are made, made for, used or sold by COMPANY, an AFFILIATE, or any sublicensees and which: (1) in the absence of this AGREEMENT would infringe at least one Valid Claim or (2) use a process or machine covered by a Valid Claim.

1.8 PENN PATENT RIGHTS means all patents represented by or issuing from those United States patent applications listed in Attachment 1, including continuation, divisional and re-issue applications and any foreign counterparts and extensions of the foregoing.

1.9 PRIMARY STRATEGIC FIELD shall be Cancer, including Cancer caused by infection.

1.10 SALE means any bona fide transaction for which consideration is in fact received by COMPANY or AFFILIATE or any sublicensee hereunder or expected for the sale, use, lease, transfer or other disposition of PENN LICENSED PRODUCT(S). A SALE shall be deemed completed at the time COMPANY, an AFFILIATE, or any sublicensee invoices, ships, or receives payment for such PENN LICENSED PRODUCT(S), whichever occurs first.

1.11 SECONDARY STRATEGIC FIELDS includes (a) Infectious Disease, (b) Allergy, (c) Autoimmune Disease, and (d) any other therapeutic indications for which PENN LICENSED PRODUCT(S) are developed.

1.12 SPONSORED RESEARCH AGREEMENT means a sponsored research agreement between PENN and COMPANY providing for the conduct of certain research consistent with this AGREEMENT, all on terms and conditions acceptable to PENN and COMPANY.

1.13 VALID CLAIM means any pending, issued or granted claim of the PENN PATENT RIGHTS that has not been surrendered, abandoned or declared invalid or unenforceable by an unappealed and unappealable decision of a court of competent jurisdiction.

### 2. LICENSE GRANT

2.1 PENN grants to COMPANY for the term of this AGREEMENT an exclusive, world-wide right and license, with the right to grant sublicenses, to make, have made, use, import, sell and offer for sale PENN LICENSED PRODUCT(S) in the FIELD OF USE. Except for Section 2.6, no other rights or licenses are granted. Intellectual property created or conceived during the performance of the SPONSORED RESEARCH AGREEMENT shall be governed by the SPONSORED RESEARCH AGREEMENT.

2.2 This license grant is exclusive except that PENN may use and permit other not-for profit organizations to use the PENN PATENT RIGHTS for educational and research purposes.

2.3 COMPANY acknowledges that pursuant to Public Laws 96-517, 97-256 and 98-620, codified at 35 U.S.C. 200-212, the United States government retains certain rights in intellectual property funded in whole or part under any contract, grant or similar agreement with a Federal agency. Pursuant to these laws, the government may impose certain requirements regarding such intellectual property, including but not limited to the requirement that products resulting from such intellectual property sold in the United States must be substantially manufactured in the United States. This license grant is expressly subject to all applicable United States government rights as provided in the above-mentioned laws and any regulations issued under those laws, as those laws or regulations may be amended from time to time.

### 2.4 The right to sublicense granted to COMPANY under this AGREEMENT is subject to the following conditions:

2.4.1 In each such sublicense, COMPANY must prohibit the sublicense from further sublicensing and require that the sublicensee is subject to the terms and conditions of the license granted to COMPANY pursuant to Section 2.1 of this AGREEMENT, the limitations thereon set forth in Sections 2.2, 2.3 and 2.4 as well as sublicensee's compliance with Sections 3.4.4, 5.5, 5.9 and 9, and COMPANY shall impose upon its sublicensees obligations comparable to those obligations imposed upon COMPANY pursuant to Sections 8.2 and 8.4 of this Agreement. COMPANY may submit a written request to PENN to obtain the right to allow a sublicensee to further sublicense PENN PATENT RIGHTS shall not be unreasonably withheld provided that COMPANY can validate to PENN's satisfaction that such sublicensee has the financial and resource capabilities to develop and commercialize PENN PATENT RIGHTS and further, such sublicensee agrees that any sub-sublicense shall be subject to the terms and conditions of the license granted to COMPANY under this AGREEMENT.

2.4.2 Within thirty (30) days after COMPANY enters into any sublicense, COMPANY shall deliver to PENN a complete copy of the sublicense written in the English language. PENN's receipt of the sublicense shall not constitute an approval of the sublicense or a waiver of any of PENN's rights or COMPANY's obligations under this AGREEMENT.

2.4.3 In the event of a DEFAULT under Section 5.3 hereunder all payments then or thereafter due to COMPANY from its AFFILIATES or sublicensees in connection with rights granted to such third party pursuant to this Agreement shall upon notice from PENN to any such AFFILIATE or sublicensee become owed directly to PENN for the account of COMPANY; provided however, that PENN shall remit to COMPANY the amount by which such payments exceed the amounts owed by COMPANY to PENN.

2.4.4 In the event that COMPANY enters into sublicenses, COMPANY remains primarily liable to PENN for all of COMPANY'S duties and obligations contained in this AGREEMENT, and any act or omission of a sublicensee which would be a breach of this AGREEMENT if performed by COMPANY shall be deemed to be a breach by COMPANY of this AGREEMENT.

2.5 Promptly after the date of execution of this AGREEMENT, PENN and COMPANY shall in good faith negotiate the terms of, and enter into, the SPONSORED RESEARCH AGREEMENT; provided, however, that neither PENN nor COMPANY shall be obligated to enter into the SPONSORED RESEARCH AGREEMENT on terms that are not acceptable to such party in all respects.

2.6 PENN grants to COMPANY a series of exclusive options during [\*] following the EFFECTIVE DATE of this AGREEMENT to obtain exclusive licenses to new inventions on therapeutic vaccines: (1) involving the use of listeria vectors and/or listeria antigen and/or PEST-containing fusion proteins in the FIELD OF USE and (2) developed by, under the supervision of, or in collaboration with Dr. Yvonne Paterson; to the extent of PENN's ownership interest in any resulting intellectual property. [\*]. Such license agreement shall include a license initiation fee of [\*], shall be substantially similar in form to this AGREEMENT and shall [\*].

2.7 PENN grants to COMPANY a series of exclusive options during [\*] following the EFFECTIVE DATE of this AGREEMENT to obtain exclusive licenses to new inventions on therapeutic vaccines: (1) involving the use of listeria vectors and/or listeria antigen and/or PEST-containing fusion proteins in the FIELD OF USE; and (2) developed by, under the supervision of, or in collaboration with Dr. Fred Frankel; to the extent of PENN's ownership interest in any resulting intellectual property. [\*] Upon exercise of option by COMPANY, PENN and COMPANY agree to negotiate in good faith a comprehensive license agreement within ninety (90) days of COMPANY's exercise of its option. Such license agreement shall include a license initiation fee of [\*].

### 3. FEES AND ROYALTIES

### 3.1 LICENSE INITIATION FEE AND ROYALTIES

3.1.1 In partial consideration of the exclusive license granted to COMPANY, COMPANY shall pay to PENN a non-refundable license initiation fee of [\*] within thirty (30) days of the date COMPANY receives in the aggregate [\*] in equity financing. The initiation fee paid to PENN pursuant to this Section shall be [\*].

3.1.2 In further consideration of the License, COMPANY shall perform its obligations under that certain Stock Purchase Agreement dated April 19, 2002, between COMPANY and PENN ("STOCK PURCHASE AGREEMENT"), a copy of which is attached as Attachment 4.

3.1.3. In further consideration of the exclusive license granted to COMPANY, COMPANY must pay to PENN, on a quarterly basis, royalties on the annual, worldwide NET SALES of PENN LICENSED PRODUCTS as follows:

[\*]% on NET SALES in countries with pending or issued patents; and

[\*]% on NET SALES in countries without pending or issued patents.

However, in the event that the PENN royalty rates represent greater than [\*] of any royalty payable to COMPANY by a sublicensee (on a country-by-country basis in regard to patent status), PENN's royalty rate shall be reduced to [\*] of such sublicense royalties; provided, however, that at no time will the aggregate royalty due to PENN for any Calendar Quarter be less than [\*] of worldwide NET SALES of PENN LICENSED PRODUCTS.

3.1.4. Following the first commercial SALE of a each PENN LICENSED PRODUCT, COMPANY must pay to PENN non-refundable minimum royalties in advance on the following dates and in the corresponding amounts:

Date Payment Becomes Due the first January 1st arising after the	Amount
first commercial SALE	\$[*]
the second January 1s arising after the first commercial SALE	\$[*]
the third and fourth January 1st arising after the first commercial SALE	\$[ * ]

The obligation to pay such Minimum Royalties will not, in respect of each PENN LICENSED PRODUCT, extend beyond January 1<sup>st</sup> of the [\*] year following the first commercial sale of that PENN LICENSED PRODUCT. A minimum royalty payment paid under this Section 3.1.5 shall serve as an advance payment against royalties due under Section 3.1.3 during the period for which such minimum royalty payment was paid.

3.1.5 COMPANY will pay PENN, on a quarterly basis, a percentage of any sublicense initiation fee or any other non-royalty payments received by COMPANY from sublicensees of PENN PATENT RIGHTS as follows:

	Percent of
If Sublicense Becomes Effective Anytime:	Sublicense Fees
On or before the 1st Anniversary of the EFFECTIVE DATE	[*]%
After the 1st and on or before the 2nd Anniversary of the EFFECTIVE DATE	[*]%
After the 2nd and on or before 3rd Anniversary of the EFFECTIVE DATE	[*]%
After the 3rd and on or before the 4th Anniversary of the EFFECTIVE DATE	[*]%
After the 4th Anniversary of the EFFECTIVE DATE	[*]%

Such sublicense payments include but are not limited to: i) upfront cash payments made to COMPANY in consideration of the sublicense, but excluding funds paid to COMPANY for research and development purposes and equity investments in COMPANY at FAIR MARKET VALUE, and excluding equity received by COMPANY in affiliates, joint venture partners and sublicensees; ii) "premium" over the fair market value of equity investments in COMPANY, where "premium" is defined as the amount by which cash amounts received by COMPANY for a particular equity security exceed the fair market value of such security and, notwithstanding the definition of FAIR MARKET VALUE set forth in Section 1.4 above, the fair market value of securities shall, for purposes of this Section 3.1.5(ii), be the average of the final "bid" and "ask" price of COMPANY's securities as of the close of business on the last business day prior to the date such securities are transferred to COMPANY if such securities are publicly traded or, in the event that such securities are not traded in the public market, the fair market value, as of the date of such securities are issued to the sublicensee, shall be established in good faith by the COMPANY Board of Directors; and iii) the fair market value of non-cash consideration received by COMPANY from a sublicensee (excluding equity received by COMPANY in sublicensee), where such fair market value, notwithstanding the definition of FAIR MARKET VALUE set forth in Section 1.4 above, is determined as of the date such consideration is received by COMPANY and equals the fair market value determined in good faith by the COMPANY Board of Directors

3.1.6 NET SALES of any PENN LICENSED PRODUCT shall not be subject to more than one assessment of the scheduled royalty; such assessment shall be the highest applicable royalty. Where any PENN LICENSED PRODUCT is the subject of a SALE by the COMPANY or any AFFILIATE but the COMPANY concludes in good faith that, in the ordinary course of business, the same PENN LICENSED PRODUCT will be the subject of a subsequent SALE by the COMPANY or any AFFILIATE for an amount greater than the consideration paid for the previous SALE, the COMPANY may exclude consideration paid for the previous SALE shull be date arising ninety (90) days after the date of the previous SALE; If a subsequent SALE for an amount greater than the consideration paid for the previous SALE shall be permanently excluded from NET SALES; if there is no subsequent SALE for an amount greater than the consideration paid for the previous SALE shall be permanently excluded from NET SALES; if there is no subsequent SALE for an amount greater than the consideration paid for the previous SALE shall be previous SALE shall be included in NET SALES, but shall still be credited against any subsequent SALE of the same PENN LICENSED PRODUCT for a higher price.

### 3.2 MILESTONE PAYMENTS

The following milestone payments are non-refundable, non-creditable, and payable to PENN by COMPANY within forty-five (45) days following the achievement of the following milestones as follows:

3.2.1 [\*] shall be due for first commercial SALE of the first PENN LICENSED PRODUCT in the PRIMARY STRATEGIC FIELD. Such payment shall be payable as follows: [\*] shall be paid within forty-five (45) days of the date of the first commercial SALE, [\*] shall be paid on the first Anniversary of the first commercial SALE; and [\*] shall be paid on the second Anniversary of the date of the first commercial SALE.

3.2.2 [\*] shall be due and payable within forty-five (45) days following the date of the first commercial SALE of a PENN LICENSED PRODUCT in a SECONDARY STRATEGIC FIELD; provided, however, that this fee shall [\*] for each of the SECONDARY STRATEGIC FIELDS in which PENN LICENSED PRODUCTS are sold.

### 3.3 DILIGENCE AND MAINTENANCE FEES

#### 3.3.1 Financial Due Diligence

3.3.1.1 COMPANY shall, within twelve (12) months of the EFFECTIVE DATE, raise at least [\*] in equity financing or convertible debt from reputable investors.

3.3.1.2 COMPANY shall, within thirty-six (36) months of the EFFECTIVE DATE, raise at least an additional [\*] in equity financing or convertible debt from reputable investors.

3.3.3 Developmental Due Diligence.

3.3.1 COMPANY will use commercially reasonable efforts to develop, commercialize, and market PENN LICENSED PRODUCTS as soon as practical, consistent with the terms of the DEVELOPMENT PLAN and any DEVELOPMENT PLAN PROGRESS REPORTS provided pursuant to Section 3.6.1 of this AGREEMENT. The DEVELOPMENT PLAN will be prepared by COMPANY and delivered to PENN prior to the EFFECTIVE DATE.

3.3.2 COMPANY agrees to commit resources (including relevant resources dedicated by sublicensees and strategic or collaboration partners and including research grants for Dr. Paterson) during the term of this AGREEMENT to the development and commercialization of PENN LICENSED PRODUCTS in the PRIMARY STRATEGIC FIELD in amounts not less than the following:

Anniversary of	Required Diligence
EFFECTIVE DATE	Expenditure
First	\$[*]
Second	\$[ * ]
Third	\$[ * ]
Fourth	\$[ * ]
Fifth and thereafter	\$[*]

Notwithstanding the above, COMPANY shall be not be obligated to make any due diligence expenditures at any time after the date the COMPANY first becomes obligated to pay minimum royalties pursuant to Section 3.1.5. In the event that total expenditures for the development and commercialization of PENN LICENSED PRODUCTS do not meet or exceed the amounts set forth above, COMPANY must pay to PENN the difference between the mandated amount listed above and the actual amount expended by COMPANY and/or its sublicensees, strategic or collaboration partner(s). Funds invested in development in a given year that are in excess of the above amounts shall be creditable up to \$[\*] against the diligence requirements of the following year. 3.3.3 SECONDARY STRATEGIC FIELDS: By [\*] of the EFFECTIVE DATE, COMPANY must either (i) initiate research and development programs for the SECONDARY STRATEGIC FIELDS of infectious disease, allergy, and autoimmune disease, at an initial annual expense level of at least [\*] per field, or (ii) partner with or grant one or more third parties rights for the commercial development of PENN LICENSED PRODUCTS in one or more of such SECONDARY STRATEGIC FIELDS.

3.3.4 In the event COMPANY develops PENN LICENSED PRODUCTS in any SECONDARY STRATEGIC FIELDS pursuant to Section 3.3.3.3, part (i), the parties will negotiate in good faith due diligence requirements for subsequent years for such SECONDARY STRATEGIC FIELD under development at that time. If COMPANY fails to complete either part (i) or (ii) as described in Section 3.3.3.3 above for such SECONDARY STRATEGIC FIELD(S) by [\*] anniversary of the EFFECTIVE DATE, COMPANY will forfeit all rights for development of commercial products in such SECONDARY STRATEGIC FIELD(S) by [\*] anniversary of the EFFECTIVE SECONDARY STRATEGIC FIELD(S). PENN will thereafter be free to enter into agreements for such forfeited rights with any third party for commercial development in the respective SECONDARY STRATEGIC FIELD(S).

### 3.3.6 COMPANY must pay to PENN annual license maintenance fees, according to the following schedule:

<u>Due Date:</u>	Amount:
1 <sup>st</sup> anniversary of EFFECTIVE DATE	\$[*]
2 <sup>nd</sup> anniversary of EFFECTIVE DATE	\$[*]
3 <sup>rd</sup> anniversary of EFFECTIVE DATE	\$[*]
4 <sup>th</sup> anniversary of EFFECTIVE DATE	\$[*]
5 <sup>th</sup> anniversary of EFFECTIVE DATE	\$[*]
6 <sup>th</sup> anniversary of EFFECTIVE DATE and each anniversary thereafter	\$[*]

provided, however, that such fees shall not be payable on any anniversary of the EFFECTIVE DATE arising at any time after the first commercial SALE of a PENN LICENSED PRODUCT.

#### 3.4 REPORTS AND RECORDS

3.4.1 On each December 1 arising during the term of this AGREEMENT, COMPANY must provide PENN with written progress reports,-(each a "DEVELOPMENT PLAN PROGRESS REPORT"), setting forth COMPANY'S progress regarding its efforts to develop and commercialize PENN LICENSED PRODUCTS, including activities of AFFILIATES and sublicensees, for the preceding year. COMPANY shall also notify PENN within thirty (30) days of the first commercial SALE by the COMPANY, an AFFILIATE, or any sublicensee of each PENN LICENSED PRODUCT. Each DEVELOPMENT PLAN PROGRESS REPORT shall include, without limitation: The date of the DEVELOPMENT PLAN PROGRESS REPORT and the time covered by such report. 3.4.1.1 3.4.1.2 Major activities and accomplishments completed by COMPANY, any AFFILIATE or any sublicensee since the last DEVELOPMENT PLAN PROGRESS REPORT. 3.4.1.3 Significant research and development projects currently being performed by COMPANY, any AFFILIATE, or any sublicensee and projected dates of completion. 3.4.1.4 Future development activities expected to be undertaken by COMPANY, any AFFILIATE, or any sublicensee during the next reporting period. 3.4.1.5 Current development stage (e.g., pre-clinical, Phase I, Phase II or Phase II) of each PENN LICENSED PRODUCT and targeted date of NDA approval, if any. 3.4.1.6 Significant changes to the DEVELOPMENT PLAN, including the reasons for the changes. 3.4.1.7 Summary of development efforts related to PENN PATENT RIGHTS being performed by third parties including the nature of the relationship between the COMPANY and such third parties. COMPANY must deliver to PENN within forty-five (45) days after the end of each CALENDAR QUARTER a report, certified by the chief financial 3.4.2 officer of COMPANY, setting forth the calculation of the royalties due to PENN for such CALENDAR QUARTER, including, without limitation: Number of PENN LICENSED PRODUCTS involved in SALES, listed by country. 3.4.2.1 3.4.2.2 Gross consideration for SALES of PENN LICENSED PRODUCTS, including all amounts invoiced, billed, or received. Qualifying costs, as defined in Section 1.5, listed by category of cost. 3.4.2.3 Page 12 of 26

	3.4.2.4	NET SALES of PENN LICENSED PRODUCTS listed by country.
categories.	3.4.2.5	Royalties owed to PENN, listed by category, including without limitation earned, sublicensee-derived, and minimum royalty
	3.4.2.6	Earned royalty amounts credited against minimum royalty payments.

3.4.3COMPANY must pay the royalties due under Sections 3.1 and 3.3 within forty-five (45) days following the last day of the CALENDAR QUARTER in which the royalties accrue. COMPANY must send with the royalties the report described in Section 3.4.1.

3.4.4 COMPANY must maintain and cause its AFFILIATES and any sublicensees to maintain, complete and accurate books and records which enable the royalties, fees, and payments payable under this AGREEMENT to be verified. The records for each CALENDAR QUARTER must be maintained for five (5) years after the submission of each report provided pursuant to Section 3.4.2. Upon reasonable prior notice to COMPANY, COMPANY must provide an independent auditor appointed by PENN and reasonably acceptable to COMPANY with access to all books and records relating to the SALES of PENN LICENSED PRODUCTS by COMPANY and its AFFILIATES or any sublicensees in order to conduct a review or audit of those books and records. Access to these books and records pertaining to NET SALES must be made available following the date of the first product sale and then no more than once every three (3) years following each audit during the term of this AGREEMENT, during normal business hours, and on two (2) occasions during the three (3) year period immediately following expiration or termination of this AGREEMENT. If a review or audit of the [\*] or more, COMPANY must reimburse to PENN its actual out-of-pocket costs of employing its auditors in connection with such review or audit. Notwithstanding the foregoing, COMPANY agrees to conduct, at its expense, an independent audit of SALES and royalties at least every five (5) years once annual SALES of a PENN LICENSED PRODUCT are greater than [\*]. The audit shall address, at a minimum, the amount of gross sales by or on behalf of COMPANY during the audit period, the amount of funds owed to PENN under this AGREEMENT, and whether the amount owed has been paid to PENN and is reflected in the records of the COMPANY. A report by the auditors shall be submitted promptly to PENN upon completion.

3.4.5 COMPANY shall provide to PENN, at least as frequently as they are distributed to the Board of Directors and/or management of COMPANY, copies of: all Board and managerial reports that relate to the PENN PATENT RIGHTS and PENN LICENSED PRODUCTS; and all business plans, projections and financial statements that are distributed to the Board of Directors and/or management.

### 3.5 CURRENCY, PLACE OF PAYMENT, INTEREST, PAYMENT OF EXPENSES

3.5.1All dollar amounts referred to in this AGREEMENT are expressed in United States dollars. All payments to PENN under this AGREEMENT must be made in United States dollars by check payable to "The Trustees of the University of Pennsylvania" and sent to the following address:

The Trustees of the University of Pennsylvania

For electronic transfer, all payments should be sent to the following address:

[\*]

3.5.2If COMPANY receives revenues from SALES of PENN LICENSED PRODUCTS in currency other than United States dollars, such revenues shall, for purposes of calculating NET SALES, be converted into United States dollars at the conversion rate for the foreign currency as published in the eastern edition of The Wall Street Journal as of the last business day of the CALENDAR QUARTER in which such NET SALES were accrued.

3.5.3 Amounts that are not paid when due shall accrue interest from the due date until paid, at a rate equal to [\*] per month (or the maximum allowed by law, if less).

### 4. CONFIDENTIALITY

4.1 CONFIDENTIAL INFORMATION means and includes all technical information, inventions, developments, discoveries, software, know-how, methods, techniques, formulae, data, processes and other proprietary ideas, whether or not patentable or copyrightable, that PENN identifies as confidential or proprietary at the time it is delivered or communicated to COMPANY.

4.2 COMPANY agrees to maintain in confidence and not to disclose to any third party any CONFIDENTIAL INFORMATION of PENN. COMPANY agrees to ensure that its employees have access to CONFIDENTIAL INFORMATION only on a need-to-know basis and are obligated in writing to abide by COMPANY's obligations under this AGREEMENT. The foregoing obligation shall not apply to:

4.2.1 information that is known to COMPANY or independently developed by COMPANY prior to the time of disclosure, in each case, to the extent evidenced by written records promptly disclosed to PENN upon receipt of the CONFIDENTIAL INFORMATION;

4.2.2 information disclosed to COMPANY by a third party that has a right to make such disclosure;

4.2.3 information that becomes patented, published or otherwise part of the public domain as a result of acts by PENN or a third person obtaining such information as a matter of right; or

4.2.4 information that is required to be disclosed by order of United States governmental authority or a court of competent jurisdiction; provided that COMPANY must use best efforts to obtain confidential treatment of such information by the agency or court.

4.2.5 information disclosed by COMPANY to a third party under the normal course of business, provided that COMPANY discloses such information under confidentiality agreements that are substantially in the form of Attachment 6 or such other form as PENN may from time-to-time approve.

4.3 PENN shall not be obligated to accept any confidential information from COMPANY. PENN shall use best efforts not to disclose confidential information of COMPANY that is received by PENN's Center for Technology Transfer from COMPANY to any third party (subject to the exceptions analogous to those in Section 4.2). PENN bears no institutional responsibility for maintaining the confidentiality of any CONFIDENTIAL INFORMATION other than (i) reports provided pursuant to Sections 3.4.1. and 3.4.2, and (ii) any information disclosed to PENN's auditor pursuant to Section 3.4.4.

4.4 PENN acknowledges that COMPANY is free to enter into confidentiality agreements with any faculty members or other employees or students of PENN provided such agreements are acceptable to the relevant faculty members, employees or students and are substantially in the form of Attachment 6 or such other form as PENN may from time-to-time approve.

### 5. TERM AND TERMINATION

5.1 This AGREEMENT, unless sooner terminated as provided in this AGREEMENT, terminates upon the later of: (a) expiration of the last to expire or become abandoned of the PENN PATENT RIGHTS; or (b) twenty (20) years after the EFFECTIVE DATE.

5.2 COMPANY may, upon sixty (60) days written notice to PENN, terminate this AGREEMENT by doing all of the following:

5.2.1 ceasing to make, have made, use, import, sell and offer for sale all PENN LICENSED PRODUCTS; and

5.2.2 terminating all sublicenses, and causing all AFFILIATES and sublicensees to cease making, having made, using, importing, selling and offering for sale all PENN LICENSED PRODUCTS; and

5.2.3 paying all monies owed to PENN under this AGREEMENT and the SPONSORED RESEARCH AGREEMENT, if any.

5.3 PENN may terminate this AGREEMENT if any of the following events of default ("DEFAULT") occur:

5.3.1 COMPANY is late in paying to PENN royalties, expenses, or any other monies due under this AGREEMENT and COMPANY does not pay PENN in full within ninety (90) days of written demand for such payment; or

5.3.2 COMPANY, experiences a Trigger Event (as defined below); or

5.3.3 COMPANY, or any AUTHORIZED AFFILIATE is in material breach of this AGREEMENT and such breach is not cured within ninety (90) sixty (60) days after written notice of the breach is provided to COMPANY.

5.4 Trigger Event means any of the following:

5.4.1 If COMPANY,

5.4.1.1 becomes insolvent, bankrupt or generally fails to pay its debts as such debts become due;

5.4.1.2 is adjudicated insolvent or bankrupt; admits in writing its inability to pay its debts; or shall suffer a custodian, receiver or trustee for it or substantially all of its property to be appointed and, if appointed without its consent, not be discharged within thirty (30) days; or

5.4.1.3 makes an assignment for the benefit of creditors; or suffers proceedings under any law related to bankruptcy, insolvency, liquidation or the reorganization, readjustment or the release of debtors to be instituted against it and, if contested by it, not dismissed or stayed within ten (10) days;

5.4.2 If proceedings under any law related to bankruptcy, insolvency, liquidation, or the reorganization, readjustment or the release of debtors are instituted or commenced by COMPANY;

5.4.3 If any order for relief is entered relating to any of the proceedings described in Sections 5.4.1 or 5.4.;

5.4.4 If COMPANY shall call a meeting of its creditors with a view to arranging a composition or adjustment of its debts;

5.4.5 If any sublicensee experiences an event comparable to a TRIGGER EVENT or is in material breach of its sublicense and fails to cure such material breach within sixty (60) days of COMPANY's written notice thereof, and (i) such sublicensee is either (x) responsible for a material amount of NET SALES or (y) primarily responsible for research and/or development activities relating to any contemplated PENN LICENSED PRODUCT described in the DEVELOPMENT PLAN and anticipated to result in commercial SALES having a positive material effect on NET SALES, and (ii) COMPANY fails to use commercially reasonable efforts to exercise its termination rights under the relevant sublicense;

5.4.6 If any AFFILIATE experiences an event comparable to a TRIGGER EVENT and (i) such AFFILIATE is either (x) responsible for a material amount of NET SALES or (y) primarily responsible for research and/or development activities relating to any contemplated PENN LICENSED PRODUCT described in the DEVELOPMENT PLAN and anticipated to result in commercial SALES having a positive material effect on NET SALES, and (ii) COMPANY fails to use commercially reasonable efforts to exercise its termination rights under any applicable agreements between COMPANY and such AFFILIATE implicating the rights granted to COMPANY under this AGREEMENT or otherwise deprive such AFFILIATE of any responsibility for the development or commercialization of PENN LICENSED PRODUCTS; or

5.4.7 If, without PENN's express prior written consent, COMPANY grants a sublicense to. or otherwise subsequently conducts material business implicating COMPANY's rights, duties and obligations under this AGREEMENT with, any Affiliate or sublicensee whose agreement or commercial relationship with COMPANY was previously terminated by COMPANY as contemplated in Sections 5.4.5 or 5.4.6 above.

5.5 In the event of a termination under Section 5.3 above, all duties of PENN and all rights (but not duties) of COMPANY under this AGREEMENT immediately terminate without the necessity of any action being taken either by PENN or by COMPANY. Upon and after any termination of this Agreement, COMPANY, any AFFILIATE, and any sublicensee shall refrain from further manufacture, sale, marketing, importation and/or distribution of PENN LICENSED PRODUCT(s). If, upon a termination of this agreement by PENN, a sublicensee is not in breach of its sublicense agreement and did not cause the Trigger Event, than PENN shall agree to negotiate in good faith with sublicensee a license agreement having commercially-reasonable terms.

5.6 Upon termination of this AGREEMENT, COMPANY must, at PENN's request, return to PENN all CONFIDENTIAL INFORMATION in respect of which COMPANY is RECIPIENT, together with any data generated by COMPANY during the term of this AGREEMENT which will facilitate the further development of the Technology licensed to COMPANY hereunder (the "NEW COMPANY DATA"). Upon termination of this AGREEMENT, COMPANY agrees to negotiate in good faith a license granting to potential licensees identified by PENN rights in the NEW COMPANY DATA on commercially reasonable terms.

5.7 COMPANY's obligation to pay all monies owed but not yet paid under this AGREEMENT shall survive termination of this AGREEMENT. In addition, the provisions of Sections 3.4.2, 3.4.3, 3.4.4 and 3.5, Articles 4 - Confidentiality, Article 5 - Term and Termination, Article 8 - Disclaimer of Warranties; Indemnification, Article 9 - Use of PENN's Name; and Article 10 - Additional Provisions shall survive such termination in accordance with their respective terms.

5.8 Upon termination of this AGREEMENT, COMPANY shall cause physical inventories to be taken immediately of: (a) all completed PENN LICENSED PRODUCT(s) on hand under the control of COMPANY, any AFFILIATES, or any sublicensees; and (b) such PENN LICENSED PRODUCT(s) as are in the process of manufacture and component parts thereof as of the date of termination of this AGREEMENT, which inventories shall be reduced to writing. COMPANY shall deliver copies of such written inventories, verified by an officer of COMPANY forthwith to PENN. PENN shall have 45 forty-five (45) days after receipt of such verified inventories within which to challenge the inventory and request an audit. Upon five (5) days written notice to COMPANY, PENN and its agents shall be given access during business hours to the premises of COMPANY and/or AFFILIATES or sublicensees for the purpose of conducting an audit. Upon the termination of this AGREEMENT, COMPANY shall, at its own expense forthwith remove and promptly upon PENN's request, efface or destroy all references to PENN from all advertising or other materials used in the promotion of COMPANY's business or the business of any AFFILIATE or sublicensee and COMPANY, its AFFILIATES, and any sublicensee shall not thereafter represent in any manner that it has rights in or to the PENN PATENT RIGHTS or PENN LICENSED PRODUCT(s). 5.9 Notwithstanding the foregoing, if this AGREEMENT terminates other than pursuant to Section 5.4.1 or 5.4.2, COMPANY shall have a period of six (6) months to sell off its inventory of PENN LICENSED PRODUCT(s) existing on the date of termination of this AGREEMENT and shall pay royalties to PENN with respect to such PENN LICENSED PRODUCT(s) within thirty (30) days following the expiration of such six-month period ("Sell Off Right").

### 6. PATENT MAINTENANCE AND REIMBURSEMENT

6.1 Subject to this Article 6, PENN controls the prosecution and maintenance of PENN PATENT RIGHTS. COMPANY must reimburse PENN for all documented attorneys fees, expenses, official fees and other charges incurred after the EFFECTIVE DATE of the option and incident to the preparation, prosecution maintenance and licensing of PENN PATENT RIGHTS. COMPANY's obligation to reimburse such costs shall commence as of the date COMPANY closes an initial [\*] or greater financing round; reimbursements shall be paid within thirty (30) days after COMPANY'S receipt of invoices for such fees, expenses and charges

6.2 COMPANY shall reimburse PENN for all historically accrued patent and licensing expenses, attorneys fees, official fees and all other charges incident to the preparation, prosecution and maintenance of the PENN PATENT RIGHTS that were incurred before the EFFECTIVE DATE of the Option (March 15, 2002) within thirty (30) days after the date of closing of an initial [\*] or greater financing round. Such historically accrued expenses are estimated by PENN at approximately [\*] but will not be greater than [\*].

6.3 Notwithstanding Section 6.1, COMPANY [\*]. In that event, PENN shall be the client of the attorney, and COMPANY may directly manage the prosecution of the PENN PATENT RIGHTS through a Client and Billing Agreement attached hereto as Attachment 7 (the "CLIENT AND BILLING AGREEMENT"); COMPANY shall be ar all costs of prosecution of the PENN PATENT RIGHTS. PENN shall be copied on all correspondence related to the prosecution of the PENN PATENT RIGHTS between COMPANY and the selected attorney, and retains the right to advise COMPANY regarding patent prosecution. PENN and COMPANY shall in good faith cooperate to implement the prosecution and maintenance of PENN PATENT RIGHTS in accordance with the CLIENT AND BILLING AGREEMENT and COMPANY must promptly pay for all ongoing attorneys fees, expenses, official fees and all other charges incident to the preparation, prosecution and maintenance of the PENN PATENT RIGHTS after the EFFECTIVE DATE of this AGREEMENT in accordance with such CLIENT AND BILLING AGREEMENT.

6.4 COMPANY hereby covenants and agrees that it shall in good faith prosecute PENN PATENT RIGHTS in all countries set forth in Attachment 7 (the "REQUIRED TERRITORIES"); [\*]; If COMPANY refuses such expenditures under the CLIENT AND BILLING AGREEMENT, or does not reimburse PENN for expenses related to PENN PATENT RIGHTS, COMPANY'S rights in the relevant PENN PATENT RIGHTS granted under Section 2.1 of this AGREEMENT shall; thereafter terminate on a patentby-patent basis. Thereafter, (i) PENN will; be free, at its discretion and expense, to either abandon such applications or patents or to continue such preparation, prosecution and/or maintenance activities; and (ii) PENN may<sub>π</sub> license such PENN PATENT RIGHTS to any third party upon such terms and conditions as PENN deems appropriate.

6.5 [\*]

6.6 [\*]

6.7 COMPANY may at its sole discretion (i) apply for and obtain such extension, term restoration or comparable addition to the life of the affected PENN PATENT RIGHTS and (ii) apply for and obtain such supplemental protection certificates for the approved product or process covered by the PENN PATENT RIGHTS, all to the extent the same are available pursuant to the applicable laws and regulations of the jurisdiction where such regulatory approval is given. Nothing herein shall be construed to obligate COMPANY to in fact seek extension or restoration of any PENN PATENT RIGHTS or supplemental protection for any PENN LICENSED PRODUCTS. Where COMPANY applies for and obtains supplemental protection or comparable treatment for any PENN LICENSED PRODUCT, then, subject to continued payment by COMPANY of its royalty obligations under this AGREEMENT, this AGREEMENT shall not expire pursuant to Section 5.1(a) prior to the date of termination of such supplemental protection or comparable treatment.

6.8 Notwithstanding the other provisions of this Article 6, COMPANY shall in good faith confer with, and regularly keep PENN apprised of, its patent prosecution, maintenance, enforcement and defense strategy and plans and shall in good faith consider PENN's comments regarding such strategy and plans including, without limitation, the following:

RIGHTS.

6.8.1 Providing to PENN, promptly upon PENN's request, copies of any office actions or proposed responses to office actions affecting PENN PATENT

6.8.2 Providing to PENN, promptly upon PENN's request, copies of any written communications alleging infringement of, or responding to allegations of infringement of, the PENN PATENT RIGHTS by third parties and any pleadings, motions, briefs or other substantive papers filed by COMPANY or any third parties or proposed to be filed by COMPANY, in connection with any litigation, arbitration or regulatory proceedings (including interference and opposition proceedings).

### 7. INFRINGEMENT AND LITIGATION

7.1 PENN and COMPANY are responsible for notifying each other promptly of any infringement of PENN PATENT RIGHTS which may come to their attention. PENN and COMPANY shall consult one another in a timely manner concerning any appropriate response to the infringement.

7.2 COMPANY may prosecute such infringement at its own expense. COMPANY must not settle or compromise any such suit in a manner that imposes any obligations or restrictions on PENN or grants any rights to the or the PENN PATENT RIGHTS, without PENN's prior written permission. Financial recoveries from any such litigation will first be applied to reimburse COMPANY for its litigation expenditures with additional recoveries being paid to COMPANY, subject to a royalty due PENN based on the provisions of Article 3.

7.3 COMPANY's rights under Section 7.2 are subject to the continuing right of PENN to intervene at PENN's own expense and join COMPANY in any claim or suit for infringement of the PENN PATENT RIGHTS. Any consideration received by COMPANY in settlement of any claim or suit shall be shared between PENN and COMPANY in proportion with their share of the litigation expenses in such infringement action.

7.4 Subject to COMPANY'S obligations under Section 6.7 above, COMPANY shall be free to determine at its sole discretion when, if at all, and how to assert and prosecute infringement claims relating to PENN PATENT RIGHTS where such determinations are based upon *bona fide* strategic issues such as COMPANY'S concerns regarding challenges to the validity of the PENN PATENT RIGHTS. If COMPANY elects at its sole discretion not to prosecute or otherwise abate any infringement for non-strategic reasons-, COMPANY shall so notify PENN, and PENN may thereafter prosecute such infringement at its own expense. In such event, financial recoveries will be entirely retained by PENN.

7.5 In any action to enforce any of the PENN PATENT RIGHTS, either party, at the request and expense of the other party shall cooperate to the fullest extent reasonably possible. This provision shall not be construed to require either party to undertake any activities, including legal discovery, at the request of any third party except as may be required by lawful process of a court of competent jurisdiction.

7.6 [\*..]

#### 8. DISCLAIMER OF WARRANTIES; INDEMNIFICATION

8.1 THE PENN PATENT RIGHTS, PENN LICENSED PRODUCTS AND ALL OTHER TECHNOLOGY LICENSED UNDER THIS AGREEMENT ARE PROVIDED ON AN "AS IS" BASIS AND PENN MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT THERETO. BY WAY OF EXAMPLE BUT NOT OF LIMITATION, PENN MAKES NO REPRESENTATIONS OR WARRANTIES (i) OF COMMERCIAL UTILITY; (ii) OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE; OR (iii) THAT THE USE OF THE PENN PATENT RIGHTS, PENN LICENSED PRODUCTS AND ALL TECHNOLOGY LICENSED UNDER THIS AGREEMENT WILL NOT INFRINGE ANY PATENT, COPYRIGHT OR TRADEMARK OR OTHER PROPRIETARY RIGHTS OF OTHERS. PENN SHALL NOT BE LIABLE TO COMPANY, COMPANY'S SUCCESSORS OR ASSIGNS OR ANY THIRD PARTY WITH RESPECT TO: ANY CLAIM ARISING FROM COMPANY'S USE OF THE PENN PATENT RIGHTS, PENN LICENSED PRODUCTS AND ALL TECHNOLOGY LICENSED UNDER THIS AGREEMENT OR FROM THE MANUFACTURE, USE OR SALE OF PENN LICENSED PRODUCTS. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY CLAIM FOR LOSS OF PROFITS, LOSS OR INTERRUPTION OF BUSINESS, OR FOR INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND REGARDLESS OF THE CAUSE OF ACTION OR THEORY OF LIABILITY UPON WHICH SUCH CLAIM IS BASED, AND WHETHER OR NOT THE PARTY AGAINST WHOM SUCH CLAIM IS MADE WAS AWARE OF THE POSSIBILITY OF SUCH DAMAGES.

8.2 COMPANY must defend, indemnify and hold harmless PENN, its trustees, officers, agents and employees (individually, an "Indemnified Party", and collectively, the "Indemnified Parties"), from and against any and all liability, loss, damage, action, claim or expense suffered or incurred by the Indemnified Parties (including attorney's fees) (individually, a "Liability", and collectively, the "Liabilities") that results from or arises out of third-party claims made in connection with: (a) the development, use, manufacture, promotion, sale or other disposition of any PENN PATENT RIGHTS or PENN LICENSED PRODUCTS by COMPANY, its assignees, AFFILIATES, sublicensees, vendors or other third parties; (b) any breach by COMPANY of this AGREEMENT, as well as any Liabilities resulting from the enforcement by an Indemnified Party of this Section. Without limiting the foregoing, COMPANY must defend, indemnify and hold harmless the Indemnified Parties from and against any Liabilities resulting from:

8.2.1 any product liability or other claim of any kind made by a third party and related to the use by a third party of a PENN LICENSED PRODUCT that was manufactured, sold or otherwise disposed by COMPANY, its assignees, AFFILIATES, sublicensees, vendors or other third parties;

8.2.2 a claim by a third party that the PENN PATENT RIGHTS or the design, composition, manufacture, use, sale or other disposition of any PENN LICENSED PRODUCT infringes or violates any patent, copyright, trademark or other intellectual property rights of such third party; and

8.2.3 claims made by third parties (including governmental agencies) in connection with clinical trials or studies conducted by or on behalf of COMPANY relating to the PENN PATENT RIGHTS or PENN LICENSED PRODUCTS, including, without limitation, any claim by or on behalf of a human subject of any such clinical trial or study.

8.3 COMPANY is not permitted to settle or compromise any claim or action giving rise to Liabilities in a manner that imposes any restrictions or obligations on PENN or grants any rights to the PENN PATENT RIGHTS or PENN LICENSED PRODUCTS without PENN's prior written consent. If COMPANY fails or declines to assume the defense of any such claim or action within thirty (30) days after notice thereof, PENN may assume the defense of such claim or action for the account and at the risk of COMPANY for indemnification, and any Liabilities related thereto shall be conclusively deemed a liability of the party responsible for indemnification. The indemnification rights of PENN or any other Indemnified Parties are in addition to all other rights which such Indemnified Party may have at law or in equity or otherwise.

### 8.4 INSURANCE

8.4.1 Within 90 days of the EFFECTIVE DATE of this AGREEMENT, COMPANY must procure and maintain a policy or policies of comprehensive general liability insurance, including broad form and contractual liability, in a minimum amount of \$2,000,000 combined single limit per occurrence and in the aggregate as respects personal injury, bodily injury and property damage arising out of COMPANY's performance under this AGREEMENT.

8.4.2 COMPANY must, upon commencement of clinical trials involving PENN LICENSED PRODUCTS, procure and maintain a policy or policies of product liability insurance in a minimum amount of \$3,000,000 combined single limit per occurrence and in the aggregate as respects bodily injury and property damage arising out of COMPANY's performance under this AGREEMENT.

8.4.3 The policy or policies of insurance described in this Section 8.4 [must be issued by an insurance carrier with an AM Best rating of "A" or better and] must name PENN as an additional insured with respect to COMPANY's performance of this AGREEMENT. COMPANY must provide PENN within thirty (30) days of the EFFECTIVE DATE with certificates evidencing the insurance coverage required herein. Such certificates must provide that COMPANY's insurance carrier(s) notify PENN in writing at least 30 days prior to cancellation or material change in coverage.

8.4.4 PENN may periodically review the adequacy of the minimum limits specified above and reserves the right to require COMPANY to adjust the liability coverages, provided such adjustments do not require COMPANY to obtain coverages in excess of those customarily obtained by entities incurring comparable risks in comparable industries. The specified minimum insurance amounts do not constitute a limitation on COMPANY's obligation to indemnify PENN under this AGREEMENT.

#### 9. USE OF PENN'S NAME

COMPANY and its employees and agents must not use and COMPANY must not permit its AFFILIATES or sublicensees to use PENN's name or any adaptation thereof, or any PENN seal, logotype, trademark, or service mark, or the name, mark, or logotype of any PENN representative or organization in any way without the prior written consent of PENN.

### **10. ADDITIONAL PROVISIONS**

10.1 Nothing in this AGREEMENT shall be deemed to establish a relationship of principal and agent between PENN and COMPANY, nor any of their agents or employees for any purpose whatsoever, nor shall this AGREEMENT be construed as creating any other form of legal association or arrangement which would impose liability upon one party for the act or failure to act of the other party.

10.2 COMPANY is not permitted to assign this AGREEMENT or any part of it, either directly or by merger or other operation of law, without the prior written consent of PENN, which consent shall not be unreasonably withheld. A withholding of PENN's consent shall be considered as reasonable in the event that the acquiring party of the assignee of this license is not reputable or is not capable of developing the PENN PATENT RIGHTS in the FIELD OF USE. Any prohibited assignment of this AGREEMENT or the rights hereunder shall be null and void. No assignment relieves COMPANY of responsibility for the performance of any accrued obligations which it has prior to such assignment.

10.3 A waiver by either party of a breach of any provision of this AGREEMENT will only be valid if express, in writing and signed by an authorized representative of the waiving party and will not constitute a waiver of any subsequent breach of that provision or a waiver of any breach of any other provision of this AGREEMENT.

10.4 Notices, payments, statements, reports and other communications under this AGREEMENT shall be in writing and shall be deemed to have been received as of the date sent if sent by public courier (e.g. Federal Express) or by Express Mail, receipt requested, and addressed as follows:

If for PENN:

University of Pennsylvania Center for Technology Transfer [\*]

If for COMPANY:

Advaxis, Inc. 250 West Lancaster Ave., Ste. 100 Paoli, PA 19301 Attn: Mr. James P. Patton with a copy to:

Office of General Counsel University of Pennsylvania

with a copy to:

Pryor Cashman Sherman & Flynn 410 Park Avenue, 10th Floor New York, NY 10022 Attn: Selig D. Sacks, Esq.

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Either party may change its official address upon written notice to the other party.

10.5 This AGREEMENT shall be construed and governed in accordance with the laws of the Commonwealth of Pennsylvania, without giving effect to conflict of law provisions. In the event that a party to this AGREEMENT perceives the existence of a dispute with the other party concerning any right or duty provided for herein, the parties will, as soon as practicable, confer in an attempt to resolve the dispute. If the parties are unable to resolve such dispute amicably, then the parties hereby submit to the exclusive jurisdiction of and venue in the courts located in the Eastern District of the Commonwealth of Pennsylvania with respect to any and all disputes concerning the subject of this AGREEMENT.

10.6 PENN and COMPANY shall not discriminate against any employee or applicant for employment because of race, color, sex, sexual or affectional preference, age, religion, national or ethnic origin, handicap, or because he or she is a disabled veteran or a veteran of the Vietnam Era.

10.7 COMPANY must comply with all prevailing laws, rules and regulations that apply to its activities or obligations under this AGREEMENT. Without limiting the foregoing, it is understood that this AGREEMENT may be subject to United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities, articles and information, including the Arms Export Control Act as amended in the Export Administration Act of 1979, and that the parties' obligations are contingent upon compliance with applicable United States export laws and regulations. The transfer of certain technical data or commodities may require a license from the cognizant agency of the United States Government and/or written assurances by COMPANY that COMPANY shall not export data or commodities to certain foreign countries without prior approval of such agency. PENN neither represents that a license is not required nor that, if required, it will issue.

10.8 If any provision of this AGREEMENT shall be held to be illegal, invalid or unenforceable, then such illegality, invalidity or unenforceability shall attach only to such provision and shall not in any manner affect or render illegal, invalid or unenforceable any other provision of this AGREEMENT, and this AGREEMENT shall be carried out as if any such illegal, invalid or unenforceable provision were not contained herein.

10.9 This AGREEMENT embodies the entire agreement of the parties with respect to the matters herein contained, and supercedes all prior oral or written agreements relating thereto except to the extent expressly addressed in the STOCK PURCHASE AGREEMENT or the STOCKHOLDER'S AGREEMENT. Any modification of this AGREEMENT must be in writing and signed by an authorized representative of each party.

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IN WITNESS WHEREOF, the parties, intending to be legally bound, have caused this AGREEMENT to be executed by their duly authorized representatives.

 THE TRUSTEES OF THE<br/>UNIVERSITY OF PENNSYLVANIA
 ADVAXIS, INC.

 SIGNATURE:
 /s/ Louis P. Berneman
 SIGNATURE:
 /s/ J. Todd Derbin

 TYPED NAME: Louis P. Berneman
 TYPED NAME:
 J. Todd Derbin

TITLE: Managing Director Center for Technology Transfer DATE:

SIGNATURE:	/s/ J. Todd Derbin	
TYPED NAME:	J. Todd Derbin	
TITLE:		
DATE:		

# ATTACHMENT 1 - List of Intellectual Property

[\*]

ATTACHMENT 2 - Sponsored Research Agreement ATTACHMENT 3 - Development Plan ATTACHMENT 4 - Stock Purchase Agreement ATTACHMENT 5 - Shareholder's Agreement ATTACHMENT 6 - Form NDA ATTACHMENT 7 - Client and Billing Agreement ATTACHMENT 8 - Required Territories

[\*]

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# NON-EXCLUSIVE LICENSE AND BAILMENT

between

# THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

and

# ADVAXIS, INC

for

XFL7 STRAIN OF LISTERIA MONOCYTOGENES

U.C. Case No. 2004-353

04

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## NON-EXCLUSIVE LICENSE AND BAILMENT

This non-exclusive license and bailment agreement ("Agreement") will be effective March 17 2004 ("Effective Date"), between The Regents of the University of California, a California corporation, having its statewide administrative offices at 1111 Franklin Street, 12th Floor, Oakland, California 94607-5200 through its UCLA Office of Intellectual Property Administration having an address at 10920 Wilshire Boulevard, Suite 1200, Los Angeles, California 90024-1406("The Regents"), and Advaxis, Inc., a Delaware corporation, having a principal place of business at 212 Carnegie Center, Princeton, NJ 08540("Licensee").

### BACKGROUND

A. Certain materials described in UC Case No 2004-353 and containing Listeria Monocytogenes strain XFL7 were made and developed by Dr. Jeff Miller at the University of California, Los Angeles campus, and are covered by Regents' Property Rights as defined below.

B. The Original Materials (as defined below) were developed under funding by the National Institute of Health (NIH). As a consequence, this Agreement is subject to overriding obligations to the United States (U.S.) Federal Government as set forth in 35 U.S.C. §§ 200-212 and applicable regulations including a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced the Original Materials for or on behalf of the U.S. Government throughout the world. The Regents has informed NIH that The Regents intends to license the Original Materials and products derived from the Original Materials without benefit of a patent or patent application and under a bailment.

C. Licensee requests the right to commercially and non-exclusively develop products using Biological Materials (as defined below) in the Field of Use (as defined below). The Regents is willing to grant that right so that the Biological Materials may be used to the fullest and products developed for the Licensee's purpose at its sole discretion, subject to the terms of this Agreement, and for the benefit of the general public.

D. Both parties recognize and agree that the Original Materials are not patented and, for their mutual convenience in valuing the rights granted in this Agreement, agree to payment of the license issue fee and maintenance fees as set forth in this Agreement.

The parties agree:

## 1. **DEFINITIONS**

1.1. "Affiliate" means any corporation or other business entity in which Licensee owns or controls, directly or indirectly, at least fifty percent (50%) of the outstanding stock or other voting rights entitled to elect directors or in which Licensee is owned or controlled directly or





indirectly by at least fifty percent (50%) of the outstanding stock or other voting rights entitled to elect directors; but in any country where the local law does not permit foreign equity participation of at least fifty percent (50%), then an "Affiliate" includes any company in which Licensec owns or controls, or is owned or controlled by, directly or indirectly, the maximum percentage of outstanding stock or voting rights permitted by local law.

 "Original Materials" means Listeria Monocytogenes strain XFL7 as identified in UC Case No. LA2004-353.

1.3. "Biological Materials" means: (a) Original Materials; (b) any material which incorporates the Original Materials.

1.4. "Derived Products" means any product produced by Licensee from the use of the Biological Materials.

1.5. "Field Of Use" means the therapeutic use of Biological Materials (specifically including Original Materials) in humans or animals.

1.6. Original Materials, including ownership rights in the Biological Materials to the extent that they necessarily use or incorporate Original Materials.

## 2. BAILMENT

2.1. The Regents shall supply Licensee with a viable sample of the existing Original Materials (or an equivalent thereof) within thirty (30) days after Effective Date and Licensee shall pay all the associated handling and shipping costs. The Original Materials will be delivered to a location specified by Licensee.

2.2. The Regents grants to Licensee, under Regents' Property Rights, a non-exclusive right, within the Field of Use, to make (propagate) and use the Biological Materials and to make, have made, use and sell Derived Products.

2.3. The rights granted in Paragraph 2.2 are subject to any licenses granted to the U.S. Government and to other limitations stated in this Agreement.

2.4. Licensee shall not sell any products (other than Derived Products within the Field of Use) developed from the use of the Biological Materials or sublicense the rights granted hereunder without the prior written consent of The Regents which shall not be unreasonably withheld or delayed. Licensee shall not transfer or sublicense Biological Materials or any animal, vector or system in which Biological Materials are contained to any third party, except for the sale of Derived Products and or a sale of substantially all the assets of licensee or a merger of licensee with another entity, or a sale by Licensee of an entire product line to a third party, together with the assets to which the product relates.

2.5. Title to the tangible material comprising the Original Materials and Biological Materials which incorporate the Original Materials is owned by The Regents and is not transferred to



Licensee under this Agreement except upon sale or transfer or use in chain of commerce, at which time title to the product is transferred to Licensee. The Regents is free to transfer or grant rights in the Original Materials to third parties for commercial or noncommercial purposes, and The Regents may use the Original Materials (or any related material or technology in which The Regents has rights) for educational and research purposes including publication and other communication of research results. Licensee shall transfer samples of Original Materials developed under this Agreement to The Regents, from time to time, upon reasonable request by The Regents, in order to comply with this Paragraph 2.5.

## 3. CONSIDERATION

3.1 Licensee shall pay The Regents a license agreement issue fee of Two Thousand Dollars (\$2,000). The fee is non-cancelable, and non-refundable, and is due to The Regents within Ninety (90) days from the Effective Date of this Agreement.

3.2. Beginning in the calendar year 2005 and continuing for the life of this Agreement, Licensee shall pay to The Regents an annual maintenance fee of One Thousand Dollars (\$1,000). The maintenance fee is due by February 28 of each year.

All monies due The Regents are payable in U.S. dollars.

### 4. PROGRESS REPORTS

Beginning December 31, 2005 and continuing annually thereafter Licensee shall submit to The Regents a written report covering Licensee's activities related to the use of Biological Materials, including the development and testing of Derived Products.

# 5. LIFE OF THE AGREEMENT

5.1. Unless otherwise terminated by operation of law or by the parties in accordance with the terms of this Agreement, this Agreement will be in effect until Fifteen (15) years from the Effective Date of this Agreement, and may be renewed by Advaxis on the same terms upon mutual written agreement by the parties.

5.2. Any termination of this Agreement will not affect the rights and obligations set forth in the following:

Article 5	Life of the Agreement
Paragraph 6.3	Disposition of Derived Products and Biological
	Materials on hand upon termination
Paragraph 6.4	Obligations Prior to Termination
Article 7	Use of Names and Trademarks
Article 9	Indemnification
Article 11	Late Payments

## 6. TERMINATION

6.1. If Licensee violates or fails to perform any term of this Agreement, then The Regents may give written notice of default to Licensee. If Licensee fails to repair the default within ninety (90) days of the effective date of the notice of default, then The Regents may terminate this Agreement and its licenses by a second written notice of termination. If a notice of termination is sent to Licensee, then this Agreement automatically terminates on the effective date of that notice.

6.2. Licensee may, at any time, terminate this Agreement by giving notice in writing to The Regents. Termination of this Agreement will be effective ninety (90) days from the date of written notice.

6.3. If this Agreement is terminated by either party, then The Regents may require that Licensee either destroy or return to The Regents all Biological Materials under Licensee's control at the time of termination. Licensee shall comply with The Regents' requirement and shall return the Biological Materials or provide The Regents with written assurance of the Biological Materials' destruction, as appropriate, within thirty (30) days of the effective date of termination. Upon termination of this Agreement, Licensee may dispose of all previously made, or partially made, Derived Products, but no more, for one-hundred twenty (120) days following the effective date of termination.

6.4. Termination of this Agreement will not relieve Licensee of any obligation or liability established prior to termination (including, but not limited to, payment of maintenance fees owing at the time of effective termination). Termination will not impair any accrued right of The Regents and will not rescind any payment made to The Regents or anything done by Licensee prior to the time termination becomes effective.

# 7. USE OF NAMES AND TRADEMARKS

7.1. Nothing contained in this Agreement confers any right to use in advertising, publicity or other promotional activities any name, trade name, trademark or other designation of either party hereto (including contraction, abbreviation or simulation of any of the foregoing). Unless required by law, the use by Licensee of the name "The Regents of the University of California" or the name of any campus of the University of California is prohibited.

7.2. The Regents is free to release to the inventors and senior administrators employed by The Regents the terms and conditions of this Agreement. If such release is made, then The Regents shall give notice of the confidential nature and shall request that the recipient does not disclose such terms and conditions to others. If a third party inquires whether a license to Regents' Property Rights is available, then The Regents may disclose the existence of this Agreement and the extent of the grant to such third party, but will not disclose the name of Licensee or any other terms or conditions of this Agreement, except where The Regents is required to release information under governmental requirements such as the California Public Records Act, a regulatory requirement, a contractual requirement, an audit requirement or other requirements of law.



### 8. LIMITED WARRANTY

8.1. The Regents warrants to Licensee that it has the lawful right to grant this bailment and license.

8.2. The Original Materials are provided without a warranty of merchantability or fitness for a purpose or any other warranty, express or implied.

8.3. Licensee shall use the biological materials with caution and prudence in any experimental work, since all of the biological materials' characteristics are not known. In no event will The Regents be liable for any incidental, special or consequential damages resulting from the exercise of this bailment or the use of biological materials. The Regents does not warrant or represent that anything made, used, sold or otherwise disposed of under any right granted in this Agreement is or will be free from infringement of patents (other than Regents' Patent Rights, if present) or other proprietary rights.

8.4. This Agreement does not confer by implication, estoppel or otherwise, any license or rights under any patent of The Regents or any right to be furnished, or any know-how not provided in the Biological Materials.

8.5. This Agreement does not obligate The Regents to furnish any know-how not provided in Regents' Property Rights (or Regents' Patent Rights, if present).

## 9. INDEMNIFICATION

9.1. Licensee shall indemnify, hold harmless and defend The Regents, its officers, employees, and agents; the sponsors of the research that led to the development of the Original Materials; and the inventors of the Original Materials and their employers from and against any and all claims, suits, losses, liabilities, damages, costs, fees and expenses resulting from or arising out of exercise of this license. Indemnification includes but is not limited to products liability.

9.2. The Regents shall promptly notify Licensee in writing of any claim or suit brought against The Regents in respect of which The Regents intends to invoke the provisions of this Article 9 (Indemnification). Licensee shall keep The Regents informed on a current basis of its defense of any claims under this Article 9 (Indemnification).

9.3. Licensee, at its sole cost and expense, must insure its activities in connection with the work under this Agreement and obtain, keep in force and maintain Comprehensive or Commercial Form General Liability Insurance (contractual liability included) with limits as follows:

Each occurrence Products/completed operations aggregate Personal and advertising injury General aggregate (commercial form only)

\$5,000,000 \$5,000,000 \$5,000,000 \$5,000,000

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9.4. Licensee expressly understands, however, that the coverages and limits in Paragraph 9.3 do not in any way limit the Licensee's liability. Licensee must furnish The Regents with certificates of insurance evidencing compliance with all requirements. Licensee is not required to insure its activities pertaining to the products' liability risks until it begins to use Licensed Products in connection with human subjects. Licensee's insurance must: provide for 30-day advance written notice to The Regents of any modification; indicate that The Regents of the University of California is endorsed as an Insured under the coverages listed in Paragraph 9.3; include a provision that the coverages will be primary and will not participate with nor will they be in excess over any valid and collective insurance or program of self-insurance carried or maintained by The Regents.

## 10. NOTICES

Any notice or payment required to be given to either party must be sent to the respective address given below and is effective: (a) on the date of delivery if delivered in person, (b) five days after mailing if mailed by first-class certified mail, postage paid, or (c) on the next business day if sent by overnight delivery. Either party may change its designated address by written notice.

For Licensee:

Advaxis, Inc. 212 Carnegie Center Princeton, NJ

Attention: Todd Derbin

For The Regents:

The Regents of the University of California University of California, Los Angeles Office of Intellectual Property Administration 10920 Wilshire Blvd., Suite 1200 Los Angeles, California 90095-1406

Attention: Director

### 11. LATE PAYMENTS

If fees are not received by The Regents when due, then Licensee shall pay to The Regents interest charges at a rate of eight percent (8%) simple interest per annum. Interest is calculated from the date payment is due until actually received by The Regents. Acceptance by The Regents of any late payment interest from Licensee under this Article 11 (Late Payments) will in no way affect any other rights of The Regents under this Agreement.

#### 12. GOVERNING LAWS

This Agreement will be interpreted in accordance with the laws of the State of California without regard to conflict of or to which party drafted particular provisions of this Agreement. Disputes between the parties regarding this Agreement will utilize only trial courts within California for disputes that go to court.





# 13. GOVERNMENT APPROVAL OR REGISTRATION

Licensee shall notify The Regents if it becomes aware that this Agreement is subject to any U.S. or foreign government reporting or approval requirement. Licensee shall make all necessary filings and pay all costs including fees, penalties and all other out-of-pocket costs associated with such reporting or approval process.

# 14. EXPORT CONTROL LAWS

Licensee shall observe all applicable U.S. and foreign laws and regulations with respect to the transfer of Biological Materials and related technical data to foreign countries, including, without limitation, the International Traffic in Arms Regulations (ITAR) and the Export Administration Regulations.

## 15. MISCELLANEOUS

15.1. This Agreement may be assigned by The Regents, but is personal to Licensee and assignable by Licensee only with the written consent of The Regents.

15.2. No amendment or modification of this Agreement is valid or binding upon the parties unless made in writing and signed on behalf of each party.

15.3. With respect to the subject matter of this Agreement, this Agreement embodies the entire understanding of the parties and supersedes all previous communications, representations or understandings, oral or written, between the parties.

15.4. If a provision of this Agreement is held to be invalid, illegal or unenforceable in any respect, then the invalidity, illegality or unenforceability will not affect any other provision of this Agreement, and this Agreement will be interpreted as if the invalid, illegal or unenforceable provisions had never been contained in it.

15.5. If it becomes necessary for either party to undertake legal action against the other on account of a failure of performance under the terms of this Agreement, then the prevailing party is entitled to costs and reasonable attorney's fees.

15.6. None of the provisions of this Agreement is intended to create any form of joint venture between the parties, rights in third parties or rights that are enforceable by any third party.

15.7. No waiver by either party hereto of any breach or default of any of the covenants or agreements herein set forth is a waiver as to any subsequent and/or similar breach or default. A suspension of a duty under this Agreement due to force majeure shall not be for a period longer than one year.

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The Regents and Licensce have executed this Agreement in duplicate originals.

ADVAXIS, INC.

By: (Signat ire) TOD SETBIN Name: (Please Print) C Title:

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

mile By: (Signa

Name: Andrew Neighbour, Ph.D.

Title: Executive Director

04 Date:

Date: 4 OF

### CONSULTANCY AGREEMENT

THIS CONSULTANCY AGREEMENT (this "Agreement") is made as of this 19th day of January, 2005, by and between Advaxis, Inc, a Colorado corporation, having a principal place of business at 212 Carnegie Center, Princeton, NJ ("Company"), and LVEP Management, LLC with a place of business at 111 River Street, 10th floor, Hoboken, NJ 07030 ("Consultant").

WHEREAS, Consultant and Company desire to enter into an agreement for the performance by Consultant of certain consulting services (the "Services"); and

WHEREAS, Consultant has the specific knowledge, experience, and expertise to perform the Services;

NOW, THEREFORE, in consideration of the mutual covenants, terms, and conditions hereinafter set forth, and intending to be legally bound, Company and Consultant agree as follows:

#### 1. SERVICES AND COMPENSATION

1.1 Services: Consultant shall provide the Services and perform the duties set in Schedule A. The parties may agree at any time to modify Schedule A. Company agrees that Consultant shall have reasonable access to Company's representatives as necessary to perform the Services provided for by this Agreement. Consultant shall report directly to the CEO of the Company.

1.2 Compensation. Consultant shall be paid for performance of the Services as specified in Schedule B.  $\!\!\!$ 

1.3 Non-Exclusive Arrangement. Consultant may from time to time act as a consultant to, perform services for, or enter into agreements similar to this Agreement with, other persons or entities without the necessity of obtaining approval from Company; provided, however, that in no event shall Consultant provide such other persons or entities with, or incorporate into or provide as part of any services for such other persons or entities, any information or know-how obtained by Consultant through its conduct of the Services (including, without limitation, any Confidential Information (as defined below)).

1.4 Non Competition: Consultant shall not for two years following the termination or non renewal of this agreement for any reason: (a) directly or indirectly compete with the Company, or advise or become a partner, consultant, agent, director, advisor or a 1% shareholder in a business that is substantially similar to or competitive with the business or planned business of the Company. Consultant acknowledges and agrees that the geographic, length of term, and types of activity restrictions contained in this Section 1.4 are reasonable and necessary to protect the legitimate business interests of the Company.

#### 2. CONFIDENTIAL INFORMATION

2.1 Confidentiality. Consultant agrees to maintain in strict confidence all Confidential Information (as defined below) provided to, or learned or developed by, Consultant for a period of five (5) years from the date of termination. Consultant shall not disclose or disseminate any Confidential Information to any person or entity, except with the prior written consent of Company. In addition, Consultant shall not use or copy any Confidential Information for any purpose other than in connection with performance of the Services hereunder.

2.2 Definition of Confidential Information. The term "Confidential Information" shall mean all trade secrets, processes, formulae, data and know-how, improvements, inventions, chemical or biological materials, techniques, marketing plans, strategies, customer lists, or other information that has been created, discovered, or developed by Company, or has otherwise

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become known to Company, or which proper rights have been assigned to Company, as well as any other information and materials that are deemed confidential or proprietary to or by Company (including, without limitation, all information and materials of Company's customers and any other third party and their consultants), regardless of whether any of the foregoing are marked "confidential" or "proprietary" or communicated to Consultant by Company in oral, written, graphic or electronic form.

2.3 Exceptions to Confidential Information. Notwithstanding the foregoing paragraph, "Confidential Information" shall not include any information or materials that: (a) are or become known to the general public through no act or omission of Consultant or any other person with an obligation of confidentiality to Company, or (b) are required to be disclosed pursuant to applicable law (provided, however, that prior to any disclosure of Confidential Information as required by applicable law, Consultant shall advise Company of such required disclosure promptly upon learning thereof and shall cooperate with Company in order to afford them a reasonable opportunity to contest or limit such disclosure).

2.4 Consultant-Restricted Information. Consultant agrees that Consultant will not improperly use or disclose to the Company any proprietary or confidential information or trade secrets of any person or entity with whom

Consultant has an agreement or duty to keep such information or secrets confidential.

2.5 Use of Third Party Information. Consultant will not use any equipment, supplies, chemicals, molecules, organisms, biological materials, or other physical property, facilities or trade secret information of any present or former employee or consulting client which are not generally available to the public, unless Consultant has obtained prior written authorization for such use and have delivered a copy of such authorization to Company prior to such use. Notwithstanding such authorization, Company shall have the right, at its sole discretion, to exclude the use of any of the foregoing by Consultant.

## 3. INTELLECTUAL PROPERTY

3.1 Assignment of Inventions. Consultant agrees that Consultant will promptly make full written disclosure to Company, will hold in trust for the sole right and benefit of Company, and hereby assigns, transfers and conveys to Company, or its designee, all of Consultant's worldwide right, title, and interest in and to any and all inventions, original works of authorship, findings, conclusions, data, discoveries, developments, concepts, improvements, trade secrets, techniques, processes and know-how, whether or not patentable or registrable under copyright or similar laws, which Consultant may solely or jointly conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, in the performance of the Services or which result, to any extent, from use of Company's premises or property (collectively, the "Inventions"), including, without limitation, any and all intellectual property rights inherent in the Inventions and appurtenant thereto including, without limitation, all patent rights, copyrights, trademarks, know-how and trade secrets (collectively, "Intellectual Property Rights"). Consultant acknowledges and agrees that certain of the Inventions (whether made solely by Consultant or jointly with others) may be "works made for hire," as that term is defined in the United States Copyright Act, and therefore Company would be deemed the owner of such Inventions. For purposes of clarification, to the extent any Invention is not a "work made for hire," such Invention would be subject to the assignment in the first sentence of this Section 3.1.

3.2 Further Assurances. Upon the request and at the expense of Company, Consultant shall execute and deliver any and all instruments and documents and take such other acts as may be necessary or desirable to document the assignment and transfer described in Section 3.1 or to enable Company to secure its rights in the Inventions and any patents, trademarks, copyrights or other intellectual property rights relating thereto in any and all jurisdictions, or to apply for, prosecute and enforce patents, trademark registrations, copyrights or other intellectual property rights in any and all jurisdictions with respect to any Inventions, or to obtain any extension, validation, re-issue, continuance or renewal of any such intellectual property right.

#### 4. REPRESENTATIONS AND WARRANTIES

4.1 Each party represents and warrants that, to the best of its knowledge, it has the right to enter into and to perform its obligations hereunder without thereby breaching any of its obligations to third parties.

4.2 Consultant represents and warrants to Company that: (i) the Services performed by Consultant hereunder will be of professional quality, consistent with generally-accepted industry standards and expectations for work of a similar nature, (ii) all Services provided to Company hereunder shall conform to the agreed-upon specifications therefor, if any, (iii) Consultant's performance under this Agreement and Consultant's retention as a consultant by Company does not and will not breach any obligation or agreement by which Consultant is bound to keep in confidence any information Consultant may acquire, or not to compete with any other person or entity.

#### 5. TERM

5.1 Term. The initial term of this Agreement shall begin on January 1. 2005 and shall end on September 30, 2005 ("Initial Term"). Thereafter, the Term shall be automatically extended by -6-month periods unless Company notifies Consultant no later than 60 days prior to the end of the Initial Term or any extension thereof of its intent not to extend the Agreement.

5.2 Termination. Consultant may terminate this Agreement for any reason during the term hereof upon thirty (30) days prior written notice to the Company. Company may terminate the Agreement upon sixty (60) days prior written notice to the Consultant provided that upon such early termination Company shall continue to pay Consultant the full consulting fee, benefits and expenses for the lesser of: (a) 3 months following the termination date, or (b) the end of the Term (as extended).

5.3 Return of Company Property. All property belonging to Company in Consultant's possession or control, including, without limitation, all Confidential Information (as well as all copies, summaries, or other representations thereof) and all originals and copies of any documents, devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials, and equipment shall be and remain the sole property of Company and shall be returned promptly to Company upon the expiration non renewal or termination of this Agreement, and earlier if requested by Company at any time.

5.4 Survival. In the event this Agreement expires or is terminated for any reason, the rights and obligations of Sections 5.2, 5.3 and Articles 2, 3, 4, 6 and 7 shall survive such expiration or termination.

### 6. NON-SOLICITATION

Non-solicitation. Consultant agrees that during the term of this Agreement and for one year thereafter, Consultant shall not for any reason, either directly or indirectly, on Consultant's own behalf or in the service or on behalf of others, (i) solicit, recruit or attempt to persuade any person to terminate employment or a consulting relationship with Company or (ii) interfere in any manner with Company's relationship with, any of Company's co-venturers, vendors, suppliers, licensors or partners.

#### 7. MISCELLANEOUS

7.1 Independent Contractor. For purposes of this Agreement and all Services to be provided hereunder, Consultant shall not be considered a partner, co-venturer, agent, employee or representative of Company, but shall remain in all respects an independent contractor.

7.2 Rules and Policies. While at Company's facilities, Consultant shall observe and follow Company's work rules, policies, and standards as the same are

communicated to Consultant from time to time, including, without limitation, those rules, policies and standards of Company relating to security of and access to facilities, telephone systems, electronic mail systems, and computer systems.

7.3 Successors. All of the terms and provisions of this Agreement shall be binding upon and inure to the benefit of and be enforceable by the respective heirs, executors, administrators, legal representatives, successors and assigns of the parties hereto, except that the duties and responsibilities of Consultant hereunder are of a personal nature and shall not be assignable or delegable in whole or in part by Consultant.

7.4 Amendments. No change, modification, extension, termination or waiver of this Agreement, or any of the provisions herein contained, shall be valid unless made in writing and signed by Consultant and a duly authorized representative of Company.

7.5 No Waiver. No term or provision of this Agreement will be considered waived and no breach consented to by either party unless such waiver or consent is in writing signed on behalf of the party against whom it is asserted. No consent to or waiver of a breach of this Agreement by either party, whether express or implied, will constitute a consent to, waiver of, or excuse for any other, different, or subsequent breach of this Agreement by such party.

7.6 Severability. Any provisions of this Agreement which are determined to be invalid or unenforceable in any jurisdiction shall be ineffective to the extent of such invalidity or unenforceability in such jurisdiction, without rendering invalid or unenforceable the remaining provisions of this Agreement or affecting the validity or enforceability of such provisions in any other jurisdiction. If a court of competent jurisdiction declares any provision of this Agreement to be invalid or unenforceable, the parties hereto shall request that such court reduce the scope, duration, or area of the provision, delete specific words or phrases from the provision, or to replace the provision with a provision that is valid and enforceable and that comes closest to expressing the original intention of the parties hereto, and this Agreement shall be enforceable as so modified in the jurisdiction in which the provision was declared invalid or unenforceable.

7.7 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of New Jersey without regard to its conflict of law provisions.

7.8 Entire Agreement. This Agreement represents the entire agreement between the parties regarding the Services provided during the term of this Agreement and shall supersede all previous communications, representations, understandings, and agreements, whether oral or written, by or between the parties with respect thereto, whether theretofore or hereafter disclosed to Consultant. Without limitation, this Agreement does not supersede any confidentiality agreement that may have been signed between Company and Consultant.

7.9 Counterparts. This Agreement may be executed in two counterparts, each of which shall be deemed to be an original as against any party whose signature appears thereon, but both of which together shall constitute but one and the same instrument.

[SIGNATURE PAGE IMMEDIATELY FOLLOWS]

IN WITNESS HEREOF, the parties have read and agree to be bound by the above terms and conditions and have entered into this Agreement effective as of the date set forth above.

Company By: /s/ J. Todd Derbin	Consultant By: /s/ Roni Appel
(Signature)	(Signature)
J. Todd Derbin	Roni Appel
Printed Name	Printed Name
CE0	Manager
Title	Title
19/January 2005	
Date	Date

### SCHEDULE A

### Schedule A

### CONSULTING SERVICES

For a Total time commitment of 20 hours per week on average, Consultant shall provide the following services:

- Assisting and advising Company on defining its scientific and business milestones;
- Reviewing and preparing Company technical and business data and materials;
- iii. Assisting the company in preparing its financial statements and reports;
- iv. Assisting the Company in complying with SEC regulation;
- Reviewing and negotiating legal documents and agreements on behalf of Company;
- vi. Assisting in implementing the Company's commercialization strategy.
- vii. Providing various financial services to Company.
- viii. Other services as agreed from time to time.
- ix. Roni Appel shall serve as Acting CFO of the Company and sign off on various financial statement and representations.

### Schedule B

### COMPENSATION AND PAYMENT SCHEDULE.

- i. Cash: \$7,000 per month payment, starting as of January 1, 2004, during the Term of the Agreement.
- ii. Bonus: Consultant shall receive a payment at year-end equal to 40% of the bonus earned by the CEO of the Company. If Consultant terminated this Agreement prior to the end of the Term, the bonus shall be paid the bonus on a pro rata basis based on the actual number of months this Agreement was in effect.

- iii. Additional one time payment: Upon the execution of this agreement Company shall pay Consultant a one-time payment of \$4,500.
- iv. Benefits: Company shall reimburse Consultant for individual health insurance expenses.
- v. Expenses: Company shall reimburse all approved expenses incurred by Consultant in connection with the Services provided herein. Expenses in excess of \$1,000.00 shall have prior authorization from the CEO.
- vi. Equity: Company shall pay Consultant \$1004.5 per month payable in 3500 unrestricted common shares of Company priced at \$0.287 per share.
- vii. Vacation: 21 days not including holidays.

This Agreement ("Agreement") is made and entered into as of the 5 day of April, 2004 between David Carpi (the "Finder") and Advaxis, Inc. (the "Company").

- 1. Background: Finder believes he may be able to arrange for Company government funded clinical studies for LM LLO E7 or other Advaxis products so as to minimize Advaxis' cash burn rate in demonstrating the potential of the Listeria system with LM LLO E7 or other Advaxis products in human phase I clinical trials and in clinical trials of cervical cancer or other cancers. The parties have agreed that Finder will attempt to assist Company in obtaining such government funding ("Government Clinical Trial Sponsorship") for Clinical Trials to be conducted for the Company (such clinical trials testing Company products or constructs and sponsored by government through the efforts of Finder: " Government Sponsored Clinical Trial").
- Equity Compensation: If Finder successfully arranges Government 2. Sponsored Clinical Trial, Company shall grant Finder a non qualified common stock option grant with that number of common stock option equal to (a) 4% (four percent) of the Economic Value of the Government Clinical Trial Sponsorship divided by (b) \$100. The options are exercisable at \$100 per share. For purpose of this agreement, "Economic Value" of Government Clinical Trial Sponsorship will be determined according to a formula specified in Exhibit A. The grant will be made upon final formal approval of the Government Clinical Trial Sponsorship. The terms of Company's option plan for outside consultants shall apply, however once the options are granted, the Consultant will have no requirement to exercise the options if the Consulting arrangement is terminated and the Consultant will be free to exercise these options at his discretion regardless of any ongoing relationship with Advaxis. For example: if Finder arranges Government Clinical Trial Sponsorship for a Phase II study, with 50 patients with outpatient settings, the Economic Value per Exhibit A shall be \$1,100,000. In that case, Finder shall receive 440 options exercisable at \$100 per share. On a post 100:1 split basis this will be 44,000 options at \$1.00 per share.
- 3. Exclusion of other transactions: It is hereby agreed and understood that this agreement covers only Government Clinical Trial Sponsorship obtained directly through the efforts of Finder and will not entitle Finder to receive any fees in connection with any other funding or transactions including but not limited to : (a) equity or debt financing of any type, (b) NIH grants obtained by or applied for by Company directly or with its partners, (c) joint ventures, licensing, vendor financing, (d) mergers, acquisition, sale of assets (e) clinical studies conducted by Approved Investors and funded by Company, or (f) sale of securities of any kind by Company (g) government manufacturing process development and pre clinical and toxicology support under the NIH and/or RAID program.
- 4. Term: This agreement will expire on April 5, 2005 and thereafter will renew on a month-to-month basis unless cancelled in writing by either party. Upon termination or non-renewal of this agreement Consultant will maintain a list of Investigators that will be approached to conduct these trials, provided however that such Investigators are pre

approved by Company in writing, in advance. Exhibit B, as amended from time to time, in writing, contains the list of Company approved Investigators ("Approved Investigators").

- 5. Post termination government sponsored clinical studies: If any such Approved Investigator agrees to conduct government sponsored clinical studies with an Advaxis product within six months of termination of this Agreement, and such Government Clinical Trial Sponsorship is obtained by Company, then Finder shall be entitled to full compensation as set out in section 2 upon the final written approval of Government Clinical Trial Sponsorship.
- 6. Subsequent clinical trial sponsorship: If consultant is successful in arranging a phase I Government Clinical Trial Sponsorship as specified in this agreement, then subsequent Government Sponsored Clinical Trials with the same Approved Investigators testing the same product or construct will be subject to the terms of this agreement provided that: (a) such subsequent Government Sponsored Clinical Trial is approved by the government and initiated within 12 months of the completion of any previous clinical trial covered under this agreement, and (b) such subsequent Government Clinical Trial Sponsorship is obtained directly through current or previous efforts of Finder. For the purpose of clarity, this paragraph is designed to enable the Finder to receive fair compensation for obtaining Government Sponsored Clinical Trials proceed in a nuccessfully and subsequent phase I trials be completed successfully and subsequent phase I, II, and III trials proceed in a natural progression as a result of the Finders work in establishing initial government funding for the initial phase I program.

- 7. Entire agreement; dispute: This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof. This Agreement may not be amended, modified or waived, except in writing signed by both parties. This Agreement may be executed in counterparts. Should a dispute arise between the parties under or relating to this Agreement, each party agrees that prior to initiating any formal proceeding against the other (except when injunctive relief is appropriate), the parties will each designate a representative for purposes of resolving the dispute. If the parties' representatives are unable to resolve the dispute within ten business days, the dispute shall be settled by mediation and then, if necessary, by arbitration under the then-current commercial arbitration rules of the American Arbitration Association. The location of the proceeding shall be Princeton, NJ. Judgment upon any award rendered by the arbitrator may be entered by any State or Federal court having jurisdiction thereof.
- 8. Assignment. This Agreement may not be assigned by any party without written consent
- 9. Non Exclusive. The Company may from time to time: (i) engage other persons and entities to act as consultants to the Company and perform services for the Company, including services that are similar to the ones described herein; and (ii) enter into agreements similar to this Agreement with other persons or entities, in all cases without the necessity of obtaining approval from Consultant.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to

duly executed on the day of the year first above written.

ADVAXIS, INC. FINDER By: /s/ J. Todd Derbin By: /s/ David Carpi Name: Title: Phase I

Fixed costs

Biostatistic Analyses Pharmacokinetic Analyses	\$300,000 \$150,000
Variable costs Cost per patient if outpatient Cost per patient if inpatient or extended stay/observation	\$ 10,000 \$ 14,000
Total cost 450,000 plus number of on type of study.	enrolled patients X 10,000 or 14,000 dependent
Phase II trials (about 30 to 50 p	patients)
Fixed costs	
Biostatistic Analyses Pharmacokinetic Analyses	\$400,000 \$200,000
Variable costs Cost per patient if outpatient Cost per patient if inpatient or extended stay/observation	\$ 10,000 \$ 14,000
Total cost 600,000 plus number of on type of study.	enrolled patients X 10,000 or 14,000 dependent
Phase III trials (about 300-400 p	patients)
Fixed costs	
Biostatistic Analyses Pharmacokinetic Analyses	\$700,000 \$400,000
Variable costs Cost per patient if outpatient Cost per patient if inpatient	\$ 10,000
or extended stay/observation	\$ 14,000

Total cost 1,100,000 plus number of enrolled patients times 10,000 or 14,000 dependent on type of study.

# Exhibit B

## Approved Investigators

JEFFERY WEBER UNIVERSITY OF SOUTHERN CALIFORNIA

CORNELIA TRIMBLE JOHNS HOPKINS UNIVERSITY

PHILIP DISAIA NCI

### Amended and Restated Consulting and Placement Agreement

This AMENDED AND RESTATED CONSULTING AND PLACEMENT AGREEMENT (this "Agreement") is entered into this 28 day of May, 2003 (the "Effective Date") by and between David Carpi ("Consultant"), and Advaxis, Inc., (the "Company").

WHEREAS, the Company seeks to enter various business development activities, strategic collaborations and licensing deals (each, a "Transaction");

WHEREAS, Consultant has access to a network of pharmaceutical and biotechnology companies ("Strategic Partners"), one of more of which may be interested in participating in the Transaction and is willing to make introductions to such Strategic Partners on the basis described below.

NOW THEREFORE, in consideration of the premises and mutual covenants contained herein, and intending to be legally bound hereby, the parties hereto agree as follows:

### 1. Consulting and Placement Services. Consultant will:

(a) Assist the Company in the preparation and refinement of its marketing summary, financial projections, power point presentation and similar documents and oral presentation (collectively "Offering Materials").

(b) Assist the Company in managing the Strategic Partner solicitation process, including, without limitation: (i) approaching the Approved Partners (as defined below); (ii) disseminating the Offering Materials; and (iii) arranging Introductions between Company and Approved Partners (as defined below). An "Introduction" shall be defined as at least one of (a) a face to face meeting between Company and an Approved Partner (as defined below) or (b) two scientific or business teleconferences or combination of scientific and business teleconference to review Company technology and commercialization possibilities. One executive or scientific level manager from Company and the Approved Partner must attend each teleconference (qualified company personnel include: Yvonne Patterson, Todd Derbin, Jim Patton, Roni Appel). It is hereby agreed and understood that only an Introduction (as defined above) on or before the termination or expiration of this Agreement that will result in a Transaction will result in any fees due to Consultant pursuant to sections 3 and 4 of this Agreement. Following an Introduction (as defined above), Consultant will send Company an e-mail notification of such meetings and Company will respond acknowledging a successful Introduction. Potential partners will qualify as "accredited investors" as that term is defined in Rule 501 of the Securities Act of 1933.

#### 2. Approvals.

(a) Pre-approval. Any and all Strategic Partners or individuals approached by Consultant on behalf of the Company must be pre-approved. A list of 28 pre-approved Strategic

Partners ("Approved Partners") executed by both parties follows this agreement in Appendix A. The list of Approved Partners may be amended or modified in writing by both parties (each company listed in appendix A: "Approved Partner"). A signed letter from the Company CEO to the Consultant indicating that a company or companies may be added to the Approved Partner list will be sufficient to add an additional company or companies to the Approved Partner list in Appendix A.

(b) Final Approval. The final terms of the Transaction will be subject to those terms and conditions negotiated by the Company and any Approved Partner. The Company will be free to reject any proposed transaction with which it is not satisfied for any reason or for no reason.

(c) Other Investors. The Company may sell Preferred Stock to or enter a strategic partnership or any other transaction with any person or entity other than an Approved Partner without payment of any Success Fees (as defined below) to Consultant.

3. Compensation. Consultant will receive the following payments (the "Success Fees") to be paid by the Company upon the completion of the Transaction with an Approved Partner pursuant to an Introduction (as defined above) by Consultant:

(a) In agreements where the combination of upfront licensing fees, proposed gross proceeds for collaborative research, and milestone payments are greater than \$5 million then the following:

(i) Cash Fee: A cash fee equal to: (i) five percent (5%) of the gross proceeds received from a Strategic Partners as an upfront licensing fee in any Transaction. (ii) Three percent (3%) of the gross proceeds received from a Strategic Partners for collaborative research; (iii) three percent (3%) of any milestone payment, if and when received by Company (not including royalties).

(b) In agreements where the combination of upfront licensing fees, proposed gross proceeds for collaborative research, and milestone payments are less than or equal \$5 million then the following: 3% (three percent) of such fees plus 3% of royalties actually received by the company up to a cumulative max of \$800,000. (c) Options: That number of non qualified options equal to: (i) five percent (5%) of the gross proceeds received from a Strategic Partners as an upfront licensing fee in any Transaction, divided by \$1.50. (ii) Three percent (3%) of the gross proceeds received from a Strategic Partners for collaborative research, divided by \$1.50; (iii) 2% (two percent) of any milestone payment, if and when received by Company (not including royalties), divided by \$1.50.

The number of options and the exercise price assumes a 100:1 split in the Company's shares, currently planned. For purpose of example only, in the event Company receives an upfront license fee of \$300,000, Consultant shall receive 10,000 options.

The options: (i) shall be immediately exercisable in whole or in part in shares of common stock of the Company; (ii) have a ten (10) year term that does not require an ongoing relationship between the Company and Consultant; (iii) shall have an exercise price equal \$150; (vi) shall be

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non-qualified for tax purpose; (v) shall be subject to the terms and conditions Company's 2003 Stock Option Plan as it applies for consultants and outside advisors.

4. Other Transactions. If the Company enters into a business transaction (other than the Transaction) during the term of this Agreement with an Approved Partner pursuant to an Introduction, the Company agrees to pay Consultant a cash fee of 4% of such proceeds. Such transactions may include, without limitation, a purchase of assets, merger, acquisition, licensing agreement, joint venture, sales contract, an investment of equity, subordinated debt, senior debt or lease facility ("Other Transactions").

Future Transactions. In the event that any Approved Partner enters into a Transaction with the Company pursuant to an Introduction by Consultant within 15 months from the termination of this agreement; or two years from the termination of this agreement for any Approved Partner that enters a material transfer agreement during the term of this agreement pursuant to an Introduction by Consultant, then for such Transactions, Consultant shall be due (i) its full fee as set forth in Section 3 or in section 4, as it may apply.

5. Termination. This Agreement will remain effective until December 31, 2003 and from that point forward will automatically renew on a month to month basis, although both parties may mutually extend this Agreement, and either party reserves the right to terminate this Agreement at any time with a 30-day notice, for any reason or for no reason. Any such termination or extension shall be in writing. Upon the termination or the expiration of this Agreement, Company will send to Consultant a list of Introduction made by Consultants for purpose of section 4.

6. Non Exclusive. The Company may from time to time: (i) engage other persons and entities to act as consultants to the Company and perform services for the Company, including services that are similar to the ones described herein; and (ii) enter into agreements similar to this Agreement with other persons or entities, in all cases without the necessity of obtaining approval from Consultant.

7. Representations and Warranties. Consultant represents and warrants as follows:

(a) It shall comply with all applicable laws with respect to the sale of securities in its performance of its obligations under this Agreement.

(b) Consultant shall not make any factual statements regarding the Company other than those provided to Consultant by the Company or approved by the Company.

#### 8. Confidentiality.

(a) Each party agrees to maintain the confidentiality of the contents of this Agreement. Consultant agrees to maintain the confidentiality of any nonpublic or proprietary information concerning the Company, including without limitation trade secrets, intellectual property, business plans, financial projections, current and potential customer and client lists, business acquisition plans, personnel acquisition plans, all other information pertaining to the business of the Company; provided, however, that confidentiality shall not be required with

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respect to the following: (i) any information that is, or becomes generally available to the public other than as a result of a disclosure by Consultant; (ii) any information in the possession of Consultant prior to disclosure of such information to Consultant by the Company as evidenced by written records; or (iii) any information that becomes available to Consultant from a source not under a confidentiality obligation to the Company.

(b) The Company agrees to hold confidential the names of Approved Partner introduced by Consultant to the Company whether or not such Approved Partner invest in any Transaction.

(c) This Section 10 shall survive the termination or expiration of this Agreement.

9. Governing Law. This Agreement shall be interpreted and enforced in accordance with the laws of New Jersey, without giving effect to its conflict of laws rules.

10. Dispute Resolution. Should a dispute arise between the parties under or relating to this Agreement, each party agrees that prior to initiating any formal proceeding against the other (except when injunctive relief is appropriate), the parties will each designate a representative for purposes of resolving the dispute. If the parties' representatives are unable to resolve the dispute within ten business days, the dispute shall be settled by mediation and then, if necessary, by arbitration under the then-current commercial arbitration rules of the American Arbitration Association. The location of the proceeding shall be Princeton, NJ. Judgment upon any award rendered by the arbitrator may be entered by any State or Federal court having jurisdiction thereof.

11. Entire Agreement. This Agreement contains the parties' entire understanding and may not be modified except in writing signed by both parties.

12. Assignment. This Agreement may not be assigned by any party without written  $\ensuremath{\mathsf{consent}}$ 

13. Travel. Any --expense over  $250\ {\rm will}$  need prior approval from the CEO of Advaxis.

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IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

> [CONSULTANT] By: /s/ David Carpi Name: ADVAXIS, INC. By: /s/ J. Todd Derbin -----Name: Title:

Appendix A:

Approved Partners:

- 1. Acambis PLC
- 2. Agensys
- 3. American Home Products (Wyeth)
- Amgen
   Antigenics
- Aventis (Aventis Pasteur)
   AVI BioPharma

- Baxter
   Baxter
   Bill & Melinda Gates Foundation (Vaccine research foundation)
   Biomera
   Call Company
- 11. Cell Genesys 12. Chiron
- 13. Corixia
- 14. Dendreon
- DynPort Vaccine Company LLC
   Elan
- 17. Epimmune
- 18. Genencor 19. Genentech
- 20. Genezyme
- 21. GSK
- 22. Human Genome Sciences 22. Imclone

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- Maxygen
   Medimmune
   Merck
   Shire (Biochem Pharma)
   Transgene
   VaxGen

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## CONSULTANCY AGREEMENT

THIS CONSULTANCY AGREEMENT (this <u>Agreement</u>) is made as of this <u>A</u> day of January, 2005, by and between Advaxis, Inc., a Delaware corporation, having a principal place of business at 212 Carnegie Center, Princeton, NJ 08540, (<u>Company</u>), and Dr. Yvonne Paterson, who is working at 323 Johnson Pavilion, 36th St. and Hamilton Walk, Philadelphia, PA 19104-6076, (215) 898-3461, (215) 573-4666, SS No 085-62-9236.

WHEREAS, Consultant and Company desire to enter into an agreement for the performance by Consultant of certain consulting services (the Services); and

WHEREAS, Consultant has the specific knowledge, experience, and expertise to perform the Services;

NOW, THEREFORE, in consideration of the mutual covenants, terms, and conditions hereinafter set forth, and intending to be legally bound, Company and Consultant agree as follows:

## 1. SERVICES AND COMPENSATION

1.1 <u>Services</u>. Consultant shall provide the Services and perform all duties as requested by Company, as more particularly set forth in the project plan attached hereto as Schedule A (the, <u>Project Plan</u>). The parties may agree at any time to modify the Project Plan; provided, however, that all such modifications must be in writing and signed by both parties. Consultant shall control the manner and means by which it performs the Services, subject to the parameters of the Project Plan and the express provisions of this Agreement. Company agrees that Consultant shall have reasonable access to Company s representatives as necessary to perform the Services provided for by this Agreement. In any event Consultant s time commitment under this Agreement shall not exceed on average one day per week, during the Term, and shall be limited in scope to the technologies licensed and/or developed by Company.

1.2 <u>Reports</u>. Consultant shall communicate the progress of its performance under the Project Plan to Company informally on a regular basis.

1.3 <u>Compensation</u>. Consultant shall be paid for performance of the Services as specified in the Project Plan, subject to the reporting obligations pursuant to <u>Section 1.2</u>.

1.4 Conflict of Interest: Exclusive Arrangement.

1.4.1 If a conflict of interest should arise during the performance of this Agreement, Consultant shall immediately notify Company thereof and Company shall have the option to pursue any and all remedies, equitable, legal or otherwise, that may be available to Company in connection therewith. Consultant shall ensure that its performance of the Services does not conflict with Consultant s duties at the University of Pennsylvania.

1.4.2 Company may from time to time (i) engage other persons and entities to act as consultants to Company and perform services for Company, including, without limitation, services similar to the Services, and (ii) enter into agreements similar to this Agreement with other persons or entities, in all cases without the necessity of obtaining any approval from Consultant.

1.4.3 For a period extending 18 months after the termination of this agreement, consultant may not act as a consultant to, perform services for, or enter into agreements similar to this Agreement, become a 1% shareholer, partner, agent, director, advisor or have any other relationship with, other persons or entities in the field of vaccines, without obtaining the prior written approval from Company, such consent may not be unreasonably withheld.

2. CONFIDENTIAL INFORMATION

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2.1 <u>Confidentiality</u>. Consultant agrees to maintain in strict confidence all Confidential Information (as defined below) provided to, or learned or developed by, Consultant during the course of Consultant s performance of the Services. Consultant shall not disclose or disseminate any Confidential Information to any person or entity, except with the prior written consent of Company. In addition, Consultant shall not use or copy any Confidential Information for any purpose other than in connection with performance of the Services hereunder. The obligation under this Section 2.1 shall terminate five years after the end of the Term.

2.2 <u>Definition of Confidential Information</u>. The term <u>Confidential Information</u> shall mean all trade secrets, processes, formulae, data and know-how, improvements, inventions, chemical or biological materials, techniques, marketing plans, strategies, customer lists, or other information that has been created, discovered, or developed by Company, or has otherwise become known to Company, or which proper rights have been assigned to Company, as well as any other information and materials that are deemed confidential or proprietary to or by Company (including, without limitation, all information and materials of Company s customers and any other third party and their consultants). The confidential information should be in writing and marked confidential or, if oral, should be reduced to writing within two weeks of disclosure and marked confidential.

2.3 Exceptions to Confidential Information. Notwithstanding the foregoing paragraph, Confidential Information shall not include any information or materials that; (a) are or become known to the general public through no act or omission of Consultant or any other person with an obligation of confidentiality to Company, (b) are required to be disclosed pursuant to applicable law (provided, however, that prior to any disclosure of Confidential Information as required by applicable law, Consultant shall advise Company of such required disclosure promptly upon learning thereof and shall cooperate with Company in order to afford them a reasonable opportunity to contest or limit such disclosure), or (c) information that is in Consultant s possession at the time of disclosure based on Consultant s written records.

2.4 <u>Consultant-Restricted Information</u>. Consultant agrees that Consultant will not improperly use or disclose to the Company any proprietary or confidential information or trade secrets of any person or entity with whom Consultant has an agreement or duty to keep such information or secrets confidential.

### 3. INTELLECTUAL PROPERTY

Assignment of Inventions. Consultant agrees that Consultant will promptly make 3.1 full written disclosure to Company, will hold in trust for the sole right and benefit of Company, and hereby assigns, transfers and conveys to Company, or its designee, all of Consultant s worldwide right, title, and interest in and to any and all inventions, original works of authorship, findings, conclusions, data, discoveries, developments, concepts, improvements, trade secrets, techniques, processes and know-how, whether or not patentable or registrable under copyright or similar laws, which Consultant may solely or jointly conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, in the performance of the Services or which result, to any extent, from use of Company s premises or property (collectively, the Inventions), including, without limitation, any and all intellectual property rights inherent in the Inventions and appurtenant thereto including, without limitation, all patent rights, copyrights, trademarks, knowhow and trade secrets (collectively, Intellectual Property Rights ), provided that such Inventions and Intellectual Property Rights were: (i) conceived, developed, or reduced to practice during the days on which Consultant is scheduled to work for Company as set forth in the applicable Project Plan, (ii) not conceived, developed, or reduced to practice at any facility of the University of Pennsylvania, (iii) not conceived, developed, or reduced to practice based on any funding provided by the University of Pennsylvania or from any other third party funding attained by or through the University of Pennsylvania, and (iv) not conceived, developed, or reduced to practice under the conduct of Consultant s research at the University of Pennsylvania. Consultant acknowledges and

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agrees that certain of the Inventions (whether made solely by Consultant or jointly with others) may be works made for hire, as that term is defined in the United States Copyright Act, and therefore Company would be deemed the owner of such Inventions. For purposes of clarification, to the extent any Invention is not a work made for hire, such Invention would be subject to the assignment in the first sentence of this <u>Section 3.1</u>.

3.2 Further Assurances. Upon the request and at the expense of Company, Consultant shall execute and deliver any and all instruments and documents and take such other acts as may be necessary or desirable to document the assignment and transfer described in <u>Section 3.1</u> or to enable Company to secure its rights in the Inventions and any patents, trademarks, copyrights or other intellectual property rights relating thereto in any and all jurisdictions, or to apply for, prosecute and enforce patents, trademark registrations, copyrights or other intellectual property rights in any and all jurisdictions with respect to any Inventions, or to obtain any extension, validation, re-issue, continuance or renewal of any such intellectual property right.

3.3 Existing Sponsored Research Agreements. Consultant and Company hereby acknowledge that two Sponsored Research Agreements (SRA) and SRA2 ) have been executed between Company, Consultant and the University of Pennsylvania (Penn), each with an effective date of July 2, 2002. The parties hereto acknowledge that under <u>Article 7</u> of each of SRA1 and SRA2, Penn shall retain all right, title and interest in any patents or inventions that are conceived and reduced to practice in the conduct of SRA1 or SRA2 (<u>SRA Inventions</u>), and that Company has an option to license such new SRA Inventions from Penn. It is understood that Consultant s obligation to assign Inventions to Company under <u>Section 3.1</u> above shall not apply to SRA Inventions. Consultant and Company hereby acknowledge that License Agreements (<u>License</u>) have been executed between Company and Penn with an effective date of July 2, 2002, in which Company has licensed the rights to use certain patents (Penn Patents) from Penn.

3.4 Joint Inventions: It is agreed and understood that in accordance with the existing Penn policies Consultant s portion of Joint Inventions (defined as Inventions which were conceived and reduced to practice by Consultant and at least one Company employee) shall be assigned by Consultant to Penn. In the case of Joint Inventions that are dominated by the Penn Patents (Dominated Joint Inventions), Company shall have the option at its sole discretion to add Penn's portion of such Dominated Joint Inventions to License for no additional consideration, provided that Company shall pay the patent prosecution expenses. In the case of Joint Inventions that are not dominated by the Penn Patents (Not Dominated Joint Invention), then Company shall have a 3-year option to license Penn s portion of each such Not Dominated Joint Invention at reasonable commercial terms, provided that during the option period Company shall pay the patent prosecution expenses.

## 4. REPRESENTATIONS AND WARRANTIES

4.1 Each party represents and warrants that, to the best of its knowledge, it has the right to enter into and to perform its obligations hereunder without thereby breaching any of its obligations to third parties. Company acknowledges that Consultant is a faculty member and an employee of the University of Pennsylvania and has dominating obligations to the University, including any and all prevailing policies related to employment, research, and intellectual property.

4.2 Consultant represents and warrants to Company that: (i) the Services performed by Consultant hereunder will be of professional quality, consistent with generally-accepted industry standards and expectations for work of a similar nature, (ii) all Services provided to Company hereunder shall conform to the agreed-upon specifications therefor, if any, (iii) to the best of Consultant s knowledge, all Services, Inventions, and Intellectual Property Rights provided to Company hereunder will not infringe or misappropriate the patent, copyright, trademark, trade secret, or other intellectual property rights of any third party, (iv) Consultant s performance under this Agreement and Consultant s retention as a consultant by Company does not and will not breach

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any obligation or agreement by which Consultant is bound to keep in confidence any information Consultant may acquire, or not to compete with any other person or entity.

## 4.3 COMPANY MAKES NO OTHER WARRANTY RELATING TO THE CONFIDENTIAL INFORMATION AND THE USE TO BE MADE THEREOF BY CONSULTANT AND HEREBY DISCLAIMS ALL IMPLIED WARRANTIES.

5. TERM

5.1 Term. Subject to the provisions of <u>Section 5.5</u>, the term of this Agreement shall commence on February 1, 2005 and shall continue for a period of one year. Thereafter, this Agreement shall automatically renew for up to six additional periods of six months each (the initial term and any extension thereof, the Term) unless terminated by either party per section 5.2.

5.2 <u>Termination</u>. Either party may terminate this Agreement for any reason during the Term hereof upon 30 days prior written notice to the other party. Upon the expiration or earlier termination of this Agreement, Company shall only be required to pay Consultant for Services actually completed as of the effective date of such expiration or earlier termination; provided, however, that Company shall not be required to make any payments for Services associated with a milestone or targeted completion date that Consultant has failed to achieve.

5.3 <u>Return of Company Property.</u> All property belonging to Company in Consultant s possession or control, including, without limitation, all Confidential Information (as well as all copies, summaries, or other representations thereof) and all originals and copies of any documents, devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials, and equipment shall be and remain the sole property of Company and shall be returned promptly to Company upon the expiration or earlier termination of this Agreement, and earlier if requested by Company at any time. Notwithstanding the above, Consultant shall be allowed to keep one copy for her records. Consultant shall not remove any of Company s property from Company s premises without prior written authorization from Company.

5.4 <u>Survival</u>. In the event this Agreement expires or is terminated for any reason, the rights and obligations of <u>Sections 5.3, 5.4</u> and <u>Articles 2, 3</u>, and <u>6</u> shall survive such expiration or termination.

5.5 <u>Condition Precedent</u>. This Agreement shall not enter into force or effect unless and until Consultant shall have (i) obtained from the University of Pennsylvania a signed copy of the Acknowledgement attached hereto as Schedule B and (ii) delivered such signed copy to Company. If Consultant fails to obtain such Acknowledgement from the University of Pennsylvania and deliver it to Company within 30 days after the later of the dates set forth below in the signature block below, the Agreement shall be deemed immediately terminated and Company shall have no liability to Consultant with respect thereto.

NON-SOLICITATION AND NON-COMPETITION

6.1 <u>Non-solicitation</u>. Consultant agrees that during the term of this Agreement and for one year thereafter, Consultant shall not for any reason, either directly or indirectly, on Consultant's own behalf or in the service or on behalf of others, (i) solicit, recruit or attempt to persuade any person to terminate employment or a consulting relationship with Company or (ii) interfere in any manner with Company's relationship with, any of Company's co-venturers, vendors, suppliers, licensors or partners.

6.2 <u>Non-competition</u>. During the term of this Agreement and for 18 months thereafter, except for Consultant s employment with the University of Pennsylvania, Consultant shall not, either directly or indirectly, alone or as a consultant, partner, officer, director, employee, joint venturer, lender or stockholder of any entity, accept employment with or provide consulting services to, any business or entity or engage in any business or activity that relates to the development, use,

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manufacturing, marketing, or selling of vaccines or drugs relating to cancer or infectious diseases including HIV.

### MISCELLANEOUS

7.1 <u>Social Security Number</u>. Consultant certifies that her correct Social Security is listed on the first page of this Agreement. Consultant acknowledges that Company will rely upon the foregoing certification in filing certain documents and instruments required by law in connection with this Agreement, including, without limitation, Form 1099 under the Internal Revenue Code of 1986, as amended (or any successor form).

7.2 <u>Independent Contractor.</u> For purposes of this Agreement and all Services to be provided hereunder, Consultant shall not be considered a partner, co-venturer, agent, employee or representative of Company, but shall remain in all respects an independent contractor, and neither party shall have any right or authority to make or undertake any promise, warranty or representation, to execute any contract, or otherwise to assume any obligation or responsibility in the name of or on behalf of the other party. Without limiting the generality of the foregoing, Consultant shall not be considered an employee of Company for purposes of any state or federal laws relating to unemployment insurance, social security, workers compensation or any regulations which may impute an obligation or liability to Company by reason of an employment relationship. Consultant agrees to pay all income, FICA, and other taxes or levies imposed by any governmental authority on any compensation that Consultant receives under this Agreement.

7.3 <u>Rules and Policies</u>. While at Company s facilities, Consultant shall observe and follow Company s work rules, policies, and standards as the same are communicated to Consultant from time to time, including, without limitation, those rules, policies and standards of Company relating to security of and access to facilities, telephone systems, electronic mail systems, and computer systems.

7.4 <u>Successors</u>. All of the terms and provisions of this Agreement shall be binding upon and inure to the benefit of and be enforceable by the respective heirs, executors, administrators, legal representatives, successors and assigns of the parties hereto, except that the duties and responsibilities of Consultant hereunder are of a personal nature and shall not be assignable or delegable in whole or in part by Consultant.

7.5 Equitable Relief. Consultant hereby acknowledges and agrees that damages at law may be an inadequate remedy for any breach of Consultant's obligations under Article 2 (Confidential Information), Article 3 (Intellectual Property), Article 6 (Non-Solicitation and Non-Competition), and, accordingly, Consultant agrees that Company will be entitled to such temporary, preliminary and permanent injunctive relief as may be necessary to remedy or limit such breach, without the necessity of proving actual damages or posting any bond or other security, and including specific performance of such obligations and an order enjoining Consultant from the continuation of, or from any threatened, breach of such obligations. The rights set forth in this paragraph shall be in addition to, and not in lieu of, any other rights, which Company may have at law or in equity.

7.6 <u>Publicity</u>. Consultant shall not disclose to any third party any information about the Services provided or to be provided by Consultant for or on behalf of Company, except as may be required by law or as Company may otherwise agree in writing.

7.7 <u>Assignment</u> Consultant shall not assign this Agreement or any right hereunder, nor delegate of any Consultant s duties hereunder, without the prior written consent of Company.

7.8 <u>Amendments</u>. No change, modification, extension, termination or waiver of this Agreement, or any of the provisions herein contained, shall be valid unless made in writing and signed by Consultant and a duly authorized representative of Company.

7.9 <u>No Waiver</u>. No term or provision of this Agreement will be considered waived and no breach consented to by either party unless such waiver or consent is in writing signed on behalf of

Page 5 of 9

the party against whom it is asserted. No consent to or waiver of a breach of this Agreement by either party, whether express or implied, will constitute a consent to, waiver of, or excuse for any other, different, or subsequent breach of this Agreement by such party.

7.10 <u>Severability</u>. Any provisions of this Agreement which are determined to be invalid or unenforceable in any jurisdiction shall be ineffective to the extent of such invalidity or unenforceability in such jurisdiction, without rendering invalid or unenforceable the remaining provisions of this Agreement or affecting the validity or enforceability of such provisions in any other jurisdiction. If a court of competent jurisdiction declares any provision of this Agreement to be invalid or unenforceable, the parties hereto shall request that such court reduce the scope, duration, or area of the provision, delete specific words or phrases from the provision, or to replace the provision with a provision that is valid and enforceable and that comes closest to expressing the original intention of the parties hereto, and this Agreement shall be enforceable as so modified in the jurisdiction in which the provision was declared invalid or unenforceable.

7.11 <u>Governing Law</u>. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania without regard to its conflict of law provisions.

7.12 Entire Agreement. This Agreement represents the entire agreement between the parties regarding the Services provided during the term of this Agreement and shall supersede all previous communications, representations, understandings, and agreements, whether oral or written, by or between the parties with respect thereto, whether theretofore or hereafter disclosed to Consultant. Without limitation, this Agreement does not supersede any confidentiality agreement that may have been signed between Company and Consultant.

7.13 <u>Counterparts</u>. This Agreement may be executed in two counterparts, each of which shall be deemed to be an original as against any party whose signature appears thereon, but both of which together shall constitute but one and the same instrument.

IN WITNESS HEREOF, the parties have read and agree to be bound by the above terms and conditions and have entered into this Agreement effective as of the date set forth above.

Company

Consultan By (Signature Yvonne Paterson

2005

Frinted Name Dr. Title January 28

Date

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# SCHEDULE A PROJECT PLAN

## CONSULTING SERVICES

(a) Omitted

I.

- (b) Consulting services relating to: All technology/science related issues; Scientific/R&D related issues; patent prosecution and inventorship issues; defining scientific milestones; R&D budgeting; hiring and staffing of R&D department; obtaining lab equipment and supplies; providing input data and materials for the FDA process; designing toxicology studies; designing protocols for clinical trials; performing animal trials and proof of concept for next generation of applications.
- (c) A compendium of all scientific and technical data consisting of the chronological history of the relevant experiments performed to date in Dr. Paterson s lab including publications and supporting data (Due Diligence Book).
- (d) Support Company s effort on IND submission for Phase I clinical trial in cervical cancer ( Phase I ).
- (e) Collaboration with the Company s scientific, legal and executive management to ensure a smooth technology transfer from the laboratory to the Company s manufacturing partners and other collaborators.
- (f) Assist the Company in developing additional Listeria monocytogenes based vectors for indications other than cervical cancer.
- (g) Assist the Company in developing LLO fusion protein based vectors for indications other than cervical cancer.

Ommited.

- Provide a summary of all disclosures of new inventions related to the licensed patent portfolio.
- (j) Assist the Company in establishing and launching its laboratory.
- (k) In addition, Consultant shall be the Chairman of the Scientific Advisory Board.

## II. COMPENSATION AND PAYMENT SCHEDULE

(a) Cash Compensation. provided that this agreement has not been terminated Company shall pay to Consultant \$3,000 per month for the Term. Upon the closing of an additional \$3 million in equity capital, the rate shall increase to \$5,000 per month. Upon the closing of an additional \$6 million in equity capital, the rate shall increase to \$7,000 per month. Upon the closing of an additional \$9 million in equity capital, the rate shall increase to \$9,000 per month.

(b)

Stock Options. Upon and subject to the adoption and approval of the Advaxis, Inc 2005 Stock Option Plan (the Plan) and Pursuant to the terms of Plan, Company will issue stock options (<u>Options</u>) to Consultant for 400,000 Shares of Common Stock. The Options shall be non-qualified and be executable at 28c per share. 40,000 options shall be fully vested when granted. 360,000 options shall vest equally over 48 months, at the rate of 7,500 options per month, provided that the Agreement has

Page 7 of 9

not been terminated by Consultant. For clarification, it is the intention of the parties that if Consultant will agree to renew this Agreement for an aggregate Term of 4-yeas, then Consultant shall vest 400,000 options. Other terms and conditions as set forth in the Plan shall apply.

The Company shall also pay the Consultant all reasonable expenses incurred in performing services hereunder. Such reasonable expenses shall include, but not necessarily be limited to, expenses associated with travel as may be designated or approved by the Company, meals in association with such travel, duplicating documents, record keeping, express mail, computer programs and equipment, and other supplies and similar matter. The Company shall pay such expenses within thirty business days of receipt of an applicable invoice.

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(c)

# SCHEDULE B

# ACKNOWLEDGMENT

The Trustees of the University of Pennsylvania acknowledges and approves the attached Consultancy Agreement (the "Agreement") entered into between Avaxis (the "Company") and Dr. Yvonne Paterson (the "Consultant"). In addition, Penn agrees to be bound by the terms set forth in the Agreement under Section 3.4, Joint Inventions.

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#### CONSULTANCY AGREEMENT

THIS CONSULTANCY AGREEMENT (this "Agreement") is made as of this 15 day of March, 2003, by and between Advaxis, Inc, a Delaware corporation, having a principal place of business at 212 Carnegie Center, Princeton, NJ ("Company"), and the party indicated below ("Consultant").

Name:	Joy A. Cavagnaro, PhD, DABT, RAC
Address:	P.O. Box 1362 Leesburg, VA 20177
Phone:	(540) 882-9728
Fax:	(540) 882-9729
SS No.	

WHEREAS, Consultant and Company desire to enter into an agreement for the performance by Consultant of certain consulting services (the "Services"); and

WHEREAS, Consultant has the specific knowledge, experience, and expertise to perform the Services;

NOW, THEREFORE, in consideration of the mutual covenants, terms, and conditions hereinafter set forth, and intending to be legally bound, Company and Consultant agree as follows:

# 1. SERVICES AND COMPENSATION

1.1 Services. Consultant shall provide the Services and perform all duties as requested by Company, as more particularly set forth in project plans executed in writing by the parties and attached hereto from time to time (each, a "Project Plan"). The initial Project Plan is attached hereto as Schedule A. Each subsequent Project Plan shall be in substantially the same form as the initial Project Plan. Upon execution in writing of each Project Plan by the parties, the provisions of this Agreement shall be incorporated by reference and shall form the entire agreement with respect to such project. The parties may agree at any time to modify a Project Plan; provided, however, that all such modifications must be in writing and signed by both parties. Consultant shall control the manner and means by which it performs the Services, subject to the parameters of the applicable Project Plan and the express provisions of this Agreement. Company agrees that Consultant shall have reasonable access to Company's representatives as necessary to perform the Services provided for by this Agreement.

1.2 Reports. Consultant shall communicate the progress of each Project Plan to Company informally on a regular basis and in written reports to be provided to Company as specified in each Project Plan, and if not specified in a Project Plan, then on a calendar quarterly basis within ten (10) days after the end of such calendar quarter. Each written report shall be subject to acceptance by Company.

1.3 Compensation. Consultant shall be paid for performance of the Services as specified in the applicable Project Plan, subject to completion by Consultant of written reports acceptable to Company pursuant to Section 1.2. Notwithstanding the foregoing, Company may suspend payment if, in Company's reasonable opinion after review of such reports, Consultant has not been performing the Services in the manner and in accordance with the schedule set forth in the applicable Project Plan and pursuant to this Agreement.

1.4 Conflict of Interest; Non-Exclusive Arrangement.

#### Page 1 of 9

1.4.1 If a conflict of interest should arise during the performance of this Agreement, Consultant shall immediately notify Company thereof and Company shall have the option to pursue any and all remedies, equitable, legal or otherwise, that may be available to Company in connection therewith. Consultant shall ensure that its performance of the Services does not conflict with Consultant's duties with other entiries.

1.4.2 Company may from time to time (i) engage other persons and entities to act as consultants to Company and perform services for Company, including, without limitation, services similar to the Services, and (ii) enter into agreements similar to this Agreement with other persons or entities, in all cases without the necessity of obtaining any approval from Consultant.

1.4.3 Subject to the provisions of Section 6.2, Consultant may from time to time act as a consultant to, perform services for, or enter into agreements similar to this Agreement with, other persons or entities without the necessity of obtaining approval from Company; provided, however, that in no event shall Consultant provide such other persons or entities with, or incorporate into or provide as part of any services for such other persons or entities, any information or know-how obtained by Consultant through its conduct of the Services (including, without limitation, any Confidential Information (as defined below)).

#### 2. CONFIDENTIAL INFORMATION

2.1 Confidentiality. Consultant agrees to maintain in strict confidence all Confidential Information (as defined below) provided to, or learned or developed by, Consultant during the course of Consultant's performance of the Services. Consultant shall not disclose or disseminate any Confidential Information to any person or entity, except with the prior written consent of Company. In addition, Consultant shall not use or copy any Confidential Information for any purpose other than in connection with performance of the Services hereunder.

2.2 Definition of Confidential Information. The term "Confidential Information" shall mean all trade secrets, processes, formulae, data and know-how, improvements, inventions, chemical or biological materials, techniques, marketing plans, strategies, customer lists, or other information that has been created, discovered, or developed by Company, or has otherwise become known to Company, or which proper rights have been assigned to Company, as well as any other information and materials that are deemed confidential or proprietary to or by Company (including, without limitation, all information and materials of Company's customers and any other third party and their consultants), regardless of whether any of the foregoing are marked "confidential" or "proprietary" or communicated to Consultant by Company in oral, written, graphic or electronic form.

2.3 Exceptions to Confidential Information. Notwithstanding the foregoing paragraph, "Confidential Information" shall not include any information or materials that: (a) are or become known to the general public through no act or omission of Consultant or any other person with an obligation of confidentiality to Company, or (b) are required to be disclosed pursuant to applicable law (provided, however, that prior to any disclosure of Confidential Information as required by applicable law, Consultant shall advise Company of such required disclosure promptly upon learning thereof and shall cooperate with Company in order to afford them a reasonable opportunity to contest or limit such disclosure).

2.4 Consultant-Restricted Information. Consultant agrees that Consultant will not improperly use or disclose to the Company any proprietary or confidential information or trade secrets of any person or entity with whom Consultant has an agreement or duty to keep such information or secrets confidential.

2.5 Use of Third Party Information. Consultant will not use any equipment, supplies, chemicals, molecules, organisms, biological materials, or other physical property, facilities or trade secret information of any present or former employee or consulting client which are not generally available to the

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public, unless Consultant has obtained prior written authorization for such use and have delivered a copy of such authorization to Company prior to such use. Notwithstanding such authorization, Company shall have the right, at its sole discretion, to exclude the use of any of the foregoing by Consultant.

#### 3. INTELLECTUAL PROPERTY

3.1 Assignment of Inventions. Consultant agrees that Consultant will promptly make full written disclosure to Company, will hold in trust for the sole right and benefit of Company, and hereby assigns, transfers and conveys to Company, or its designee, all of Consultant's worldwide right, title, and interest in and to any and all inventions, original works of authorship, findings, conclusions, data, discoveries, developments, concepts, improvements, trade secrets, techniques, processes and know-how, whether or not patentable or registrable under copyright or similar laws, which Consultant may solely or jointly conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, in the performance of the Services or which result, to any extent, from use of Company's premises or property (collectively, the "Inventions"), including, without limitation, any and all intellectual property rights inherent in the Inventions and appurtenant thereto including, without limitation, all patent rights, copyrights, trademarks, know-how and trade secrets (collectively, "Intellectual Property Rights"). Consultant acknowledges and agrees that certain of the Inventions (whether made solely by Consultant or jointly with others) may be "works made for hire," as that term is defined in the United States Copyright Act, and therefore Company would be deemed the owner of such Inventions. For purposes of clarification, to the extent any Invention is not a "work made for hire," such Invention would be subject to the assignment in the first sentence of this Section 3.1.

3.2 Further Assurances. Upon the request and at the expense of Company, Consultant shall execute and deliver any and all instruments and documents and take such other acts as may be necessary or desirable to document the assignment and transfer described in Section 3.1 or to enable Company to secure its rights in the Inventions and any patents, trademarks, copyrights or other intellectual property rights relating thereto in any and all jurisdictions, or to apply for, prosecute and enforce patents, trademark registrations, copyrights or other intellectual property rights in any and all jurisdictions with respect to any Inventions, or to obtain any extension, validation, re-issue, continuance or renewal of any such intellectual property right.

# 4. REPRESENTATIONS AND WARRANTIES

4.1 Each party represents and warrants that, to the best of its knowledge, it has the right to enter into and to perform its obligations hereunder without thereby breaching any of its obligations to third parties.

4.2 Consultant represents and warrants to Company that: (i) the Services performed by Consultant hereunder will be of professional quality, consistent with generally-accepted industry standards and expectations for work of a similar nature, (ii) all Services provided to Company hereunder shall conform to the agreed-upon specifications therefor, if any, (iii) to the best of Consultant's knowledge, all Services, Inventions, and Intellectual Property Rights provided to Company hereunder will not infringe or misappropriate the patent, copyright, trademark, trade secret, or other intellectual property rights of any third party, (iv) Consultant's performance under this Agreement and Consultant's retention as a consultant by Company does not and will not breach any obligation or agreement by which Consultant is bound to keep in confidence any information Consultant may acquire, or not to compete with any other person or entity, and (v) Consultant has not entered into, and will not enter into, any agreement, and is not affected by any policy, either written or oral, that would interfere or be inconsistent with Consultant's performance under this Agreement. Consultant shall indemnify, defend, and hold harmless Company and its officers and employees from and against any and all losses, damages, liabilities, obligations, judgments, penalties, fines, awards, costs, expenses, and disbursements (including without limitation, the costs, expenses and disbursements, as and when incurred, of investigating, preparing or

Page 3 of 9

defending any claim, action, suit, proceeding, or investigation) suffered or incurred by Company on account of Consultant's breach of any of the foregoing representations and warranties.

4.3 COMPANY MAKES NO OTHER WARRANTY RELATING TO THE CONFIDENTIAL INFORMATION AND THE USE TO BE MADE THEREOF BY CONSULTANT AND HEREBY DISCLAIMS ALL IMPLIED WARRANTIES.

# 5. TERM

5.1 Term. The initial term of this Agreement shall begin on the date set forth above and shall end on September 15th, 2003, or upon termination in accordance with the terms set forth in Section 5.2, whichever date is earlier ("Initial Term"). The Term shall be automatically extended until March 15, 2004 unless Company notifies Consultant no later than August 15th of its intent not to extend the Initial Term. Thereafter, the Term may be extended upon mutual agreement of the parties in writing.

5.2 Termination. Consultant may terminate this Agreement for any reason during the term hereof upon thirty (30) days prior written notice to the Company. Company may terminate the Agreement on September 15, 2003 by providing Consultant with a prior notice as provided in Section 5.1, or at any time with a 10-day prior notice for Cause. Cause shall be defined as any material breach of this agreement which was not cured by Consultant within 5 business days from the Company's written notice of such material breach. Upon the expiration or earlier termination of this Agreement, Company shall only be required to pay Consultant for Services actually completed as of the effective date of such expiration or earlier termination; provided, however, that Company shall not be required to make any payments for Services associated with a milestone or targeted completion date that Consultant has failed to achieve.

5.3 Return of Company Property. All property belonging to Company in Consultant's possession or control, including, without limitation, all Confidential Information (as well as all copies, summaries, or other representations thereof) and all originals and copies of any documents, devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials, and equipment shall be and remain the sole property of Company and shall be returned promptly to Company upon the expiration or earlier termination of this Agreement, and earlier if requested by Company at any time. Consultant shall not remove any of Company's property from Company's premises without prior written authorization from Company.

5.4 Survival. In the event this Agreement expires or is terminated for any reason, the rights and obligations of Sections 5.3, 5.4 and Articles 2, 3, 4, 6 and 7 shall survive such expiration or termination.

#### 6. NON-SOLICITATION AND NON-COMPETITION

6.1 Non-solicitation. Consultant agrees that during the term of this Agreement and for one year thereafter, Consultant shall not for any reason, either directly or indirectly, on Consultant's own behalf or in the service or on behalf of others, (i) solicit, recruit or attempt to persuade any person to terminate employment or a consulting relationship with Company or (ii) interfere in any manner with Company's relationship with, any of Company's co-venturers, vendors, suppliers, licensors or partners.

6.2 Non-competition. During the term of this Agreement and for one year thereafter, Consultant shall not, either directly or indirectly, alone or as a consultant, partner, officer, director, employee, joint venturer, lender or stockholder of any entity, accept employment with or provide consulting services to, any business or entity or engage in any business or activity that relates to cancer vaccines.

# 7. MISCELLANEOUS

7.1 Social Security Number. Consultant certifies that his or her correct Social Security is listed on the first page of this Agreement. Consultant acknowledges that Company will rely upon the foregoing certification in filing certain documents and instruments required by law in connection with this

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Agreement, including, without limitation, Form 1099 under the Internal Revenue Code of 1986, as amended (or any successor form).

7.2 Independent Contractor. For purposes of this Agreement and all Services to be provided hereunder, Consultant shall not be considered a partner, co-venturer, agent, employee or representative of Company, but shall remain in all respects an independent contractor, and neither party shall have any right or authority to make or undertake any promise, warranty or representation, to execute any contract, or otherwise to assume any obligation or responsibility in the name of or on behalf of the other party. Without limiting the generality of the foregoing, Consultant shall not be considered an employee of Company for purposes of any state or federal laws relating to unemployment insurance, social security, workers compensation or any regulations which may impute an obligation or liability to Company by reason of an employment relationship. Consultant agrees to pay all income, FICA, and other taxes or levies imposed by any governmental authority on any compensation that Consultant receives under this Agreement. Consultant shall indemnify, defend and hold harmless Company and its officers and employees from and against any and all losses, damages, liabilities, obligations, judgments, penalties, fines, awards, costs, expenses and disbursements (including without limitation, the costs, expenses and disbursements, as and when incurred, of investigating, preparing or defending any claim, action, suit, proceeding or investigation) suffered or incurred by Company as a result of any allegation that Consultant is an employee of Company by virtue of performing any work for or on behalf of Company hereunder or otherwise.

7.3 Rules and Policies. While at Company's facilities, Consultant shall observe and follow Company's work rules, policies, and standards as the same are communicated to Consultant from time to time, including, without limitation, those rules, policies and standards of Company relating to security of and access to facilities, telephone systems, electronic mail systems, and computer systems.

7.4 Successors. All of the terms and provisions of this Agreement shall be binding upon and inure to the benefit of and be enforceable by the respective heirs, executors, administrators, legal representatives, successors and assigns of the parties hereto, except that the duties and responsibilities of Consultant hereunder are of a personal nature and shall not be assignable or delegable in whole or in part by Consultant.

7.5 Equitable Relief. Consultant hereby acknowledges and agrees that damages at law may be an inadequate remedy for any breach of Consultant's obligations under Article 2 (Confidential Information), Article 3 (Intellectual Property), Article 6 (Non-Solicitation and Non-Competition), and, accordingly, Consultant agrees that Company will be entitled to such temporary, preliminary and permanent injunctive relief as may be necessary to remedy or limit such breach, without the necessity of proving actual damages or posting any bond or other security, and including specific performance of such obligations and an order enjoining Consultant from the continuation of, or from any threatened, breach of such obligations. The rights set forth in this paragraph shall be in addition to, and not in lieu of, any other rights which Company may have at law or in equity.

7.6 Publicity. Consultant shall not disclose to any third party any information about the Services provided or to be provided by Consultant for or on behalf of Company, except as may be required by law or as Company may otherwise agree in writing.

7.7 Assignment. Consultant shall not assign this Agreement or any right hereunder, nor delegate of any Consultant's duties hereunder, without the prior written consent of Company.

7.8 Amendments. No change, modification, extension, termination or waiver of this Agreement, or any of the provisions herein contained, shall be valid unless made in writing and signed by Consultant and a duly authorized representative of Company.

 $7.9~\rm No$  Waiver. No term or provision of this Agreement will be considered waived and no breach consented to by either party unless such waiver or consent is in writing signed on behalf of the party against whom it is asserted. No

Page 5 of 9

consent to or waiver of a breach of this Agreement by either party, whether express or implied, will constitute a consent to, waiver of, or excuse for any other, different, or subsequent breach of this Agreement by such party.

7.10 Severability. Any provisions of this Agreement which are determined to be invalid or unenforceable in any jurisdiction shall be ineffective to the extent of such invalidity or unenforceability in such jurisdiction, without rendering invalid or unenforceable the remaining provisions of this Agreement or affecting the validity or enforceability of such provisions in any other jurisdiction. If a court of competent jurisdiction declares any provision of this Agreement to be invalid or unenforceable, the parties hereto shall request that such court reduce the scope, duration, or area of the provision, delete specific words or phrases from the provision, or to replace the provision with a provision that is valid and enforceable and that comes closest to expressing the original intention of the parties hereto, and this Agreement shall be enforceable as so modified in the jurisdiction in which the provision was declared invalid or unenforceable.

 $7.11\ Governing\ Law.$  This Agreement shall be governed by and construed in accordance with the laws of New Jersey without regard to its conflict of law provisions.

7.12 Entire Agreement. This Agreement represents the entire agreement between the parties regarding the Services provided during the term of this Agreement and shall supersede all previous communications, representations, understandings, and agreements, whether oral or written, by or between the parties with respect thereto, whether theretofore or hereafter disclosed to Consultant. Without limitation, this Agreement does not supersede any confidentiality agreement that may have been signed between Company and Consultant.

7.13 Counterparts. This Agreement may be executed in two counterparts, each of which shall be deemed to be an original as against any party whose signature appears thereon, but both of which together shall constitute but one and the same instrument.

[SIGNATURE PAGE IMMEDIATELY FOLLOWS]

Page 6 of 9

IN WITNESS HEREOF, the parties have read and agree to be bound by the above terms and conditions and have entered into this Agreement effective as of the date set forth above.

Company By:	Consultant By:
(Signature)	(Signature)
Printed Name	Printed Name
Title	Title
Date	Date

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SCHEDULE A

## PROJECT PLAN for Project No. 1

## I. CONSULTING SERVICES

Scope: for two days per month during the term of this agreement and any extension thereof, Consultant shall provide Company with Consulting services and advise the Company on the subjects and tasks detailed below:

- Assisting and advising Company on defining its scientific milestones;
- Reviewing Company scientific technical and business data and materials;
- iii. Developing a regulatory strategy to advance the Company's technology to clinical trials.
- iv. Support Company's effort on obtaining regulatory approval for Phase I clinical trial in cervical cancer ("Phase I").
- v. Support the Company's effort to meet RAC submission.
- vi. Working with the Company's staff and management on designing executing and monitoring pre clinical trials (including all toxicology and bio-distribution studies or additional pre clinical studies if necessary).
- II. COMPENSATION AND PAYMENT SCHEDULE

CASH: a monthly consulting fee of \$3,000 which shall be pay as follows:

- i. Paid in cash: \$1,000 monthly.
- ii. Deferred: \$1,000 paid at the closing of any equity financing above \$500,000.
- iii. Deferred: \$1,000 at the closing of a subsequent equity financing greater than \$1,000,000.

EQUITY COMPENSATION. Company has adopted and approved its 2003 Stock Option Plan (the "Plan") and is planning to implement a 100:1 split in its shares. Pursuant to the terms of Plan, Company agrees to grant stock options ("Options") to Consultant (on a post split basis) for 1500 (one thousand five hundred) Shares of Common Stock, at an exercise price of \$1.50 per share, per each month while this Agreement is in effect and provided it has not been terminated. The Options shall be non-qualified. The Options shall be fully vested when granted. Other terms and conditions as set forth in the Plan shall apply.

Page 8 of 9

The parties intend this Project Plan to be a "Project Plan" under the Consultancy Agreement between the parties dated as of the \_\_\_\_ of March, 2003. The parties have read and agree to be bound by the above terms and conditions and have entered into this Project Plan effective as of the latest date set forth below.

Consultant
By: /s/ Jay Cavagnaro
(Signature)
Printed Name
Title
Date

Page 9 of 9

ADVAXIS, INC 212 CARNEGIE CENTER, SUITE 206 PRINCETON, NJ 08540 PHONE: (609) 497-7555 FAX: (609) 497-9299

Thursday, June 19, 2003

Eileen G. Gorman, PhD DNA Bridges, Inc. ("DNA") 700 Cheltenham Rd. Wilmington, DE 19808-1507

Dear Eileen,

# RE: GRANT WRITING AGREEMENT

This letter summarizes our understanding regarding the terms and conditions of the engagement for the purpose of DNA's implementation and execution of a grant writing strategy for Advaxis, Inc ("Advaxis" or "Company"):

- 1) Project:
  - a) Implement and execute a grant writing strategy on behalf of Advaxis based on the schedule and grants specified in SCHEDULE A. Specifically:
    - 2) Developing and managing proposal development timeline
    - 3) Gathering relevant background material
    - 4) Writing the grant
    - 5) Editing grant and working with client to fine tune the grant application
    - 6) Preparing budget requirements for grant
    - Prepare forms prior to submission (form review by the company must be completed one week prior to the final submission target date)
    - 8) All other items reasonably necessary to submit the grant
- 9) Payment schedule: As described in SCHEDULE B.
- 10) Conflict of interest: If a conflict of interest should arise during the performance of this Agreement, DNA shall immediately notify Company thereof.
- 11) Confidentiality: the terms of the existing confidentiality agreement between DNA and Advaxis shall apply.
- 12) Assignment of Inventions. DNA agrees that DNA will promptly make full written disclosure to Company, will hold in trust for the sole right and benefit of Company, and hereby assigns, transfers and conveys to Company, or its designee, all of DNA's worldwide right, title, and interest in and to any and all inventions, original works of authorship, findings, conclusions, data, discoveries, developments, concepts, improvements, trade secrets, techniques, processes and know-how, whether or not patentable or registrable under copyright or similar laws, which DNA may solely or jointly conceive or develop or reduce to practice, or cause to

be conceived or developed or reduced to practice, in the performance of the services under this agreement or which result, to any extent, from use of Company's premises or property.

- 13) Independent Contractor. For purposes of this Agreement and all Services to be provided hereunder, DNA shall not be considered a partner, co-venturer, agent, employee or representative of Company, but shall remain in all respects an independent contractor, and neither party shall have any right or authority to make or undertake any promise, warranty or representation, to execute any contract, or otherwise to assume any obligation or responsibility in the name of or on behalf of the other party.
- 14) Termination: Each party may terminate this agreement with a 30 day prior notice.
- 15) Amendment: This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof. This Agreement may not be amended, modified or waived, except in writing signed by both parties. Both parties may agree in writing to amend this agreement or any of its schedules.
- 16) Dispute resolution: Any dispute that arises in connection with agreement shall be determined by arbitration conducted in Princeton, New Jersey, in accordance with the Commercial Arbitration Rules of the American Arbitration Association then existing.

IN WITNESS HEREOF, the parties have read and agree to be bound by the above terms and conditions and have entered into this Agreement effective as of the date set forth above.

ADVAXIS, INC		DNA BRIDGES, INC	
Signature:	/s/ J. Todd Derbin	Signature:	/s/ Eileen Gorman
Name Title:		Name: Title:	Eileen Gorman
		EIN#:	54-1957384
Date:		Date:	

#### CONSULTING AGREEMENT

This Consulting Agreement (the "AGREEMENT") is made and entered into this 2nd day of July, 2004 (the "EFFECTIVE DATE"), by and between Advaxis, Inc., a Delaware corporation (the "COMPANY"), and Sentinel Consulting Corporation, a Delaware corporation (the "CONSULTANT"). Each of Company and Consultant shall be referred to as a "PARTY" and collectively as the "PARTIES."

#### RECITALS

WHEREAS, Consultant has performed certain services for the Company and the Company desires to compensate Consultant for services performed and to solidify the relationship between the Parties from this point forward;

WHEREAS, the Parties hereto have previously discussed the terms of a consulting agreement and desire to finalize all discussions between them into this Agreement;

WHEREAS, the Company wishes to engage the consulting services of Consultant on a non-exclusive basis; and

WHEREAS, Consultant wishes to provide the Company with consulting services.

NOW, THEREFORE, in consideration of the mutual promises herein contained, the Parties hereto hereby agree as follows:

#### 1. CONSULTING SERVICES

The Company hereby authorizes, appoints and engages the Consultant to perform the following services in accordance with the terms and conditions set forth in this Agreement:

- a. The Consultant will consult with the Company concerning its business plan, financial statements, brochures, and other offering materials to be prepared in anticipation of the obtaining one or more rounds of equity financing for the Company. Without limiting the generality of the foregoing, Consultant specifically agrees to:
  - Review all of the Company's books and records, sales materials, business plans, financial statements, projections, and all other materials reasonably necessary in the performance of its duties hereunder;
  - (ii) Suggest and assist in the implementation of changes to any of the above listed materials which will better position the Company to obtain equity financing, including the structure of any private placement which the Company undertakes;

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- (iii) Introduce the Company to reasonable sources of accounting, legal, printing, financial statement preparation, public relations and other professional services as needed;
- (iv) Assist the Company in identifying and engaging, on terms acceptable to the Company, a NASD licensed broker/dealer to assist the Company in raising funds in a private placement; and
- (v) Submit to the Company, when requested, complete and accurate reports of the status of Consultant's efforts.
- b. In addition, upon the Company's specific request Consultant shall render the following additional services to the Company upon mutual agreement of Consultant and Company:
  - (i) Drafting of a term sheet for financing;
  - (ii) Drafting of a Private Placement Memorandum or Offering Memorandum;
  - (iii) Drafting of support legal document drafts for review by the Company's legal counsel;
  - (iv) Conducting a patent assessment and intellectual property analysis for investor groups;
  - (v) Conducting a detailed market assessment for a Company's product line;
  - (vi) Conducing or assisting in a technical audit; and
  - (vii) Additional special services to be determined by Consultant and the Company.
- 2. TERM OF AGREEMENT

This Agreement, including all of its terms, conditions and exhibits, shall

be in full force and effect as of the date hereof through and including that period which ends six (6) full months from the date of this Agreement (the "Initial Term"). Either Party shall have the right to terminate this Agreement for any reason or for no reason after four (4) months upon delivery of ten (10) days advance written notice.

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If the Company terminates this Agreement during the first four (4) months of this agreement without cause, a cash fee of Twenty Five Thousand Dollars (\$25,000) (the "TERMINATION FEE") shall immediately be due to Consultant.

If the Company terminates this Agreement during the fifth or sixth months of this agreement for any reason of for no reason, it shall owe no fees to Consultant and Consultant hereby waives its right to any compensation, in cash, equity or other.

# 3. COMPENSATION TO CONSULTANT

- a. Upon execution of this Agreement, the Company shall pay to Consultant an engagement fee of \$5,000 (the "ENGAGEMENT FEE"). It is acknowledged by all Parties that the Engagement Fee has been paid by the Company to the Consultant prior to the execution of this Agreement.
- b. Upon execution of this Agreement, the Company shall pay to Consultant a cash fee of \$10,000, plus travel expenses (the "VIDEO FEE"), in connection with the preparation of a video describing the Company. It is acknowledged by all Parties that the Video Fee has been paid by the Company to the Consultant prior to the execution of this Agreement.
- c. Immediately after the Initial Term, provided that this Agreement has not been terminated by either party during the Initial Term, the Company shall pay to Consultant a cash fee equal to \$85,000 (the "CONTINUED CONSULTING FEE").
- d. Immediately after the Initial Term, provided that this Agreement has not been terminated by either party during the Initial Term, the Company shall issue to Consultant a warrant to purchase 3.4 Units for an aggregate purchase price of \$85,000, exercisable over a five (5) year period (the "WARRANTS").
- e. Immediately after the Initial Term, provided that this Agreement has not been terminated by either party during the Initial Term, the Company shall issue to Consultant 444,251 shares of common stock of the Company or any successor thereto (the "SHARES").
- 4. EXPENSES; DELEGATION
  - a. The Parties hereto agree that the Company shall not be responsible for any costs or expenses incurred by Consultant in performing his duties hereunder unless Consultant obtains the prior approval of the Company; provided, however, that Company agrees to pay up to (i) \$6,000 in connection with the scientific review conducted by Dr. Ferrone, and.(ii) \$12,000 in connection with Consultant's legal expenses.
  - b. The Company agrees that Consultant may delegate some of the consulting services under this Agreement to other agents, subject to approval by Company and such compensation or fees due to Consultant pursuant to

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Section 3 in connection with such services may be payable to such agent in a manner mutually acceptable to the Company and SCI.

# 5. INDEPENDENT CONTRACTOR

Both the Company and the Consultant agree that the Consultant will act as an independent contractor in the performance of his duties under this Agreement. Nothing contained in this Agreement shall be construed to imply that Consultant, or any employee, agent or other authorized representative of Consultant, is a partner, joint venturer, agent, officer or employee of the Company. Neither Party hereto shall have any authority to bind the other in any respect vis a vis any third party, it being intended that each shall remain an independent contractor and responsible only for its own actions.

# 6. NOTICES

Any notice, request, demand, or other communication given pursuant to the terms of this Agreement shall be delivered via hand delivery, facsimile, email, or overnight courier, and shall be deemed delivered upon receipt. All notices shall be delivered to:

If to the Company:	Advaxis, Inc. 212 Carnegie Center, Suite 206 Princeton, NJ 08540 Attn: J. Todd Derbin, CEO Facsimile (801) 459-3596
If to Consultant:	Sentinel Consulting Corporation 30211 Avenida de las Banderas, Suite 121 Rancho Santa Margarita, CA 92688 Attn: Robert Harvey Facsimile (949) 888-2326

#### 7. ASSIGNMENT

This contract shall inure to the benefit of the Parties hereto, their heirs, administrators and successors in interest. This Agreement shall not be assignable by either Party hereto without the prior written consent of the other.

# 8. CHOICE OF LAW AND VENUE

This Agreement and the rights of the Parties hereunder shall be governed by and construed in accordance with the laws of the State of California including all matters of construction, validity, performance, and enforcement and without giving effect to the principles of conflict of laws. Any action brought by any Party hereto shall be brought within the State of California, County of Orange.

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#### 9. NONDISCLOSURE

All information which Consultant, its employees, members, officers, directors, representatives or agents ("Consultant Disclosing Party") receives from the Company, (whether communicated orally, by electronic or magnetic media or by visual display and whether prepared or furnished by or on behalf of Company), shall be held in the strictest confidence unless and until Company specifically consents in writing to the disclosure of any confidential information. Consultant agrees to be responsible for any breach of this Section 9 by any Consultant Disclosing Party. Nothing in this Agreement prohibits the disclosure of any confidential information if required by law, rule or regulation. In the event any Consultant Disclosing Party is so required, it will provide Company with prompt written notice so that Company may seek an appropriate protective order and upon the request of Company, it will use its best efforts to cooperate in obtaining such order. It is understood that Company could sustain irreparable injury in the event of a breach of this Section 9. Accordingly, in the event of such breach, Company will be entitled to seek and obtain immediate injunctive relief in addition to any other remedy available at law or equity. Additionally, Company shall not disclose or disseminate Consultant generated information of any sort of form without approval of Consultant.

#### 10. ENTIRE AGREEMENT

Except as provided herein, this Agreement, including exhibits, contains the entire agreement of the Parties, and supersedes all existing negotiations, representations, or agreements and all other oral, written, or other communications between them concerning the subject matter of this Agreement. The Parties acknowledge that they have previously executed one or more consulting agreements prior to the date hereof, and those agreement are replaced by this Agreement. There are no representations, agreements, arrangements, or understandings, oral or written, between and among the Parties hereto relating to the subject matter of this Agreement that are not fully expressed herein.

#### 11. SEVERABILITY

If any provision of this Agreement is unenforceable, invalid, or violates applicable law, such provision, or unenforceable portion of such provision, shall be deemed stricken and shall not affect the enforceability of any other provisions of this Agreement.

#### 12. CAPTIONS

The captions in this Agreement are inserted only as a matter of convenience and for reference and shall not be deemed to define, limit, enlarge, or describe the scope of this Agreement or the relationship of the Parties, and shall not affect this Agreement or the construction of any provisions herein.

#### 13. COUNTERPARTS

This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which shall together constitute one and the same instrument.

# 14. MODIFICATION

No change, modification, addition, or amendment to this Agreement shall be valid unless in writing and signed by all Parties hereto.

#### 15. DISPUTE RESOLUTION

The Parties agree to submit any disputes involving money or damages greater than \$5,000 relating to this Agreement and/or transactions, duties, or obligations to be performed under this Agreement to mediation with a mediator approved by the Parties to the dispute. If the Parties resolve their disputes through mediation, the Parties shall share the mediator's fees evenly but pay their own attorney's fees and other expenses related to mediation. If mediation fails to resolve all disputes within thirty (30) days after the Parties submit the dispute to a mediator, then the Parties will submit to binding arbitration. The Parties agree that mediation is a pre-condition to filing an arbitration. The prevailing Party in arbitration relating to transactions contemplated by this Agreement shall be entitled to costs and expenses including reasonable attorneys fees and the attorney's fees and expenses incurred in connection with mediation that failed to resolve the dispute. Claims of \$5,000 or less may be submitted to mediation or small claims court.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed as of the Effective Date.

#### "Company"

"Consultant"

Advaxis, Inc., a Delaware corporation Sentinel Consulting Corporation, a Delaware corporation

/s/ J. Todd Derbin

By: J. Todd Derbin Its: CEO /s/ Robert T. Harvey By: Robert T. Harvey Its: President

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# CONFIDENTIAL TREATMENT REDACTED VERSION



Determination of Manufacturing Parameters, Process Development and cGMP Production of *Listeria monocytogenes* for Advaxis, Inc.

July 7, 2003

Reference No. O422

making tomorrow's medicines

Cobra Biomanufacturing Plc The Science Park,	
Keele,	
U.K. ST5 5SP	
ST5 5SP	



#### **Executive Summary**

Advaxis has developed a recombinant attenuated *L. monocytogenes* for vaccination against HPV E7 expressing tumors. Advaxis will require the production of approximately [\*] cfu of *L. monocytogenes* non-cGMP preclinical material and [\*] cfu for clinical trial use produced following cGMP guidelines. The program will involve the following phases: **Phase I** 

- · Transfer of current *Listeria* culture and analysis methods
- $\cdot\,$  Two month feasibility study and process development program
- · Animal component free growth media recommendation
- · Analytical methods development and host characterization methods

# Phase II

- · cGMP Master Cell Bank production
- Toxicology material
- $\cdot\,$  Manufacture of clinical material
- $\cdot \,$  Development of product stability tests
- Quality assurance review
- Bulk product release for fill/finish

To achieve these goals, Advaxis will require the collaboration of a partner with:

- Specialized facilities for plasmid DNA manufacture
- · Experience in plasmid DNA manufacture according to cGMP
- · Successful track record producing material for clinical trials in the USA
- · Experience in meeting regulatory requirements in facilities and documentation

Cobra has both the expertise and the facilities available to meet the project deliverables required by Advaxis in the timescales attached.

#### Cobra Biomanufacturing Plc

Cobra is a full service, world class Contract Manufacturing Organization that manufactures and supplies DNA-based therapeutics for the pharmaceutical and biotechnology industries. Cobra provides contract services spanning pre-clinical to early Phase III scale production and supply of biological products. These services include the cGMP manufacture of DNA, recombinant protein, viruses, mammalian cell products and cell banking.

Currently, four clinical trials in the USA are being conducted using products manufactured at Cobra. Additionally, there are clinical trials in Europe, Africa, China, and Australia using products manufactured at Cobra.

Cobra has a Type II Drug Master File (DMF) lodged with the FDA covering DNA manufacture. We were last inspected by the MCA in August 2002 and found to be cGMP compliant. Cobra provides a comprehensive analytical and documentation package for regulatory filing.

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#### Introduction

Cobra Biomanufacturing is a full service, world class Contract Manufacturing Organization that manufactures and supplies DNA-based therapeutics for the pharmaceutical and biotechnology industries. Cobra provides contract services spanning pre-clinical to early Phase III scale production and supply of biological products. These services include the cGMP manufacture of DNA, recombinant protein, viruses, mammalian cell products and cell banking. The company also undertakes process development programs for recombinant protein and gene therapy products.

# **Company History**

Cobra was founded in 1992 as a start up biotechnology company specializing in gene therapy and has been operating from facilities at the Keele Science Park for the past 8 years. The manufacturing division was originally established in order to expedite Cobra Therapeutics own R & D programs. Investments were made in cGMP manufacturing facilities and the development of technology for scaleable manufacture of DNA and protein based pharmaceuticals. In 1998 the manufacturing division began to offer cGMP manufacturing services to the pharmaceutical industry. Cobra Therapeutics became a wholly owned subsidiary of ML Laboratories in 2000.

In June 2002, following a successful IPO on London's AIM, Cobra Biomanufacturing was established as an *independent* company with an exclusive focus on custom manufacturing of bio therapeutics.

Cobra's corporate objective is to continue to grow as a major contract supplier of DNA, virus and protein based therapeutics for clinical trials and of licensed biopharmaceutical products for commercial sale.

# Manufacture of DNA Therapeutics for Clinical Trials

Cobra has established a worldwide reputation in the manufacture of plasmid DNA therapeutics and is supporting clinical trials in the USA, Europe, Africa, China, and Australia.

Every project undergoes a technology transfer of your existing expression system to utilize our scale-up expertise before initiating the cGMP manufacturing program. During the evaluation stage genetic stability and relative productivity will be determined in shake flask experiments. The fermenter productivity of the transformed host strain will then be evaluated in a scale down (5L) evaluation. This initial optimisation is to achieve the maximum productivity in the fermentation, ensure yield and product purity throughout the purification process. It is essential for the identification of potential difficulties with your plasmid. The process development work is necessary because in our experience

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there can often be a 5-10 fold difference in productivity between strains (even with similar plasmid backbones) and genetic instability is observed with some plasmids. By assessing the plasmid at the beginning of the program, we can accurately estimate the yields of clinical material that you will obtain.

Cobra has substantial experience working with Kanamycin and Tetracycline resistant plasmids and has also developed and been granted patents covering an antibiotic-free plasmid DNA manufacturing process, the Operator Repressor Titration (ORT) System. A Type II DMF (Drug Master File) has been lodged with the FDA covering DNA manufacture.

# Facilities

Cobra has over 11,000 square feet of space used for a process development facility, separate QA/QC laboratories, and dedicated cGMP manufacturing facilities. The existing cGMP manufacturing facility includes 4,500 square feet of EU Grade C Clean Room space required for key stages in the manufacture of biopharmaceutical products. The cGMP facility has two microbial production suites. The [\*] fermenter suite ([\*] working volume) is for Phase I and II clinical trial material. There is a [\*] fermenter ([\*] working volume) that is used to provide an inoculum for the larger fermenter. The [\*] fermenter suite ([\*] working volume) is for Phase II and III clinical trial material.

Additionally, there are two virus production suites with [\*] and [\*] fermenters ([\*] and [\*] working volume) utilising adenovirus and baculovirus expression systems for manufacture of Phase I and II clinical trial material.

# Quality

Cobra is committed to conducting its manufacturing activities in accordance with appropriate current Good Manufacturing Practice (cGMP) and Good Control Laboratory Practice (GLP) regulations and/or guidelines. The latest inspection from the UK Medicines Control Agency (MCA) was in August 2002 with a compliance statement received several weeks later. Cobra's QA group ensures that the products manufactured by the division meet appropriate standards of safety, quality, and efficacy. The QA group oversees manufacture at all stages and is responsible for testing, release, storage, and arranges shipment of the drug product. Overseas shipping and safe passage through Customs is easily co-ordinated and sub-contracted to BioCair, Inc or World Courier.

# Key Personnel

Cobra's belief that quality individuals result in quality products is reflected in the key personnel that will be involved in the manufacture of Advaxis' *L. monocytogenes* for clinical trials.

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# Julian Hanak B.Sc. (Hons), MSc., Director of Production

After gaining an honours degree in Biochemistry at University College London, Julian obtained an MSc at the University College of North Wales and then trained in cell culture and microbial fermentation at the National Institute of Medical Research. He then moved to the Bioproducts Laboratory (Elstree) where his duties involved the pilot scale production of human monoclonal antibodies for clinical trials. He was also responsible for running a sterile fill operation and supervising the commissioning of a new cGMP production suite.

In 1992, Julian moved to Zeneca Pharmaceuticals where he was involved with the process development of several immunotherapy products and the development of virus expression systems for protein production. He joined Cobra in 1994 and took over responsibility for production in 1995.

# Geoff Sharpe BSc., PhD., CChem, MRSC., Director of Quality Assurance

Geoff has over 25 years experience in pharmaceutical biotechnology with over 12 years experience in Quality Assurance. After having gained a degree in Applied Chemistry at Liverpool, Geoff trained as a research chemist working for ICI Corporate Laboratory. He later worked at the ICI Corporate Bioscience Group and went on to complete a PhD in molecular biology at Leicester University.

In 1991 he transferred to ICI Pharmaceuticals (now AstraZeneca) where he was involved with the cloning and expression of recombinant proteins and managed the corporate DNA sequencing laboratory. In 1993, he moved to Zeneca Pharmaceuticals. In the pharmaceutical department Geoff managed a team involved in the development, manufacture, and release of both small molecule and biotechnology based therapeutics. In 1996 he joined Cobra as their Quality Assurance Manager and has been trained as a Qualified Person under Article 23 of Directive 75/319/EEC.

# Amanda Weiss BSc., MSc., Section Head Fermentation

Amanda was trained at the University of Birmingham, Centre for Biochemical Engineering before joining Cobra in 1996 as a fermentation scientist. Amanda has expertise in microbial and mammalian cell culture, scale-up design and large-scale manufacture of biopharmaceuticals. She was also involved with the exemplification and publication of Cobra's ORT technology. Amanda has successfully managed the fermentation aspect of Cobra's manufacturing operations for over 5 years.

# Tony Hitchcock BSc, Section Head Microbial Products

Tony has over 19 years' experience in the large-scale manufacture of biopharmaceuticals. Tony has held positions in the Blood Products Laboratory (Elstree) and at Zeneca Pharmaceuticals in the protein process development department. Tony was a founding staff member of Cobra and has been responsible for the development of much of Cobra's DNA manufacturing technology. Tony has published several papers in the field and is an inventor on two families of Cobra's process patents.

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# Roy Cowell BSc. (Hons), CChem, MRSC, Section Head Quality Control

Roy has 16 years' experience of analytical development and quality control of pharmaceuticals within the associated regulatory framework. Ten years employed by Zeneca (now AstraZeneca) Pharmaceuticals working on new chemical entities and candidate biotherapeutics and six years employed at Cobra working on candidate DNA products. Roy is currently undergoing training leading to eligibility for Qualified Person status.

# Joy Manley BSc, Senior QA Microbiologist

Joy is currently responsible for developing, validating, and applying suitable testing regimes that help to assure clean room suitability and equipment cleanliness. New test methods are designed and validated for plant systems and for cleaning as required. Both standard and novel microbiological methods are developed and used to characterize cell banks. She has experience in working with microorganisms from both pharmaceutical and clinical backgrounds, previously working for Fisons and The Public Health Laboratory.

# **David Thatcher, Chief Executive**

David was trained as a protein chemist at the Universities of Newcastle on Tyne and Edinburgh. In 1981 he moved to Biogen SA in Geneva where he worked on the isolation of recombinant cytokines. In 1985 he became Director of Process Development of Biogen, Inc. in Cambridge, MA, where he was responsible for the development of large-scale processes for the production of gamma interferon, GM-CSF and several other products.

In 1988 he left Biogen and joined Zeneca Pharmaceuticals as head of their Protein Production Lab where he was responsible for the production of a number of biopharmaceutical products for clinical evaluation. In 1994 he joined Cobra and has been responsible for managing the evolution of Cobra's manufacturing technology and developing the contract manufacturing business into an independent company with a successful initial public offering.

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#### **Quotation O422**

<u>Descripti</u>	on <u>Pr</u>	rice
Phase 1		
[*]		
Phase 1	I	
[*]		
<i>Notes:</i> Stage I		

- Execution of Material Transfer Agreement. Advaxis methods for recombinant Listeria culture and analysis will be transferred to Cobra. This will include plasmid isolation, 1. plasmid and host identity, plasmid and host stability, cryopreservation, and protocol for plasmid isolation.
- Characterization and strain history of the untransformed L. monocytogenes will be addressed by Advaxis. Advaxis will also be responsible for plasmid sequence and/or 2. detailed restriction maps. Host and plasmid information is required for the GMO risk assessment. A letter from Dr. Paterson addressing the mobility of L. monocytogenes is requested.
- Advaxis will supply [\*] vials of a transformed research cell bank (mid log phase) of L. monocytogenes with documentation sufficient to make the research bank suitable for 3. generation of the cGMP Master Cell Bank.
- A two-month feasibility study will be undertaken to determine the growth kinetics of Listeria (latest harvest point) in various growth media. The study will also involve 4. bioreactor growth, analysis of log phase, determination of yield, and number of cell doublings in vivo before maintenance of virulence is lost. We suggest running Stage II at the same time as Stage I to reduce the timeline to cGMP manufacture.

# Stage II

An animal component free growth media will be recommended following evaluation of the existing media formulations with suitable alternatives. The media evaluated will be 4. from published references for media used in Listeria culture.

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- 5. Development of a cryopreservation media suitable for administration to patients.
- 6. Analytical methods will be developed to meet FDA regulatory requirements for a
  - o host identity
  - o plasmid identity (restriction mapping or sequencing)
  - o culture purity (monosepsis)
  - o viable count.
- 7. Host characterization methods will be developed for the following:
  - o phenotype auxotrophies and markers
  - o morphology
  - o specific media for identification
  - o gram strain
- 8. Cobra will supply Dr. Paterson with [\*] of log phase culture for a hemolysin assay. Additionally, Cobra will supply Dr. Paterson with three samples of [\*] for a mouse tumor challenge to study maintenance of virulence.
- 9. The following documentation will be provided:

Technical Report

10. Confirmation of price estimates for cGMP manufacture at this point, dependent upon successful technology transfer, feasibility study and process development.

# Stage III

11. Cell banking will only proceed based upon the feasibility study achieving cell densities of at least [\*] viable cells per litre of culture. The Master Cell Bank will be manufactured under cGMP in accordance with the latest CPMP guidelines and MCA guidance. A Type II Drug Master File has been lodged with the FDA covering these procedures. Cells will be cryopreserved in mid log growth at a density of between [\*] to [\*] cfu/ml.

Pricing for the Working Cell Bank is based on production immediately following the Master Cell Bank. Characterization for the Working Cell Bank is free of charge if concurrent with Master Cell Bank testing.

12. A [\*]-vial cGMP Master Cell Bank and Working Cell Bank will be released according to the agreed program.

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July 7, 2003



live attenuated bacterial vaccine. Methods developed will include:

- 13. The Master Cell Bank and Working Cell Bank will be characterised using the following range of tests:
  - · Confirmation of species (API Listeria)
  - Confirmation of strain by partial genotyping
  - Plasmid stability by serial sub-culture
  - Counter selection for monosepsis
  - · Plasmid identity by restriction digest
  - $\cdot\,$  DNA sequence of the plasmid (to be invoiced separately).
- 14. The non-cGMP material for use in toxicology studies, stability testing, and quality control lot release will produced at the [\*] scale with a yield of [\*] based upon the feasibility study achieving cell densities of at least [\*] viable cells per litre of culture.
- 15. The following documentation will be provided to support a Regulatory filing:

Certificates of Analysis Analytical Reports

# Stage IV

16. cGMP Manufacture: Prices are estimates without knowledge of the results of the Phase I Feasibility Program and may require variances to this proposal. If the productivity of the strain cannot be developed to achieve cell densities of at least [\*] viable cells per litre of culture the delivery of [\*]% of final bulk material cannot be guaranteed. The expected quantity of bulk and scale required will be advised as soon as it is determined during the Phase I Feasibility and Development Program and prior to initiation of the Phase II cGMP manufacturing program. If cell densities of [\*] cells per litre are obtained in the feasibility study then a [\*] fermentation should yield the requested [\*] clinical material. If the desired cell densities of [\*] cells per litre are not achieved, then the cGMP manufacturing program will be renegotiated.

## Stage V

17. Product Stability Testing will be required, but will be negotiated as a separate contract once the methods have been developed and the protocol agreed by Advaxis after FDA discussions. Stability tests for genetic stability; cell bank stability and bulk drug stability will be developed once a program is agreed upon. The figure provided is for budgetary purposes.

#### Stage VI

18. Documentation.

The following documentation will be provided:

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Certificate of Analysis Technical Summary to support regulatory filing A copy of the completed BMR will be provided.

# 19. Specifications

Cobra warrants that upon delivery of the Product to Advaxis, Inc. the Product shall:

- Have been manufactured in accordance with cGMP.
- · Be in conformity with the provisional draft specifications as attached to this document.
- · That Cobra will provide Product of sufficient quality for human clinical use.
- In the event the Product fails to meet any of the specification described above, the final determination as to the suitability of the product for human clinical use shall be determined by Advaxis, Inc., who may consult with the appropriate offices of the US FDA or other regulatory agencies.

# Stage VII

- 20. Fill/Finish will be subcontracted to BioReliance. A quote cannot be provided until the type of container, number of vials and other variables have been determined. The figure provided is for budgetary purposes.
- 20. The costs of consumables have not been included in this quotation and will be billed directly to the customer without additional charge.
- 21. The cost of subcontracted work has not been included in this quotation and will be billed directly to the customer (plus a [\*]% handling charge).
- 22. Cobra will take responsibility for shipment. The price of shipment of bulk, dosage forms and samples and insurance thereof is excluded from this contract. Shipping will be arranged in consultation with the customer and will be billed directly to the customer (plus a [\*]% handling charge).
- 23. Cobra and/or Advaxis, Inc. may wish to issue a press release relating to this contract. However, prior to any information being disclosed written approval must be obtained from the other party.
- 24. The Customer agrees to pay reasonable travel expenses connected with Cobra staff attending meetings, other than those on Company premises and requested by the Customer.

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25. Cobra Bio-Manufacturing plc's O422 Phase I Terms and Conditions and O422 Phase II Terms and Conditions apply to this work and acceptance of this quotation implies acceptance of these Terms and Conditions.

## How to Proceed

Please return a signed copy of the enclosed contract with your formal Purchase Order to Cobra Biomanufacturing.

Cobra Biomanufacturing Plc The Science Park Keele, United Kingdom ST5 5SP Phone: 011 44 1782 714181 Fax: 011 44 1782 714168

When timing is critical a faxed version is acceptable, but an original must be signed and returned within fourteen days. Upon receipt Cobra will notify the client of acceptance within 72 hours.

**Confidential Document** 



Advaxis, Inc. 212 Carnegie Center, Suite 206 Princeton, NJ 08540 USA

July 7, 2003

Contract O422

Determination of Manufacturing Parameters, Process Development and cGMP Manufacture of L. monocytogenes

# (a) Phase I: Two-month Feasibility Study and Development Program

Price (Line items: a + b + c):

Total:

\$[\*]

#### **Terms of Payment**

The following payment terms will apply: On receipt of a signed copy of the Contract, Cobra Biomanufacturing Plc. will begin Phase I. Upon commencement of the work program, Advaxis will be invoiced for \$[\*] net 30 days and will be invoiced the remaining \$[\*] appropriately on a monthly basis for the length of the program. The final invoice will be sent before [\*].

This phase of the program is governed by the Terms and Conditions set out in the attached document " O422 Phase I Terms and Conditions".

# **Phase II: Pre-Clinical and GMP Manufacture**

Price Estimate is based on [ \* ] cGMP manufacture: (Line items: d + e + f + g + i + k + l + m + n + o)

Total:

\$[ \* ] (excluding Fill/Finish)

#### **Terms of Payment**

The following payment terms will apply: On receipt of a signed copy of the Contract, Cobra Biomanufacturing Plc. will hold a slot for Advaxis without a deposit. Advaxis will be notified of any request for the slot and may reserve the slot with a [\*]% deposit. Receipt of this payment will reserve the production slots as per the agreed program. On commencement of the work program, [\*]% of the cost will be appropriately invoiced on a monthly basis for the length of the program, with the remaining [\*]% due upon the delivery and acceptance of the Certificate of Analysis by the Customer's QA Department (less deposit if required). There is an intention by Advaxis and Cobra to agree on % royalties of final commercial products utilizing the current Listeria monocytogenes platform and variations thereof for various indications in exchange for a reduction in price of the Phase II cGMP manufacturing campaign of proposal 0422.

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This phase of the program is governed by the Terms and Conditions set out in the attached document "O422 Phase II Terms and Conditions".

# Contract O422

Determination of Manufacturing Parameters, Process Development and cGMP Manufacture of L. monocytogenes

For Advaxis, Inc.For Cobra Biomanufacturing PlcAccepted by: J. Todd DerbinDavid R. ThatcherSignature: /s/ J. Todd Derbin/s/ David R. ThatcherDate: 7/7/038<sup>th</sup> July 2003

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Test	Method Specification
[*]	
<u>Identity</u>	
API Listeria	Profile number conforms, typically >0.95
Growth on selective media	Good growth
Gram strain	Gram positive
Colony morphology	Complies with that for L. monocytogenes
Quantity	
[*]	
<u>Purity</u>	
[*]	
Confidential Document	14 July 7, 2003

#### CONSULTANCY AGREEMENT

THIS CONSULTANCY AGREEMENT (this "Agreement") is made as of this 15th day of January, 2005, by and between Advaxis, Inc, a Colorado corporation, having a principal place of business at 212 Carnegie Center, Princeton, NJ ("Company"), and David Filer, Ph.D. having an address at 165 E. 32nd St. Apt #2F, New York, NY 10016, Phone: 212-689-1373, Fax: 212-581-7010 ("Consultant").

WHEREAS, Consultant and Company desire to enter into an agreement for the performance by Consultant of certain consulting services (the "Services"); and

WHEREAS, Consultant has the specific knowledge, experience, and expertise to perform the Services;

NOW, THEREFORE, in consideration of the mutual covenants, terms, and conditions hereinafter set forth, and intending to be legally bound, Company and Consultant agree as follows:

#### 1. SERVICES AND COMPENSATION

1.1 Services. Consultant shall provide the Services and perform all duties as requested by Company, as more particularly set forth in SCHEDULE A. Company agrees that Consultant shall have reasonable access to Company's representatives as necessary to perform the Services provided for by this Agreement.

1.2 Reports. Consultant shall communicate the progress of each Project Plan to Company informally on a regular basis and in written reports to be provided to Company as specified in each Project Plan, and if not specified in a Project Plan, then on a calendar quarterly basis within ten (10) days after the end of such calendar quarter. Each written report shall be subject to acceptance by Company.

1.3 Compensation. Consultant shall be paid for performance of the Services as specified in SCHEDULE B. Notwithstanding the foregoing, Company may suspend payment if, in Company's reasonable opinion after review of such reports, Consultant has not been performing the Services in the manner and in accordance with the schedule set forth in the applicable Project Plan and pursuant to this Agreement.

1.4 Conflict of Interest; Non-Exclusive Arrangement.

1.4.1 If a conflict of interest should arise during the performance of this Agreement, Consultant shall immediately notify Company thereof and Company shall have the option to pursue any and all remedies, equitable, legal or otherwise, that may be available to Company in connection therewith. Consultant shall ensure that its performance of the Services does not conflict with Consultant's duties with other entiries.

1.4.2 Company may from time to time (i) engage other persons and entities to act as consultants to Company and perform services for Company, including, without limitation, services similar to the Services, and (ii) enter into agreements similar to this Agreement with other persons or entities, in all cases without the necessity of obtaining any approval from Consultant.

1.4.3 Subject to the provisions of Section 6.2, Consultant may from time to time act as a consultant to, perform services for, or enter into agreements similar to this Agreement with, other persons or entities without the necessity of obtaining approval from Company; provided, however, that in no event shall Consultant provide such other persons or entities with, or incorporate into or provide as part of any services for such other persons or entities, any information or know-how obtained by Consultant through its conduct of the Services (including, without limitation, any Confidential Information (as defined below)) and provided further that Consultant shall not provide services to any entity engaged in the research or development or marketing of vaccines.

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#### 2. CONFIDENTIAL INFORMATION

2.1 Confidentiality. Consultant agrees to maintain in strict confidence all Confidential Information (as defined below) provided to, or learned or developed by, Consultant during the course of Consultant's performance of the Services. Consultant shall not disclose or disseminate any Confidential Information to any person or entity, except with the prior written consent of Company. In addition, Consultant shall not use or copy any Confidential Information for any purpose other than in connection with performance of the Services hereunder.

2.2 Definition of Confidential Information. The term "Confidential Information" shall mean all trade secrets, processes, formulae, data and know-how, improvements, inventions, chemical or biological materials, techniques, marketing plans, strategies, customer lists, or other information that has been created, discovered, or developed by Company, or has otherwise become known to Company, or which proper rights have been assigned to Company, as well as any other information and materials that are deemed confidential or proprietary to or by Company (including, without limitation, all information and materials of Company's customers and any other third party and their consultants), regardless of whether any of the foregoing are marked "confidential" or "proprietary" or communicated to Consultant by Company in oral, written, graphic or electronic form.

2.3 Exceptions to Confidential Information. Notwithstanding the foregoing paragraph, "Confidential Information" shall not include any information or materials that: (a) are or become known to the general public through no act or omission of Consultant or any other person with an obligation of confidentiality to Company, or (b) are required to be disclosed pursuant to applicable law (provided, however, that prior to any disclosure of Confidential Information as required by applicable law, Consultant shall advise Company of such required disclosure promptly upon learning thereof and shall cooperate with Company in order to afford them a reasonable opportunity to contest or limit such disclosure).

2.4 Consultant-Restricted Information. Consultant agrees that Consultant will not improperly use or disclose to the Company any proprietary or confidential information or trade secrets of any person or entity with whom Consultant has an agreement or duty to keep such information or secrets confidential.

2.5 Use of Third Party Information. Consultant will not use any equipment, supplies, chemicals, molecules, organisms, biological materials, or other physical property, facilities or trade secret information of any present or former employee or consulting client which are not generally available to the public, unless Consultant has obtained prior written authorization for such use and have delivered a copy of such authorization to Company prior to such use. Notwithstanding such authorization, Company shall have the right, at its sole discretion, to exclude the use of any of the foregoing by Consultant.

## 3. INTELLECTUAL PROPERTY

3.1 Assignment of Inventions. Consultant agrees that Consultant will promptly make full written disclosure to Company, will hold in trust for the Sole right and benefit of Company, and hereby assigns, transfers and conveys to Company, or its designee, all of Consultant's worldwide right, title, and interest in and to any and all inventions, original works of authorship, findings, conclusions, data, discoveries, developments, concepts, improvements, trade secrets, techniques, processes and know-how, whether or not patentable or registrable under copyright or similar laws, which Consultant may solely or jointly conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, in the performance of the Services or which result, to any extent, from use of Company's premises or property (collectively, the "Inventions"), including, without limitation, any and all intellectual property rights inherent in the Inventions and appurtenant thereto including, without limitation, all patent rights, copyrights, trademarks, know-how and trade secrets (collectively, "Intellectual Property Rights"). Consultant acknowledges and agrees that certain of the Inventions (whether made solely by Consultant or jointly with others) may be "works made for hire," as that term is defined in the United States Copyright Act, and therefore Company would be deemed the owner of such Inventions. For purposes of clarification, to the extent any Invention is not a "work made for hire," such Invention would be subject to the assignment in the first sentence of this Section 3.1.

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3.2 Further Assurances. Upon the request and at the expense of Company, Consultant shall execute and deliver any and all instruments and documents and take such other acts as may be necessary or desirable to document the assignment and transfer described in Section 3.1 or to enable Company to secure its rights in the Inventions and any patents, trademarks, copyrights or other intellectual property rights relating thereto in any and all jurisdictions, or to apply for, prosecute and enforce patents, trademark registrations, copyrights or other intellectual property rights in any and all jurisdictions with respect to any Inventions, or to obtain any extension, validation, re-issue, continuance or renewal of any such intellectual property right.

#### 4. REPRESENTATIONS AND WARRANTIES

4.1 Each party represents and warrants that, to the best of its knowledge, it has the right to enter into and to perform its obligations hereunder without thereby breaching any of its obligations to third parties.

4.2 Consultant represents and warrants to Company that: (i) the Services performed by Consultant hereunder will be of professional quality, consistent with generally-accepted industry standards and expectations for work of a similar nature, (ii) all Services provided to Company hereunder shall conform to the agreed-upon specifications therefor, if any, (iii) to the best of Consultant's knowledge, all Services, Inventions, and Intellectual Property Rights provided to Company hereunder will not infringe or misappropriate the patent, copyright, trademark, trade secret, or other intellectual property rights of any third party, (iv) Consultant's performance under this Agreement and Consultant's retention as a consultant by Company does not and will not breach any obligation or agreement by which Consultant is bound to keep in confidence any information Consultant may acquire, or not to compete with any other person or entity, and (v) Consultant has not entered into, and will not enter into, any agreement, and is not affected by any policy, either written or oral, that would interfere or be inconsistent with Consultant's performance under this Agreement. Consultant shall indemnify, defend, and hold harmless Company and its officers and employees from and against any and all losses, damages, liabilities, obligations, judgments, penalties, fines, awards, costs, expenses, and disbursements (including without limitation, the costs, expenses and disbursements, as and when incurred, of investigating, preparing or defending any claim, action, suit, proceeding, or investigation) suffered or incurred by Company on account of Consultant's breach of any of the foregoing representations and warranties.

4.3 COMPANY MAKES NO OTHER WARRANTY RELATING TO THE CONFIDENTIAL INFORMATION AND THE USE TO BE MADE THEREOF BY CONSULTANT AND HEREBY DISCLAIMS ALL IMPLIED WARRANTIES.

5. TERM

5.1 Term. The initial term of this Agreement shall be six months ("Initial Term"). The Term may be extended upon mutual agreement of the parties in writing.

5.2 Termination. Each party may terminate this Agreement upon thirty (30) days prior written notice to the other party.

5.3 Return of Company Property. All property belonging to Company in Consultant's possession or control, including, without limitation, all Confidential Information (as well as all copies, summaries, or other representations thereof) and all originals and copies of any documents, devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials, and equipment shall be and remain the sole property of Company and shall be returned promptly to Company upon the expiration or earlier termination of this Agreement, and earlier if requested by Company at any time. Consultant shall not remove any of Company's property from Company's premises without prior written authorization from Company.

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5.4 Survival. In the event this Agreement expires or is terminated for any reason, the rights and obligations of Sections 5.3, 5.4 and Articles 2, 3, 4, 6 and 7 shall survive such expiration or termination.

# 6. NON-SOLICITATION AND NON-COMPETITION

6.1 Non-solicitation. Consultant agrees that during the term of this Agreement and for one year thereafter, Consultant shall not for any reason, either directly or indirectly, on Consultant's own behalf or in the service or on behalf of others, (i) solicit, recruit or attempt to persuade any person to terminate employment or a consulting relationship with Company or (ii) interfere in any manner with Company's relationship with, any of Company's co-venturers, vendors, suppliers, licensors or partners.

6.2 Non-competition. During the term of this Agreement and for one year thereafter, Consultant shall not, either directly or indirectly, alone or as a consultant, partner, officer, director, employee, joint venturer, lender or stockholder of any entity, accept employment with or provide consulting services to, any business or entity or engage in any business or activity that relates to cancer vaccines.

#### 7. MISCELLANEOUS

7.1 Social Security Number. Consultant certifies that his or her correct Social Security is listed on the first page of this Agreement. Consultant acknowledges that Company will rely upon the foregoing certification in filing certain documents and instruments required by law in connection with this Agreement, including, without limitation, Form 1099 under the Internal Revenue Code of 1986, as amended (or any successor form).

7.2 Independent Contractor. For purposes of this Agreement and all Services to be provided hereunder, Consultant shall not be considered a partner, co-venturer, agent, employee or representative of Company, but shall remain in all respects an independent contractor, and neither party shall have any right or authority to make or undertake any promise, warranty or representation, to execute any contract, or otherwise to assume any obligation or responsibility in the name of or on behalf of the other party. Without limiting the generality of the foregoing, Consultant shall not be considered an employee of Company for purposes of any state or federal laws relating to unemployment insurance, social security, workers compensation or any regulations which may impute an obligation or liability to Company by reason of an employment relationship. Consultant agrees to pay all income, FICA, and other taxes or levies imposed by any governmental authority on any compensation that Consultant receives under this Agreement. Consultant shall indemnify, defend and hold harmless Company and its officers and employees from and against any and all losses, damages, liabilities, obligations, judgments, penalties, fines, awards, costs, expenses and disbursements (including without limitation, the costs, expenses and disbursements, as and when incurred, of investigating, preparing or defending any claim, action, suit, proceeding or investigation) suffered or incurred by Company as a result of any allegation that Consultant is an employee of Company by virtue of performing any work for or on behalf of Company hereunder or otherwise.

7.3 Rules and Policies. While at Company's facilities, Consultant shall observe and follow Company's work rules, policies, and standards as the same are communicated to Consultant from time to time, including, without limitation, those rules, policies and standards of Company relating to security of and access to facilities, telephone systems, electronic mail systems, and computer systems.

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7.4 Successors. All of the terms and provisions of this Agreement shall be binding upon and inure to the benefit of and be enforceable by the respective heirs, executors, administrators, legal representatives, successors and assigns of the parties hereto, except that the duties and responsibilities of Consultant hereunder are of a personal nature and shall not be assignable or delegable in whole or in part by Consultant.

7.5 Equitable Relief. Consultant hereby acknowledges and agrees that damages at law may be an inadequate remedy for any breach of Consultant's obligations under Article 2 (Confidential Information), Article 3 (Intellectual Property), Article 6 (Non-Solicitation and Non-Competition), and, accordingly, Consultant agrees that Company will be entitled to such temporary, preliminary and permanent injunctive relief as may be necessary to remedy or limit such breach, without the necessity of proving actual damages or posting any bond or other security, and including specific performance of such obligations and an order enjoining Consultant from the continuation of, or from any threatened, breach of such obligations. The rights set forth in this paragraph shall be in addition to, and not in lieu of, any other rights which Company may have at law or in equity.

7.6 Publicity. Consultant shall not disclose to any third party any information about the Services provided or to be provided by Consultant for or on behalf of Company, except as may be required by law or as Company may otherwise agree in writing.

7.7 Assignment. Consultant shall not assign this Agreement or any right hereunder, nor delegate of any Consultant's duties hereunder, without the prior written consent of Company.

7.8 Amendments. No change, modification, extension, termination or waiver of this Agreement, or any of the provisions herein contained, shall be valid unless made in writing and signed by Consultant and a duly authorized representative of Company.

7.9 No Waiver. No term or provision of this Agreement will be considered waived and no breach consented to by either party unless such waiver or consent is in writing signed on behalf of the party against whom it is asserted. No consent to or waiver of a breach of this Agreement by either party, whether express or implied, will constitute a consent to, waiver of, or excuse for any other, different, or subsequent breach of this Agreement by such party.

7.10 Severability. Any provisions of this Agreement which are determined to be invalid or unenforceable in any jurisdiction shall be ineffective to the extent of such invalidity or unenforceability in such jurisdiction, without rendering invalid or unenforceable the remaining provisions of this Agreement or affecting the validity or enforceability of such provisions in any other jurisdiction. If a court of competent jurisdiction declares any provision of this Agreement to be invalid or unenforceable, the parties hereto shall request that such court reduce the scope, duration, or area of the provision, delete specific words or phrases from the provision, or to replace the provision with a provision that is valid and enforceable and that comes closest to expressing the original intention of the parties hereto, and this Agreement shall be enforceable as so modified in the jurisdiction in which the provision was declared invalid or unenforceable.

7.11 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of New Jersey without regard to its conflict of law provisions.

7.12 Entire Agreement. This Agreement represents the entire agreement between the parties regarding the Services provided during the term of this Agreement and shall supersede all previous communications, representations, understandings, and agreements, whether oral or written, by or between the parties with respect thereto, whether theretofore or hereafter disclosed to Consultant. Without limitation, this Agreement does not supersede any confidentiality agreement that may have been signed between Company and Consultant.

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7.13 Counterparts. This Agreement may be executed in two counterparts, each of which shall be deemed to be an original as against any party whose signature appears thereon, but both of which together shall constitute but one and the same instrument.

[SIGNATURE PAGE IMMEDIATELY FOLLOWS]

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IN WITNESS HEREOF, the parties have read and agree to be bound by the above terms and conditions and have entered into this Agreement effective as of the date set forth above.

COMPANY	CONSULTANT
By: /s/ J. Todd Derbin (Signature)	By: /s/ David Filer (Signature) Dr.
J. Todd Derbin Printed Name	David Filer Printed Name
CEO - Title	Biotech Consultant Title
Date	Date

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SCHEDULE A

#### PROJECT PLAN FOR PROJECT NO. 1

I. CONSULTING SERVICES

Scope: for three days per month during the term of this agreement and any extension thereof, Consultant shall provide Company with Consulting services and advise the Company on the subjects and tasks detailed below:

- i. Assisting and advising Company on its development efforts;
- Reviewing Company scientific technical and business data and materials;
- iii. Introducing he Company to industry analysts, institutional investors collaborators and strategic partners.

#### II. COMPENSATION AND PAYMENT SCHEDULE

Cash: a monthly consulting fee of \$2,000 during the Term. EQUITY COMPENSATION. Company is planning to adopt its 2005 option plan ("Plan"). Pursuant to the terms of Plan, and subject to the approval and establishment of the Plan, Company agrees to grant stock options ("Options") to Consultant for 40,000 (forty thousand) Shares of Common Stock, vesting monthly over 12 months provided that this Agreement has not been terminated. The Options shall be non-qualified. Other terms and conditions as set forth in the Plan shall apply.

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#### CONSULTING AGREEMENT

This CONSULTING AGREEMENT (the "Agreement") is made by and between Pharm-Olam International Ltd., a Texas limited partnership with an address of 450 North Sam Houston Pkwy., Suite 250, Houston, TX 77060 ("Consultant"), and Advaxis, Inc., with an address of 212 Carnegie Center, Suite 206, Princeton, New Jersey 08540 ("Advaxis") and is effective as of January 15, 2005 ("Effective Date").

#### RECITALS

- A. Consultant, a contract research organization, possesses special expertise and knowledge in the field of pre-clinical, clinical and regulatory affairs: and
- B. Advaxis, a biotechnology company commercializing novel vaccines, has need for Consultant's pre-clinical consultant services; and
- C. Advaxis and Consultant now desire to enter into this Agreement whereby Consultant shall perform consulting services for Advaxis on the terms and conditions set forth below.

#### AGREEMENT

NOW, THEREFORE, Consultant and Advaxis agree as follows:

- Description of Services. Subject to the terms and conditions of this Agreement, Consultant shall perform management of pre-clinical toxicology studies as defined in Attachment 1 and by cost in Attachment 2. Timelines for pre-clinical toxicology studies milestone payment schedule are outlined in Attachment 3
- 2. Term and Renewal. This Agreement shall be effective as of the Effective Date and shall remain in effect for a period of Twelve (12) months unless terminated pursuant to this Agreement. This Agreement may only be renewed for additional periods on terms mutually agreed upon in writing by the parties. Neither party shall have any obligation to renew this Agreement. However, the expiration of this Agreement shall not effect the obligations of Consultant to complete the services agreed upon in this Agreement.
- 3. Fees.
  - a) For return of services as outlined in Attachment 1 and 2, Advaxis will make milestone payments according to payment chart in Attachment 3. The cost for project management, animal studies and DNA assays as outlined in Attachment 2 is \$272,163, two hundred seventy two one hundred sixty three dollars.
  - b) Advaxis shall also reimburse Consultant for all reasonable and necessary out-of-scope expenses actually incurred by Consultant in rendering services under this Agreement. In case of meetings, such expenses will include reasonable and necessary travel, lodging and meals. Consultant shall provide Advaxis with a written expense report, complete with receipts or other reasonable documentation, for all such expenses requested for reimbursement. Any expense item greater than \$200 shall require Advaxis' prior written or email approval.
- 4. Invoices. Milestone payments due hereunder shall be payable upon Advaxis's receipt ("Due Date") of a written invoice or an expense report and accompanying supporting documentation therefore. Any amounts which remain unpaid for thirty (30) days or more after the Due Date shall bear interest at the rate equal to 8%. Interest shall be computed on the basis of 12 months of 30 days each per year, as the case may be, subject to the provisions hereof limiting interest to the maximum rate of interest allowed by applicable law.
- 5. Confidentiality; Proprietary Information; Intellectual Property.
  - a) Any and all information which Advaxis or its affiliates may disclose to Consultant under this Agreement will be considered confidential.
  - b) Consultant further agrees that all discussions and negotiations with respect to this Agreement are confidential.
  - c) Consultant understands that Advaxis possesses and will continue to possess information that has been created, discovered or developed, or has otherwise become known to Advaxis or its affiliates and/or in which property rights have been assigned or otherwise conveyed to Advaxis or its affiliates, which information has commercial value in the business in which Advaxis is engaged. All such information, including the information described in Sections 5 (a) and (b) above, and including any other information developed by or on behalf of Consultant pursuant to this Agreement, is hereinafter referred to as "Proprietary Information." By way of illustration, but not limitation, Proprietary Information includes trade secrets, processes, formulae, data and know-how, improvements, inventions,

techniques, marketing plans, strategies, forecasts and customer and contact lists. Accordingly, Consultant further agrees as follows:

i) All Proprietary Information shall be the sole property of Advaxis or its affiliates and their assigns, as the case may be, and such parties shall be the sole owners of all patents and other rights in connection therewith. At all times during this Agreement and at all times after expiration or termination of this Agreement, Consultant will keep in confidence and trust all Proprietary Information, and will not use or disclose any Proprietary Information without the prior written consent of Advaxis, except as may be necessary in the ordinary course of performing the duties of Consultant hereunder. No announcement, oral presentation or publication of any kind relating to any Proprietary Information shall be made by Consultant without the prior written consent of Advaxis; and

- ii) All documents, data, records, apparatus, equipment and other physical property, whether or not pertaining to Proprietary Information, furnished to Consultant by or on behalf of Advaxis or developed by or on behalf of Consultant pursuant to this Agreement, shall be and remain the sole property of Advaxis and/or its affiliates and shall be returned promptly as and when requested by Advaxis. Should Advaxis not so request, Consultant agrees to return and deliver all such property upon expiration or termination of this Agreement for any reason and Consultant shall not retain or reproduce any such property upon expiration or termination.
- iii) Consultant shall promptly disclose to Advaxis or its designee all intellectual property (including, but not limited to any inventions, improvements, formulae, processes, techniques, know-how, data, patents or applications for patents, trade secrets, trademarks, copyrights and confidential information as described in this Section 5), made or conceived or reduced to practice or learned by Consultant (collectively, "Intellectual Property") which (A) result from the tasks assigned to Consultant hereunder; (B) are funded by or on behalf of Advaxis or its affiliates; or (C) result from the use or property or premises owned, leased or contracted for by or on behalf of Advaxis or its affiliates.
- iv) Consultant agrees to and does hereby sell, assign, transfer and set over to Advaxis, its affiliates, successors or assigns, as the case may be, all right, title and interest in and to all Intellectual Property developed or conceived individually or in conjunction with others in performance of this Agreement, to be held and enjoyed by Advaxis, its affiliates, successor or assigns, as the case may be, to the full extent of the term for which any Letters Patent may be granted and as fully as the Intellectual Property would have been held by Consultant had this Agreement, sale or assignment not be made.
- v) Consultant shall execute and deliver any and all instruments and documents and perform any and all acts, necessary to obtain, maintain or enforce patents, trademarks, trade secrets and copyrights for such Intellectual Property, and shall make, execute and deliver any and all instruments and documents and perform any and all acts necessary to obtain, maintain or enforce patents, trademarks, trade secrets and copyrights for such Intellectual Property as Advaxis may designate in any and all countries. All costs and expenses of application and prosecution of such patents, trademarks, trade secrets and copyrights shall be paid by Advaxis.
- vi) Any copyrightable material prepared by Consultant as a result of Consultant's activities with Advaxis, in performance of this Agreement, are prepared as works for hire for the benefit of Advaxis. Consultant hereby assigns to Advaxis any copyright to which Consultant is entitled for any copyrightable material prepared in the course of the performance of this Agreement for Advaxis. Advaxis shall have the right to reproduce, modify and use such material and all results generated as the result of services rendered under this Agreement for any propose related to its lawful business.

- vii) Upon the written request of Advaxis, Consultant shall make any assignment provided for in this Section 5 directly to, or for the benefit of, an Advaxis affiliate or Advaxis's designee, including Consultant's performance of any related obligations hereunder.
- 6. Remedies. (a) Consultant acknowledges that Advaxis will have no adequate remedy at law if Consultant breaches the terms of Section 5 hereof. Accordingly, in such event, Advaxis shall have the right, in addition to any other rights it may have at law or equity, to obtain in any tribunal of competent jurisdiction injunctive relief to restrain any breach or threatened breach. (b) If, due to reasons within Consultant's reasonable control, Consultant's products or services fail to meet standards generally accepted in the applicable industry, or if Consultant fails to provide agreed-upon products or services in a timely manner Advaxis shall have the right, in addition to any other remedy it may have at law or equity, to: (i) terminate this Agreement immediately upon written notice to Consultant; (ii) require that defective products or services be replaced or remedied, as the case may be, without charge to Advaxis; and (iii) correct, or have corrected by a third party, the defective product amounts incurred by Advaxis in taking such corrective measures.
- 7. Termination. This Agreement may be terminated (a) by Advaxis with or without cause upon thirty (30) day's prior written notice to Consultant, or (b) by Consultant in the event of a material breach by Advaxis, provided that Consultant provides Advaxis with written notice of such breach and Advaxis fails reasonably to cure such breach within thirty (30) days of receipt of such notice.

In the event this Agreement is terminated pursuant to this Section prior to completion of the work to be performed, Consultant shall cease work upon Advaxis's request, and shall be entitled to receive its fee for work actually and reasonably performed through the effective date of termination. In addition, Consultant shall promptly return to Advaxis all written materials and biological material provided to Consultant by Advaxis or its partners or affiliates.

The provisions of Sections 5-6 and 9-14, inclusive, shall survive expiration or termination of this Agreement.

8. Independent Contractor. Consultant shall be an independent contractor and shall have no authority to enter into contracts on behalf of Advaxis, bind Advaxis to any third parties or act as an agent on behalf of Advaxis in any way. Consultant shall account for and report the payment of all applicable federal and state income taxes, social security taxes, and all other taxes due on payments received by Consultant hereunder. Consultant hereby acknowledges than Advaxis will report as compensation all payments to Consultant hereunder.

- 9. Consultant's Representation and Warranties. Consultant hereby represents and warrants to Advaxis that (a) Consultant has the authority to enter into and perform this Agreement and (b) performance of Consultant's services as contemplated by this Agreement will not result in the breach or violation of any contract, arrangement or understanding (including without limitation any intellectual property rights or any agreement of confidentiality or non-disclosure, whether written or oral) which Consultant may have with any third party (including with limitation current and former employers of Consultant and any other companies or persons for which Consultant has performed or is performing consulting services).
- 10. Compliance Standards. During the term of this Agreement and any renewal term, Consultant shall comply with all applicable laws, rules and regulations in the conduct of the services being performed.
- 11. Severability. If any provision of this Agreement is declared void or unenforceable, such provision shall be deemed modified to the extent necessary to allow enforcement, and all other portions of this Agreement shall remain in full force and effect.
- 12. Entire Agreement, Amendments. This Agreement contains the entire and complete agreement between the parties with respect to the subject matter hereof, and supersedes all prior oral and/or written agreements with respect to the subject matter hereof, other than any currently effective confidentiality agreement. Any changes to this Agreement must be in writing and signed by both parties. The Parties acknowledge that the confidentiality agreement previously executed beween the parties remain in full force and effect.
- 13. Successors. This Agreement shall be binding upon and inure to the benefit of the successors, assigns and legal representatives of the parties.
- 14. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New Jersey without regard to its conflicts of laws provisions, and the parties agree to personal jurisdiction and venue in the state and federal courts of New Jersey, in any suit or proceeding arising out of the subject matter of this Agreement.

DATED as of the Effective Date written above, and executed by:

ADVAXIS, INC.:

By: /s/ J. Todd Derbin Name: J. Todd Derbin Title: CEO By:\_

Name: Title:

#### ATTACHMENT 1

FOUR WEEK TOXICOLOGY STUDY OF LM-LLO-E7 VECTOR IN MICE

<code>PURPOSE: To examine the toxicity of Advaxis' Lm-LLO-E7 Vector following four weekly i.v. or s.c. doses to female Balb/C mice.</code>

SCOPE: 10 mice/group 70 FEMALE MICE TOTAL

REGULATORY STATUS: GLP

TEST ARTICLE: Lm-LLO-E7

CONTROL ARTICLES: Control Buffer

ROUTES OF ADMINISTRATION: i.v./s.c.

#### OVERALL DESIGN:

Wild-Type female Balb/C mice will be administered a single intravenous or subcutaneous injection of Lm-LLO-E7 Vector or control saline once weekly for four weeks on Study Days 1, 8, 15 and 22 as described in the table below.

FOUR WEE	K TOXICOLOGY STUDY OF L	M-LLO-E7 IN FE	MALE MICE	
Treatment	Dose Level	Route	Dosing Days	Females
Saline	Θ	i.v.	1,8,15, 22	10
Lm-LLO-E7	Low	i.v.	1,8,15, 22	10
Lm-LLO-E7	Mid	i.v.	1,8,15, 22	10
Lm-LLO-E7	High	i.v.	1,8,15, 22	10
Lm-LLO-E7	Low	s.c.	1,8,15, 22	10
Lm-LLO-E7	Mid	s.c.	1,8,15, 22	10
Lm-LLO-E7	High	s.c.	1,8,15, 22	10
	Treatment Saline Lm-LLO-E7 Lm-LLO-E7 Lm-LLO-E7 Lm-LLO-E7 Lm-LLO-E7	TreatmentDose LevelSaline0Lm-LLO-E7LowLm-LLO-E7MidLm-LLO-E7HighLm-LLO-E7LowLm-LLO-E7Mid	TreatmentDose LevelRouteSaline0i.v.Lm-LLO-E7Lowi.v.Lm-LLO-E7Midi.v.Lm-LLO-E7Highi.v.Lm-LLO-E7Lows.c.Lm-LLO-E7Mids.c.	Saline       0       i.v.       1,8,15, 22         Lm-LLO-E7       Low       i.v.       1,8,15, 22         Lm-LLO-E7       Mid       i.v.       1,8,15, 22         Lm-LLO-E7       High       i.v.       1,8,15, 22         Lm-LLO-E7       High       i.v.       1,8,15, 22         Lm-LLO-E7       Low       s.c.       1,8,15, 22         Lm-LLO-E7       Low       s.c.       1,8,15, 22         Lm-LLO-E7       Mid       s.c.       1,8,15, 22

IN-LIFE PROCEDURES:

- CLINICAL OBSERVATIONS: Twice Daily cageside observation for signs of mortality, moribundity and/or toxicity.
- PHYSICAL EXAMS, BODY WEIGHTS AND FOOD CONSUMPTION: At randomization, prior to treatment on SD1 and weekly thereafter.

TERMINAL PROCEDURES:

Twenty-four hours following the final dose:

- Blood samples are obtained from all surviving mice for clinical pathology and hematological analysis. (5 animals for hematology, 5 for clinical chemistry per group)
- o Body weights
- o Necropsy:

Full gross necropsy on all main study mice, and will include examination of external surface of body, all orifices, and cranial, thoracic and abdominal cavities and their contents. The following tissues will be obtained at necropsy and preserved in neutral buffered formalin:

Adrenals	Aorta	Bone	Brain	Cecum	Colon	Cervix	Duodenum
epididymides	Esophagus	Eyes	Femur	Gallbladder	Heart	Ileum	Jejunum
Kidneys	Liver	Lungs	Lymph nodes	Salivary gl	Mammary Gl	Optic nerves	Ovaries
Pancreas	Pituitary	Gross Lesions	Sciatic Nerve	Skin	Spinal cord	Spleen	Stomach
Administration Site	Thymus	Thyroid	Parathyroid	Trachea	Skeletal Muscle	Vagina	Uterus

All Tissues from control and high dose treated animals will be embedded in paraffin, stained with hematoxylin and eosin, and examined microscopically by a board certified veterinary pathologist. Tissues from the mid and low dose group will be retained and evaluated only if findings were noted in corresponding tissues from high dose treated animals.

#### TEST ARTICLE DOSAGE VERIFICATION:

INFORMATION TO BE SUPPLIED BY THE SPONSOR. (REQUIRED FOR GLP STUDY)

#### PURPOSE:

- o To determine the Maximum Tolerated Dose (MTD) of Lm-LLO-E7 Vector via both s.c. and i.v. routes to female Balb/C
- o To compare the tolerability of Balb/C mice to Lm-LLO-E7 relative to WT Listeria

RATIONALE:

- o 24 Female mice for Dose Range phase.
- Only females will be used since the indication for Lm-LLO-E7 is Cervical Cancer
- o No difference is anticipated between sexes
- Balb/c mice will be used since they are more sensitive to Listeria than C57BL/6 Mice.
- o LD50 for Lm-LLO-E7 in Balb/c mice is reported to be ~108 pfu via ip route.
- o Sensitivity to i.v. route of administration should be greater.
- Dose levels will be adjusted based on results of initial determinations from groups 3 and 6 below.

#### STUDY DESCRIPTION:

Test Article: Lm-LLO-E7 Listeria Monocytogenes Bacterial Vector Control Article: WT Listeria Monocytogenes Vector

ROUTE OF ADMINISTRATION: Intravenous or subcutaneous (as indicated)

A. DOSE RANGE FINDING TOXICITY PHASE:

	ACUTE DOSE RANGE FINDING	TOXICITY STUDY OF LM-LLO-E7	VECTOR IN BALB	/C MICE
GROUP	TREATMENT	DOSE LEVEL (PFU)	ROUTE	NUMBER OF FEMALES
1	WT Listeria	MTD	i.v.	3
2	WT Listeria	MTD	S.C.	3
3	Lm-LLO-E7	106	i.v.	3
4	Lm-LLO-E7	107*	i.v.	3
5	Lm-LLO-E7	108*	i.v.	3
6	Lm-LLO-E7	106	s.c.	3
7	Lm-LLO-E7	107*	s.c.	3
8	Lm-LLO-E7	108*	s.c.	3

\*Based on results of dosing groups 3 and 6 mice.

- Groups 1-2 female Balb/c mice will receive a single i.v. or s.c. dose of WT Listeria on study Day 1 and will be monitored for signs of toxicity. This dose will be based on published data on the known toxicity of WT listeria.
- o Mice in groups 3-5 will be dosed i.v. with increasing doses of LmLLO-E7 starting at 106 pfu. If this dose is well tolerated, a higher dose will be administered until a MTD is established.

o Mice in groups of 6-8 will be dosed s.c. with increasing doses of LmLLO-E7 starting at 106 pfu. If this dose is well tolerated, a higher dose will be administered until a MTD is established.

#### B. MAIN PHASE ACUTE TOXICITY STUDY

Groups of 5 female mice will be dosed once on Study Day 1 as described in the table below. Mice will be administered a single i.v. or s.c. injection of the Lm-LLO-E7 Vector or WT Listeria (Groups 1-2) on Study Day 1.

Mice will be observed for clinical signs and changes in body weight and food consumption during the next 14 days. Surviving mice will be sacrificed on Study day 15, and gross necropsies will be performed.

=======================================			===================	
	ACUTE DOSE IV AND SC TO	XICITY STUDY OF LM-LLO-E7 V	ECTOR IN BALB/0	C MICE
GROUP	TREATMENT	DOSE LEVEL (PFU)	ROUTE	NUMBER OF FEMALES
1	WT Listeria	MTD (sub LD50)	i.v.	5
2	WT Listeria	MTD (sub LD50)	S.C.	5
3	Lm-LLO-E7	106	i.v.	5
4	Lm-LLO-E7	107*	i.v.	5
5	Lm-LLO-E7	108*	i.v.	5
6	Lm-LLO-E7	106	S.C.	5
7	Lm-LLO-E7	107*	S.C.	5
8	Lm-LLO-E7	108*	S.C.	5

o Mice will be dosed once as described in the table above either i.v. or s.c., and will be monitored for clinical signs of toxicity.

o Other assessments will include weekly body weights and food consumption.

 Surviving mice will be weighed and sacrificed on SD 15. Gross necropsies only. Only gross lesions to be retained. PURPOSE: The purpose of this pilot study is to determine the biodistribution of Lm-LLO-E7 vector following a single i.v. administration to female Balb/c mice, and to optimize conditions for PCR detection of Lm-LLO-E7 following i.v. administration in mice.

==========	PILOT B	IODISTRIBUTION 0	F LM-LLO-E7 VECTOR IN	FEMALE MICE	
GROUP	TREATMENT	DOSE LEVEL	ROUTE OF ADMINISTRATION	FEMALES	SCHEDULED SACRIFICES (3 PER TIMEPOINT)
1	Buffer Control	0	Intravenous	4	SD2
2	Lm-LLO-E7 Vector	108 CFU or MTD	Intravenous	12	SD 2, 10, 30

 $\label{eq:clinical observation} \ensuremath{\mathsf{CLINICAL}}\xspace \ensuremath{\mathsf{OBSERVATIONS}}\xspace: \ensuremath{\mathsf{Twice}}\xspace \ensuremath{\mathsf{daily}}\xspace \ensuremath{\mathsf{cageside}}\xspace \ensuremath{\mathsf{observation}}\xspace \ensuremath{\mathsf{for signs}}\xspace \ensuremath{\mathsf{observation}}\xspace \ensuremath{\mathsf{for signs}}\xspace \ensuremath{\mathsf{observation}}\xspace \ensuremath{\mathsf{for signs}}\xspace \ensuremath{\mathsf{signs}}\xspace \ensuremath{\mathsf{for signs}}\xspace \en$ 

 $\ensuremath{\mathsf{PHYSICAL}}$  EXAMS: At randomization, prior to treatment on SD1 and weekly thereafter.

BODY WEIGHTS: At randomization, prior to treatment on SD1 and weekly thereafter.

TERMINAL PROCEDURES: On study day 2, three mice from groups 1 and 2 will be weighed, bled, and sacrificed by CO2 asphyxiation. Blood samples and tissue samples will be obtained and will be analyzed for presence of exogenous Test article DNA using PCR with primers specific for the vector and/or targeted gene. On study days 10 and 30 respectively, three mice per day from group 2 will be weighed, bled and sacrificed and blood and tissue samples obtained and analyzed for exogenous Test article DNA.

- o Gross necropsies will be performed only to obtain Tissues for PCR analysis.
- o A portion of the following tissues will be collected using clean sterile instruments (clean sterile set for each individual animal) and placed in vials and frozen at -80(Degree)C:

Injection Site	Spleen	Small Intestine
Ovaries	Lymph node (1)	Lung
Heart	Brain	Bone Marrow
Kidney	Liver	Blood

PCR ANALYSIS: PCR analysis will be performed on the tissues using primers specific for genetic sequences of the Listeria monocytogenes vector.

TEST ARTICLE DOSAGE VERIFICATION: Information to be supplied by the sponsor.

PURPOSE: To examine the biodistribution of Lm-LLO-E7 Vector following a single intravenous or s.c. injection to female Balb/C mice.

SCOPE: 96 Female Mice

REGULATORY STATUS: GLP

TEST ARTICLE: Lm-LLO-E7

CONTROL ARTICLES: Control Buffer

ROUTES OF ADMINISTRATION: Intravenous and Subcutaneous

 $\ensuremath{\mathsf{PURPOSE}}$  To compare overall biodistribution following either i.v. or s.c. administration of Lm-LLO-E7.

OVERALL DESIGN: Wild-Type female Balb/c mice will be administered a single intravenous or s.c. injection of Lm-LLO-E7 Vector or control saline on Study Day 1 (SD 1) as described in the table below. Six mice per timepoint will be dosed, but only five per timepoint will be sacrificed for PCR analysis.

	BIODISTRIBUTION OF LM-LLO-E7 LISTERIA VECTOR IN FEMALE MICE				
Group	Treatment	Dose Level	Route	Dose Volume (mL/kg)	Females
1	Saline	Θ	i.v.	10	24
2	Lm-LLO-E7 Vector	Low	i.v.	10	24
3	Lm-LLO-E7 Vector	High	i.v.	10	24
4	Lm-LLO-E7 Vector	High	S.C.	10	24

 $\ensuremath{\mathsf{CLINICAL}}$  OBSERVATIONS: Twice Daily cageside observation for signs of mortality, moribundity and/or toxicity

 $\ensuremath{\mathsf{PHYSICAL}}$  EXAMS: At randomization, prior to treatment on SD1 and weekly thereafter.

BODY WEIGHTS: At randomization, prior to treatment on SD1 and weekly thereafter.

TERMINAL PROCEDURES: On study days 2, 10 and 30 and 90, five mice per group will be weighed, bled, and sacrificed by CO2 asphyxiation.

Blood samples will be analyzed for presence of exogenous Test article DNA using PCR with primers specific for the vector and target gene.

Gross necropsies will be performed only to obtain Tissues for PCR analysis.

A portion of the following tissues will be collected using clean sterile instruments (clean sterile set for each individual animal) and placed in small microcentrifuge vials and frozen at -80(Degree)C:

Injection Site	Spleen	Blood
Ovaries	Mesentary lymph node	Lung
Heart	Brain	Bone Marrow
Kidney	Liver	Small Intestine

PCR ANALYSIS: Quantitative PCR will be performed on DNA extracted from above tissue samples and the presence of the vector sequence will be assessed.

TEST ARTICLE DOSAGE VERIFICATION: INFORMATION TO BE SUPPLIED BY THE SPONSOR. (REQUIRED FOR GLP STUDY)

ATTACHMENT 2

#### PRE-CLINICAL TOXICOLOGY STUDIES LM-LLO-E7

TASK	COST
Acute Dose Toxicity and Main Phase Includes dose range finding to find MTD (24 mice) and main phase acute toxicity (40 mice), assessments of weekly body weights and food consumption, and gross pathology with necropsy at 15 days, final clinical and GLP reports.	\$10,632
FOUR WEEK TOXICITY STUDY Includes four weekly vaccinations given to 70 mice, sacrifice at 28 days, chemistry and hematology labs. on 50% of mice, gross pathology, final clinical and GLP reports.	\$31,500
Histology and pathology of 40 tissues per mouse in control and high dose groups (30 mice) by certified veterinary pathologist with histo-pathology report (\$25.00 per tissue)	\$30,000
PILOT BIODISTRIBUTION STUDY Includes 16 mice dosed with 12 serial sacrificed out to 30 days, blood and 11 tissues per mouse collected for PCR analysis of vector and targeted gene, clinical and GLP reports.	\$13,000
BIODISTRIBUTION STUDY Includes 96 mice dosed with 80 serial sacrificed out to 90 days, daily clinical observations, weekly physical exams and body weights, blood and 11 tissues taken for \$31,700 PCR analysis of vector and targeted gene, clinical and GLP reports.	
PCR ANALYSIS Lark will analyze 11 tissues and one blood from 3 groups of mice (12, 60 and 20) Using a targeted assay. Lark will also perform spiking experiments on all samples and extraction efficiency tests. The reactions will be thermal cycled, recorded and analyzed using the ABI PRISM 7700 Sequence Detection System. All work will be \$135,831 conducted under Good Laboratory Practices.	
PROJECT MANAGEMENT Pharm-Olam will management all the studies to assure conducted to Good Laboratory Practices and compliant with the protocol, monitor studies at critical points, weekly sponsor updates, oversee development of all protocols and clinical reports and maintain study timelines. (130 hours @ \$150/hr)	\$19,500
TOTAL	\$272,163

#### ATTACHMENT 3

TIMELINES FOR PRE-CLINICAL TOXICOLOGY STUDIES February 1 - initiate acute dose toxicity study March 1 - initiate main phase acute dose toxicity study March 1 - initiate pilot bio-distribution study April 1 - initiate 4 week multi-dose study May 1 - initiate 90 day bio-distribution study September 1- Final reports completed for all studies

#### MILESTONE PAYMENT CHART

Percent	Cost
10%	\$27,216.30
10%	\$27,216.30
20%	\$54,432.60
20%	\$54,432.60
20%	\$54,432.60
20%	\$54,432.60
	\$272,163
	10% 20% 20% 20%

## STRATEGIC GROWTH INTERNATIONAL, INC.

February 1, 2005

Mr. J. Todd Derbin Chief Executive Officer **ADVAXIS, INC** 212 Carnegie Center, Suite 206 Princeton, NJ 08540

Dear Mr. Derbin:

This letter is to confirm and summarize the agreement under which Strategic Growth International will serve as Investor Relations Consultant to ("Consultant") Advaxis, Inc. ("the Company").

#### DUTIES:

As Investor Relations Consultant, we will:

- a) Consult with the management of the Company on Investor Relations aspects of shareholder communications, including how to arrange and conduct meetings with the professional investment community and investor groups; how to communicate the corporate message to specified audiences, and how to enhance relations with security analysts and the financial press.
- Help develop and implement a comprehensive Investor Relations program as described in Exhibit I of this Agreement.
- c) Provide professional staff services as may be reasonably required to help the Company carry out its programs and objectives.

#### LIABILITY:

The Company agrees to indemnify and hold harmless SGI from and against any and all losses, claims, damages, expenses or liabilities which SGI may incur based upon information, representations, reports or data furnished by the Company to the extent that such material is furnished, prepared or approved by for use by SGI.

scepted by: Agreed To and By: Advaxis, Inc. J. Togd Derbin, CEO

-

Strategic Growth International, Inc. Richard E. Cooper, Chairman

150 East 52nd Street, 22nd Fl., New York, New York 10022 Tel: 1-212-838-1444 / Fax: 1-212-838-1511

#### Page 2

#### **RECORDS AND RECORD KEEPING:**

SGI will maintain accurate records of all out-of-pocket expenditures incurred on behalf of the Company. Authorization for projects and operating activities with costs exceeding \$250 will be obtained in advance before commitments are made.

#### TERMS OF PAYMENT:

Billings will be done monthly in arrears. Expenses and charges will be included in the following month's bill. Payment is due within ten (10) days upon receipt of invoice with the first cash monthly fee of \$7,000 payable in advance on the Effective Date.

#### SERVICE FEES:

SGI shall be immediately available to provide reasonable investor relations services to the Company at no cost until such time as the current registration statement is declared effective by the Securities and Exchange Commission ("Effective Date"). Beginning on the Effective Date, the Company will pay SGI a monthly retainer fee of \$8,000 (U.S.) in cash and \$7,000 in the Company's common stock; such stock shall have piggyback registration rights. The stock will be issued to SGI as soon as trading and a market price are established.

For purposes of determining how many shares are to be issued each month, the price of such stock would be issued at the price that the stock begins trading, with a 15 percent discount factored in due to the stock's restricted nature, but in any event the shares will be priced at no less than \$1.00 per share. The stock will have piggyback registration rights.

Warrant: The Company shall also issue a Warrant ("the Warrant") to purchase 240,000 common stock exercisable at the opening trading price on the date that trading commences, but in any event no less than \$1.00. In the event that the shares underlying the warrant are not fully registered pursuant to an "effective" registration statement within 15 months, the exercise price will be reduced by 15% (a reduction of the opening trading price by 15%). The Warrant will be for 5 years, have piggyback registration rights, and be available for cashless exercise. The Warrant will vest pursuant to the below provision.

The Company will pay SGI a finder's fee for any cash raised by Advaxis from an institution introduced to Advaxis by SGI, pursuant to a written and pre approved list of investors ("Approved Institution"). (Exhibit 2 shall be signed by both parties and shall consist of all the approved Institutions). The finder's fee would be 2% in cash and a warrant for 2% of the shares issued to the Approved Institution exercisable at the financing price with piggyback registration rights and with an exercise period of 5 years. If an Approved Institution invested directly, without the involvement of a placement agent, SGI would receive a cash fee of 5% of the monies raised.

Agreed To and Accepted by: kis. Inc. Adva

J. Todd Derbin, CEO

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Strategic Growth International, Inc. Richard E. Cooper, Chairman

<u>Vesting of the Warrant</u>: The Warrant shall not vest and shall expire unexercised and be surrendered to the Company upon the non renewal or termination of the agreement unless the Company, at its sole discretion, provides SGI with a Warrant Triggering Notice ("Warrant Triggering Notice") 5 days in advance at any time. Should the Company provide SGI with the Warrant Triggering Notice, the Company will begin paying a reduced cash fee of \$8,000 per month and the Warrant shall begin vesting upon the Warrant Triggering Notice and will have a vesting period of 18 months, vesting at the rate of 13,333 shares/month as long as the Agreement is not expired or terminated. Upon such termination or expiration, SGI shall be entitled to the Warrants vested to date.

#### TERM AND TERMINATION OF AGREEMENT:

Term: This agreement shall commence on the Effective Date and extend for 18 months.

**Termination:** The Company shall have the right to terminate this agreement 6 months from the Effective Date and 12 months from the Effective Date upon 10 days prior written notice. Upon such event, assuming the Warrant Triggering Note has been given, SGI shall be entitled to vest no further shares and shall only be entitled to vested shares.

#### RENEWAL

Both parties may agree in writing to renew the Agreement for a fourth period of six months upon the termination of the current Agreement which is 18 months from the Effective Date ("Agreement Termination Date"), in which case vesting of shares pursuant to the Warrant which has not vested up to 240,000 to the agreement termination date shall vest evenly for the renewed 6 month period, in an amount per month that will vest all remaining unvested options.

This agreement shall be governed by and subject to the jurisdiction of and law of New York State.

Please confirm agreement to the above by endorsing all three (3) copies and returning two (2) copies to SGI.

AGREED TO AND ACCEPTED BY:

lis. Inc

J. Todd Derbin, CEO

Strategic Growth International, Inc. Richard E. Cooper, Chairman

#### EXHIBIT 1 Financial Public Relations Duties for Advaxis, Inc.

Strategic Growth International, Inc. will develop a comprehensive financial relation game plan with the following goals, all of which are designed to achieve <u>increased</u> and <u>sustained</u> <u>share value</u>:

1. Develop a coordinated package of financial public relations materials, including PowerPoint, fact sheet, press releases, corporate package, etc., that is acceptable to the Company. SGI will also review and advise on features and functionality of the website in this regard.

2. Immediately introduce the Company to financial intermediaries with the goal of fulfilling the Company's financial needs.

3. Assist in increasing liquidity in the stock with the goal of establishing trading volume of at least 1% of shares outstanding per day, attaining new market makers and introducing the Company to professionals in the investment community.

4. Develop additional and new institutional ownership in the stock, with goal of developing up to 25% new institutional ownership by December 31, 2005.

5. Assist in obtaining at least one additional research from reputable institutional sales boutiques and small cap research analysts.

6. Create financial media opportunities for the Company as appropriate.

7. Obtain invitations to and coordinate participation in at least two financial industry and biotech conferences.

8. Coordinate all day-to-day investor relation's activities – press releases, dissemination of information, earnings conference calls, etc.

9. Assist in creating opportunities for European buying in the stock, with the goal of attaining at least 3-5 European institutions.

10. Assist in obtaining at least one additional analyst report from an unpaid, reputable analyst.

Advaxis, Inc. J. Todd Derbin, President, CEO

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Strategic Growth International, Inc. Richard E. Cooper, Chairman

11. Develop a program of institutional investor road shows, which will be held approximately every 4-6 weeks. Included in our schedule will be NY Metro, Philadelphia, Chicago, San Francisco, Denver, London, Geneva and Zurich.

AGREED TO AND CCEPTED BY: n Advaxis, Inc. J. Todd Derbin, CEO

Date: February 1, 2005

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Date: February 1, 2005

Strategic Growth International, Inc. Richard E. Cooper, Chairman

#### EXHIBIT 2 Approved Institutions Companies Introduced For "Financing Transaction" for Advaxis Inc

# [to be agreed and executed by both parties following the execution of the agreement]

#### ADVAXIS, INC. 212 CARNEGIE CENTER, SUITE 206 PRINCETON, NJ 08540

February 10, 2005

Mr. Richard Berman 420 Lexington Avenue Suite 2420 New York NY 10170

Dear Richard:

This will confirm the agreement of Advaxis, Inc., a Colorado Corporation (the "Company") to nominate you as a member of the board of directors. Your nomination as a board member is based on the desire of the Company to have the benefit of your financial sophistication and board membership experience in connection with a proposed financing of the Company through the offering and sale of its equity or debt of the Company. You shall officially become a board member as soon as you are elected as per the procedure specified in the bylaws of the Company. You agree to execute a confidentiality agreement in the form attached hereto as <u>Exhibit A</u>.

The Company agrees to reimburse you for any reasonable out-of-pocket expenses incurred by you in connection with your attendance at the meetings of the Board.

You shall receive the following compensation for as long as you are a member of the board of directors: (i) a cash fee of \$2,000 per month, and (ii) 400,000 stock options vesting over 4 years on a quarterly basis for as long as you remain a board member (subject to the approval of a new option plan). You may resign from the board at anytime. Your removal shall be in accordance with the bylaws of the Company or by a majority of the other directors.

If the foregoing correctly sets forth our agreement kindly execute, at the place indicated, and return a copy of this letter

Very truly yours

J. Todd Derbin President and Chief Executive Officer

Agreed and accepted: ma Bv rd Berman 2 10.5 68166

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ADVAXIS, INC 212 Carnegie Center Princeton, NJ 08540

February 8, 2005

Vafa Shahabi, Ph.D. 200 Jug Hollew Rd. P.O.Box 21 Valley Forge, PA 19481

Dear Vafa,

#### Re: Employment Agreement

Advaxis, Inc. ("Advaxis" or "Company") would like to offer you the position of Director of Science with an effective start date of March 1st, 2005. The following terms and conditions will apply:

- <u>Capacity, extent of service</u>: You will be employed by Advaxis or its successors for the Term (as defined below) as its Director of Science or other capacity as determined by the President of the Company. This position will report directly to the VP Science of the Company or other person defined by munagement. You shall be responsible to work on and/or manage various rosearch and/or development projects as defined by the Company's management from time to time. During your employment herematics, you shall devote your full business time and your best efforts, business judgment, skill and knowledge to the performance of your duries and responsibilities heremader. You shall not engage in any other business activity or employment during the term of this Agreement, other than matters approved by the President.
- <u>Effective Date. Term.</u> The effective date of this Agreement and your employment (the "Effective Date") shall be the day first written above.
- 3. Salary: your base salary shall be \$100,000 per annum.
- 4. Bonus: You will participate in the Bonus Program with a potential total annual discretionary bonus of \$20,000 ("Bonus"). The Bonus will depend on achieving personal and Company milestones. The CEO of the Company will determine the milestones within the first 30 days of your employment.
- <u>Benefits</u>: In addition to the above you will be entitled to participate in the Company's benefit plan including a 401 (K) plan upon the establishment of such plan by the Company. In addition, you will have 21 vacation days per year.
- <u>Options</u>: You will participate in the Company's 2005 Stock Option Plan ("Plan") upon the approval of such plan by the board of directors and by the shareholders of the Company. You

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shall receive 150,000 (one hundred fifty thousand) options with a 4-year vesting period, all subject to the terms and conditions as set in the Plan. You will be eligible to be considered for additional option grants subject to the Company's fature incentive plans and practices.

- 7. Non-Competition and Non-Solicitation: You shall not for 18 months following the termination of this agreement for any reason: (a) directly or indirectly compete with the Company, or advise or become a purtner or a 1% shareholder or employee in a competing entity (defined as my entity involved in research, development, selling, manufacturing or marketing of vaccines or drugs based on *Listeria Monocytogenes or Listericlosyn O, PEST or AclAI*, or (b) solisit any olients or outsources of the Company for any business that is substantially similar to or competitive with the business or planned business of the Company. You acknowledge and agree that the geographic, length of term, and types of activity restrictions continued in this Section 7 are reasonable and necessary to protect the legitimate business interests of the Company.
- <u>Termination</u>: Following the Ending Date your employment can be terminated by the Company with a 30-day prior notice for any reason. Upon such Termination by Company, Company shall conduct an exit interview and provide the reason for termination.

Upon your acceptance, this letter will contain the agreement and understanding between you and the Company and supersedes any prior or contemporaneous agreements, understandings, communications, offers, representations, warranties, or communications by or on behalf of the Computy (oral or written).

If these terms are agreeable to you, sign and date the letter to the appropriate space at the bottom and return it us.

Succeely,

Advanis Torle TOUS DEPEN Shahabi, PhD Title: St. Research Scientist CED

I understand and accept the terms and conditions of this offer of employment.

Vale Shalli Vafa Shihabi, Ph.D Date: Feb 15, 2005

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March 1, 2005

John Rothman, Ph.D. 77 Bissell Road, Lebanon, NJ 98833

Dear John,

#### Re: Employment Agreement

Advaxis, Inc. ("Advaxis" or "Company") would like to offer you the position of VP Clinical Development with an effective start date of March 7th, 2005. The following terms and conditions will apply:

- <u>Capacity. extent of service</u>: You will be employed by Advaxis or its successors for the Term (as defined below) as a VP Clinical Development or other capacity as determined by the President of the Company. This position will report directly to the CEO of the Company or other person defined by management. You shall be responsible to work on and/or manage various clinical development projects, support certain business development and financing activities as defined by the Company's management from time to time. During your employment hereunder, you shall devote your full business time and your best efforts, business judgment, skill and knowledge to the performance of your duties and responsibilities hereunder. You shall not engage in any other business activity or employment during the term of this Agreement, other than matters approved by the President.
- Effective Date, Term. The effective date of this Agreement (the "Effective Date") shall be the day first written above. This Agreement shall have an original term of 12 months commencing on the Effective Date and ending on February 28th, 2006 ("Ending date"). This Agreement may be extended by both parties in writing.
- <u>Salary</u>: your base salary shall be \$170,000 per annum. Following the closing of a \$15 million equity financing your base salary shall increase to \$180,000.
- 4. Bonus: You will participate in the Bonus Program with a potential total annual discretionary bonus of \$45,000 ("Bonus"). The Bonus will depend on achieving personal and Company milestones. For a partial year the Bonus shall be pro rated for the amount of time you actually were employed by the Company. The milestones required to accomplish your bonus are specified in <u>Exhibit A</u>. At the Company's choice the bonus may be paid in cash or in common shares, the number of common shares issued in lieu of cash will be based on the average closing price in the 30 days preceding the day in which the bonus is approved by the board of directors.
- <u>Benefits</u>: In addition to the above you will be entitled to participate in the Company's benefit plan including a health plan and life insurance, upon the initiation of such plans by the Company.
- 6. <u>Options</u>: You will participate in the Company's 2005 Stock Option Plan ("Plan") upon the approval of such plan by the board of directors and by the shareholders of the Company. You shall receive 360,000 (three hundred sixty thousand) non qualified options with a 4-year vesting period, all subject to the terms and conditions as set in the Plan.

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- 7. Non-Competition and Non-Solicitation: You shall not for 18 months following the termination of this agreement for any reason: (a) directly or indirectly compete with the Company, or advise or become a partner or a 1% shareholder or employee in a competing entity (defined as any entity involved in research, development, selling, manufacturing or marketing of vaccines or drugs based on a core technology substantially similar to Company's), or (b) solicit any clients or customers of the Company for any business that is substantially similar to or competitive with the business or planned business of the Company. You acknowledge and agree that the geographic, length of term, and types of activity restrictions contained in this Section 7 are reasonable and necessary to protect the legitimate business interests of the Company.
- 8. Assignment of Inventions. You agree that you will promptly make full written disclosure to Company, will hold in trust for the sole right and benefit of Company, and hereby assigns, transfers and conveys to Company, or its designee, all of your worldwide right, title, and interest in and to any and all inventions, original works of authorship, findings, conclusions, data, discoveries, developments, concepts, improvements, trade secrets, techniques, processes and know-how, whether or not patentable or registrable under copyright or similar laws, which You may solely or jointly conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, in the performance of the Services or which result, to any extent, from use of Company's premises or property (collectively, the "Inventions"), including, without limitation, any and all intellectual property rights inherent in the Inventions and appurtenant thereto including, without limitation, all patent rights, copyrights, trademarks, know-how and trade secrets (collectively, "Intellectual Property Rights"), Upon the request and at the expense of Company. You shall execute and deliver any and all instruments and dake such other acts as may be necessary or desirable to document the assignment and transfer described herein or to enable Company to secure its rights relating thereto in any and all jurisdictions, or to apply for, prosecute and deliver applents, trademark registrations, copyrights or other intellectual property rights in any and all jurisdictions, or to obtain any extension, validation, re-issue, continuance or renewal of any such intellectual property rights.
  9. Termination: This agreement can be terminated by you or the Company at any time with a
- <u>Termination</u>: This agreement can be terminated by you or the Company at any time with a 30-day prior notice for any reason or for no reason.

Upon your acceptance, this letter will contain the agreement and understanding between you and the Company and supersedes any prior or contemporaneous agreements, understandings, communications, offers, representations, warranties, or commitments by or on behalf of the Company (oral or written).

If these terms are agreeable to you, sign and date the letter in the appropriate space at the bottom and return it us.

Sincerely,

054/55

Advaxis, Inc Toda

J. Todd Deroin Chief Executive Officer

Inderstand and accept the terms and conditions of this offer of employment. John Rothman, PhD Date: 3/4/05

#### Exhibit A

Milestones for 2005 and related % of total bonus

Milestone*	%	
The closing of a \$15 million Equity financing by 12/31/2005	30%	
Completion of patient enrollment by 12/31/2005	30%	
Discretion of CEO	20%	
Completion of strategic drug development plan for her/2 and hTERT	20%	

\* in case of an achievement of a partial milestone the bonus shall be at the Company's sole discretion.



3/4/05

p.4



March 4, 2005

#### Dear John,

Pursuant to section 1 of the Employment Agreement between Advaxis and John Rothman, it is permissible to devote occasional time to certain matters as detailed below. It is understood that these other matters must not in any way, in the sole discretion of Advaxis, impact upon the progress of Advaxis or detract from Dr. Rothman's attention to Advaxis business agenda. These matters include research and product development Advants ousnices agence. These matters include research and product overopment related activities such as supporting patents, reviewing proposed research, reviewing completed research, and so forth. Advaxis reserves the right to determine at any point in the future, for any reason or for no reason, and in its sole discretion that these activities or any of them are in conflict with the Advaxis activities and prohibit them or discontinue the approved status

These commitments include the following projects initiated with Princeton Technology Partners LLC, including: CogniSean<sup>®</sup> Nitif<sup>®</sup>

Wallboard Project

They also include certain support provided to MooringsGroup LLC and/or its principal which in the past has included: Opti-E-Scrip SurfaceLogix<sup>®</sup> Calypso Diagnostics

Agreed and understood:

John Rothman J. Todd Derbin

CEO Advaxis

212 CARNEGIE CENTER, SUITE 206 PRINCETON, NJ 08540 T1: 609.844.7755 T2: 609.497.7655 F: 609.497.9299

### CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors Advaxis, Inc.

We hereby consent to incorporation by reference in Amendment No.1 to the Registration Statement (No. 333-122504) on Form SB-2 of our report dated April 22, 2004 (except for Note 5, Note 8, and the last paragraph of Note 4, as to which the date is March 7, 2005) on the balance sheets of Advaxis, Inc. (a development stage company) as of December 31, 2004 and 2003, and the related statements of operations, stockholders' equity (deficiency), and cash flows for the period March 1, 2002 (inception) to December 31, 2002, the year ended December 31, 2003, and the period March 1, 2002 (inception) to December 31, 2003. We also consent to the reference to our Firm under the caption "Experts".

/s/ Goldstein Golub Kessler LLP

#### **GOLDSTEIN GOLUB KESSLER LLP**

New York, New York

April 7, 2005



800 Third Avenue, 21st Floor New York, NY 10022-7604 Tel (212) 209-3050 Fax (212) 371-5500

April 7, 2005

Securities and Exchange Commission 460 Fifth Street, N.W. Washington, D.C. 20549

#### Re: Advaxis, Inc. Registration Statement on Form SB-2 File No.

Ladies and Gentlemen:

On behalf of our client, Advaxis, Inc., a Colorado corporation (the "*Company*"), we attach for filing under the Securities Act of 1933, as amended (the "*Act*"), by means of the Electronic Data Gathering, Analysis, and Retrieval system, Amendment No. 1 to Registration Statement on Form SB-2 (File No. 0.50621) (the "*Registration Statement*"), together with certain exhibits thereto.

We are in receipt of the letter, dated March 2, 2005 (the "*Comment Letter*"), from Jeffrey Riechter, Esq., Assistant Director, Office of Corporate Finance, of the Securities and Exchange Commission (the "*Commission*"), addressed to the Company. Set forth below are the responses of the Company to the comments set forth in the Comment Letter, numbered to correspond thereto. All capitalized terms used, but not otherwise defined, herein shall have the respective definitions assigned thereto in the filing transmitted herewith.

Comment Number	Page Number	Response
1.	n/a	The Company takes notice that the comments of the Commission regarding specific portions of the filing should also be the basis for appropriate changes in other portions of the filing.
2.	n/a	All non pricing blank sections have been filled.
3.	3-6	The Company has revised the summary in response to your observations.

Comment Number	Page Number	Response
4.	n/a	The registration statement has been revised in response to your observations. Please note that this registration statement is not registering a transaction but rather is a secondary offering.
5.	6	URL information has been added to the SB2
6.	4	Risks of the Company's strategy have been inserted.
7.	6	Our auditors, in their report on our financial statements as of December 31, 2002 and 2003, indicated that the Company has incurred losses from operations, has a working capital deficiency, and a shareholder's deficiency, which raise substantial doubt about the Company's ability to continue as a going concern. As discussed in the accompanying prospectus, subsequent to the issuance of those financial statements the Company has raised additional equity financing and intends to raise additional funds and the going concern qualification is no longer being made. See further discussion in "Management's Discussion and Analysis of Financial Condition and Results of Operations and Plan of Operations - Liquidity and Capital Resources".
8.	several	The Company has revised several risk factors in response to your observations.
9.	21, 80	We have adopted a risk factor regarding secondary trading and have expanded the discussion of such trading;
10.	n/a	See response No. 7. No additional risk factor is necessary.
11.	14	A risk factor disclosing the risks presented by the fact that the Company has no manufacturing, sales or distribution capabilities has been included.
12.	11	A risk factor discussing risks associated with clinical trials has been included.
13.	14	Please see the risk factor included in response to comment 11.
14.	n/a	A disclosure regarding the potential impact of continuing losses has been added in several places.
15.	n/a	See the disclosure included in response to comment 14.
16.	n/a	The document has been revised in several places to disclose with specification the consequences of not raising significant long term capital.
17.	12	In response to your observation, the risk factor has been shortened. The complete description of the complexities remains under "Business Government Regulations"

Comment Number	Page Number	Response
18.	n/a	The risk factor has been removed.
19.	17	The names of key competitors have been included. Market share information is not practically available.
20.	n/a	The Company has not experienced any of these difficulties because its stock is not trading.
21.	n/a	The stock has not traded since inception of the Company.
22.	21	The number of shares issuable on exercise of outstanding warrants and option has been set forth.
23.	22	The disclosure has been revised as requested.
24.	various	The disclosures in the filing in "Recent Developments" and in "Management's Discussion and Analysis of Financial Condition and Results of Operations and Plan of Operations - Overview" and in Note 8 to the financial statements have been revised to omit references to a reverse merger or an accounting acquirer.
25.	27 et seq.	The Section captioned "Management's Discussion and analysis of Financial Condition and Results of Operations and Plan of Operations ("MD&A") has been revised in response to your observation.
26.	29	The requested information has been provided in the MD&A.
27.	36	The following has been added to the MD&A as critical accounting policies: "The preparation of financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, the Company evaluates its estimates, based on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.
		"The Company believes the following critical accounting policy involves significant estimate and judgment. The Company amortizes trademark and patent costs over their estimated useful lives. The Company may be required to adjust these lives based on advances in science and competitor actions. The Company reviews the recorded amounts of trademarks and patents at each period end to determine if their carrying amount is still recoverable based on expectations regarding potential licensing of the intangibles or sales of related products. Such an assessment, in the future, may result in a conclusion that the assets are impaired, with a corresponding charge against earnings.
		"Due to the limited nature of the Company's operations, the Company has not identified any other accounting policies involving estimates or assumptions that are material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change, and where the impact of the estimates and assumptions on financial condition or operating performance is material."
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Comment Number	Page Number	Response
28.	F-10	The following has been added to the disclosures to the financial statements:
		"In accordance with Securities and Exchange Commission (SEC) Staff Accounting Bulletin (SAB) No. 104, revenue from license fees and grants is recognized when the following criteria are met; persuasive evidence of an arrangement exists, services have been rendered, the contract price is fixed or determinable, and collectibility is reasonably assured. In licensing arrangements, delivery does not occur for revenue recognition purposes until the license term begins. Nonrefundable upfront fees received in exchange for products delivered or services performed that do not represent the culmination of a separate earnings process will be deferred and recognized over the term of the agreement.
		"For revenue contracts that contain multiple elements, the Company will determine whether the contract includes multiple units of accounting in accordance with EITF No. 00-21, <i>Revenue Arrangements with Multiple Deliverables</i> . Under that guidance, revenue arrangements with multiple deliverables are divided into separate units of accounting if the delivered item has value to the customer on a standalone basis and there is objective and reliable evidence of the fair value of the undelivered item."
29.	27 et seq	The nine month numbers are no longer included. However the principle of your comment has been observed in preparation of the revised MD&A. Three month first quarter numbers are now included.
30.	n/a	No IND has yet been filed with respect to any of the product candidates.
		4

Comment Number	Page Number	Response
31.	40 et seq	The material terms of the described agreements have been added and the described agreements are being filed as exhibits.
32.	40-47	Patent expiration dates have been added.
33.	60	Mr. Patton's payment was a fixed consulting fee, not a bonus. A description of the basis for Mr. Derbin's bonus has been included.
34.	65-67	The names of the natural persons with voting and dispositive power have been added by footnote.
35.	68-69	The services provided have been added.
36.	n/a	All material agreements have been filed.
37.	71-80	The names of the natural persons with voting or dispositive power have been added by footnote.
38.		We believe this information is already set forth in the narrative on page 20, but have also added it to relevant footnote. Please note that with respect to such persons, the securities were not purchased in the ordinary course of business but rather were received as compensation in the ordinary course with no understanding to distribute the securities
39.		Sunrise Securities Corp. acted as a placement agent, not as an underwriter. We have identified certain selling stockholders as its affiliate.
40.	85	The number of shares has been added.
41.	n/a	We confirm on behalf of the Company the limitation upon substantiating new names for the name of the selling stockholder on the terms you specify in your comment.
42.	n/a	Your point is noted.
43.	n/a	The financial statements have been updated as of January 31, 2005.
44.	n/a	The pro forma balance sheet and the reference to the pro forma balance sheet in note 8, and the pro forma information included in "Summary of Consolidated Financial Data of Advaxis" have been deleted.
45.	F-4	All interim periods have been labeled "unaudited".
46.	F-5	The financial statements have been revised to retroactively record the equivalent number of shares received by Advaxis in the transaction and to record the issuance of the shares to financial advisors in the period of the transaction.

Comment Number	Page Number	Response
47.	F-9	The costs of the intangible assets were substantially incurred at the end of the year, and accordingly, no amortization expense was recorded for the year.
48.	F-12	During the periods, the Company issued options with varying exercise prices, certain of which equaled the fair value of a share of common stock at the grant date, and certain of which exceeded the fair value of a share of common stock at the grant date. Accordingly, the average exercise price has increases although the fair value of the common stock has not fluctuated.
49.	F-12	The cancellation and replacement of option had no accounting consequence based on the provisions of paragraphs 53 and 54 of FIN 44. Note 4 has been modified to disclose the following:
		The cancellation and replacement of option had no accounting consequence since the aggregate intrinsic value of the options immediately after the cancellation and replacement was not greater than the aggregate intrinsic value immediately before the cancellation and replacement, and the ratio of the exercise price per share to the fair value per share was not reduced. Additionally, the original options were not modified to accelerate vesting or extend the life of the new options.
50.	F-13	None of the agreements disclosed in Note 6 are related party transactions. In that regard, we note that paragraph 2 of SFAS No. 57 states that:
		Financial statements shall include disclosures of material related party transactions, <b>other than compensation arrangements</b> , expense allowances, and other similar items in the ordinary course of business (Emphasis Added)
51.	n/a	Your statement regarding review of filed exhibits is noted. Additional exhibits have been filed.
52.	Ex. 5.1	Counsel has agreed to delete the limitations from its opinion and a revised opinion is being filed (Exhibit 5.1)
53.	n/a	Your comment is noted. The Commission file number will be corrected by Amendment.
54.	n/a	The Form 8K dated November 12, 2004, as Amended, is being further amended in response to your comment.
55.	n/a	The Form 8K dated November 12, 2004, as Amended, is being further amended in response to your comment.

Comment Number	Page Number	Response
Closing Comments		The Company takes notice of the Closing Comments.
Please contact the undersigned if we may be of assistance.		
		Sincerely,
		/s/ Gary A. Schonwald
		Gary A. Schonwald
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