

NEOSE TECHNOLOGIES INC
Form 10-K/A
April 29, 2008

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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-K/A
(Amendment No. 1)**

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

for the fiscal year ended December 31, 2007

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

**for the transition period from _____ to
Commission File Number 0-27718**

NEOSE TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

13-3549286

(I.R.S. Employer Identification No.)

**102 Rock Road
Horsham, Pennsylvania**

(Address of principal executive offices)

19044

(Zip Code)

Registrant's telephone number, including area code: **(215) 315-9000**

Securities registered pursuant to Section 12(b) of the Act:

Common Stock, par value \$0.01 per share

The NASDAQ Stock Market LLC

(Title of each class)

(Name of each exchange on which registered)

Securities registered pursuant to Section 12(g) of the Act:

None

(Title of class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

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Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in the definitive proxy statement or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

As of June 30, 2007, the aggregate market value of the registrant's Common Stock held by non-affiliates of the registrant was approximately \$116,082,696 based on the last sale price of the Common Stock on such date as reported by The NASDAQ Stock Market LLC. This calculation excludes 7,280,093 shares held on June 30, 2007 by directors and executive officers.

As of April 24, 2008, there were 54,468,181 shares of the registrant's Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None

Explanatory Note

Neose Technologies, Inc. (we, us, or Company) is filing this Amendment No. 1 to its Annual Report on Form 10-K/A for the fiscal year ended December 31, 2007 to amend and restate Items 10 through 14 to include the information intended to be incorporated therein by reference to the Company's definitive Proxy Statement with respect to the Company's Annual Meeting of Shareholders for 2008, which information was previously intended to be filed with the Securities and Exchange Commission (SEC) within 120 days following the end of the Company's fiscal year ended December 31, 2007. In addition, in connection with the filing of this Form 10-K/A and pursuant to Rule 12b-15 under the Securities Exchange Act of 1934 (Exchange Act), the Company is including certain currently dated certifications. The remainder of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2007 filed on March 10, 2008 remains unchanged.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT.

Board of Directors

Our business, property and affairs are managed by, or under the direction of, our Board of Directors (Board), in accordance with the General Corporation Law of the State of Delaware and our By-Laws. Each member of our Board serves for a one year term or until the election and qualification of his or her successor. The following are the current seven members of our Board:

L. Patrick Gage, Ph.D., 65, has served on our Board since October 2002 and as Chairman of our Board since May 2006. Dr. Gage currently serves as the interim Chief Executive Officer and as a director of PDL BioPharma, Inc., a public biopharmaceutical company. He also serves as a director of three private companies: Acceleron Pharma Inc., Immune Control Inc. and Alvine Pharmaceuticals Inc. Dr. Gage is an advisor to Functional Genetics, Inc., Warburg Pincus LLC, and the Visiting Committee to the Division of the Biological Sciences and the Pritzker School of Medicine at the University of Chicago. From 2003 until early 2008, Dr. Gage was a Venture Partner with Flagship Ventures, a venture capital firm. Dr. Gage served as Senior Vice President, Science and Technology, at Wyeth from 2001 to 2002, and as President of Wyeth Research from 1998 to 2002. Prior to Wyeth, Dr. Gage held positions of increasing responsibility at Genetics Institute, Inc. from 1989 to 1998, culminating with his service as President after the company was acquired by Wyeth. He also spent 18 years at Hoffmann-La Roche, Inc. in various scientific and management positions. He is also a director of two non-profit companies, the Biotechnology Institute and The Philadelphia Orchestra Association. Dr. Gage has a B.S. in physics from the Massachusetts Institute of Technology and a Ph.D. from The University of Chicago.

Brian H. Dovey, 66, has served on our Board since May 2003. He is a Managing Member of Domain Associates, L.L.C., a private venture capital management firm focused on life sciences, and has served in this capacity with the firm since 1988. He has served as Chairman of three companies and on the board of directors of approximately 30 additional companies, including BioVascular Inc., Ocera Therapeutics, Inc., Orexigen Therapeutics, Inc., Orqis Medical Corporation, REVA Medical, Inc., ReVision Optics, Inc., and SkinMedica, Inc. Prior to joining Domain, Mr. Dovey spent six years at Rorer Group, Inc. (now Aventis), including as President from 1986 to 1988. Previously, he was President of Survival Technology, Inc., a start-up medical products company. He also held management positions with Howmedica, Inc., Howmet Corporation, and New York Telephone. Mr. Dovey has served as both President and Chairman of the National Venture Capital Association. He is the chair of the Board of Managers of the Wistar Institute. Mr. Dovey received his B.A. from Colgate University and an MBA degree from the Harvard Business School.

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William F. Hamilton, Ph.D., 69, has served on our Board since 1991. Dr. Hamilton has served on the University of Pennsylvania faculty since 1967, and is the Landau Professor of Management and Technology, and Director of the Jerome Fisher Program in Management and Technology at The Wharton School and the School of Engineering and Applied Science. He serves as a director of NovaDel Pharma Inc., Avid Radiopharmaceuticals, Inc., Yaupon Therapeutics, Inc., and Neuro Diagnostic Devices, Inc. Dr. Hamilton received his B.S. and M.S. in chemical engineering and his MBA from the University of Pennsylvania, and his Ph.D. in applied economics from the London School of Economics.

Douglas J. MacMaster, Jr., 77, has served on our Board since 1993. Mr. MacMaster served as Senior Vice President of Merck & Co., Inc. from 1988 until his retirement in 1992, where he was responsible for worldwide chemical and pharmaceutical manufacturing, the Agvet Division, and the Specialty Chemicals Group. From 1985 to 1988, Mr. MacMaster was President of the Merck Sharp Dohme Division of Merck. Mr. MacMaster serves as a director of Martek Biosciences Corp., a public biological products manufacturing company. He received his B.A. from St. Francis Xavier University, and his J.D. from Boston College Law School.

H. Stewart Parker, 52, has served on our Board since May 2005. Ms. Parker currently serves as the President and Chief Executive Officer of Targeted Genetics Corporation, a public biotechnology company, and has held that position since the company's founding in 1992. From 1981 to 1992, she held various positions at Immunex Corporation, most recently as Vice President, Corporate Development. From 1991 to 1993, Ms. Parker served as President, CEO and director of Receptech Corporation. She serves on the board of directors and the executive committee of the Biotechnology Industry Organization, and as a director of several privately-held companies and not-for-profit organizations. Ms. Parker received her B.A. and MBA from the University of Washington.

Mark H. Rachesky, M.D., 49, has served on our Board since 1999. Dr. Rachesky has served as the President, as well as the founder, of MHR Management LLC and affiliates, investment managers of various private investment funds that invest in inefficient market sectors, including special situation equities and distressed investments, since 1996. From 1990 through 1996, Dr. Rachesky was employed by Carl C. Icahn, initially as a senior investment officer and for the last three years as sole Managing Director of Icahn Holding Corporation, and acting chief investment advisor. Dr. Rachesky is currently on the board of directors of Loral Space & Communications, Inc. (where he is Non-Executive Chairman of the Board), Leap Wireless International, Inc. (where he is Non-Executive Chairman of the Board), NationsHealth Inc., and Emisphere Technologies, Inc.. Dr. Rachesky is a graduate of Stanford University School of Medicine, and Stanford University School of Business. Dr. Rachesky graduated from the University of Pennsylvania with a major in Molecular Aspects of Cancer.

George J. Vergis, Ph.D., 47, has served on our Board since February 2006 and since May 2006 has been our Chief Executive Officer and President. Prior to taking his current position, Dr. Vergis served as our President and Chief Operating Officer from October 2005 to May 2006. Dr. Vergis also served as our Executive Vice President, Commercial and Clinical Development from February 2004 through October 2005. From December 2002 through February 2004, Dr. Vergis served as our Senior Vice President, Business and Commercial Development. He served as our Vice President, Business and Commercial Development from July 2001 to December 2002. From 1996 to May 2001, Dr. Vergis served as Vice President, New Product Development and Commercialization at Knoll Pharmaceutical Company, a division of BASF Pharma, responsible for the commercial planning, product development, and marketing for the immunology franchise. Prior to this position, Dr. Vergis was responsible for managing the endocrine business for BASF Pharma's Knoll Pharmaceutical Division. Dr. Vergis previously held a variety of clinical and medical marketing positions at Wyeth Pharmaceuticals and Warner-Lambert Parke-Davis. Dr. Vergis serves as a director of Woods Services Foundation, a not-for-profit organization. Dr. Vergis received his B.A. in biology and history from Princeton

University, his Ph.D. in physiology from The Pennsylvania State University, and his MBA from Columbia University.

Executive Officers

In addition to our Chief Executive Officer, who is listed above, the current executive officers of the Company are set forth below. Each of our executive officers serves for a one year term or until the election and qualification of his or her successor.

A. Brian Davis, 41, has served as our Senior Vice President and Chief Financial Officer since January 2005. From August 2002 until January 2005, he served as our Vice President, Finance, and from 1994 until August 2002, Mr. Davis served in a variety of positions, most recently as Acting Chief Financial Officer and Senior Director, Finance. From 1991 to 1994, Mr. Davis was employed by MICRO HealthSystems, Inc., a provider of healthcare information systems, where he served most recently as Corporate Controller. Mr. Davis is licensed as a Certified Public Accountant, received his B.S. in accounting from Trenton State College and his MBA from the Wharton School of the University of Pennsylvania.

Shawn A DeFrees, Ph.D., 49, has served as our Senior Vice President, Research and Development, since February 2008. From July 2003 until January 2008, Dr. DeFrees served as our Vice President of Research and Development, and Technology Development, and from July 1999 until July 2003, Dr. DeFrees served as our Senior Director, Discovery Research and New Product Development. Prior to joining the Company, Dr. DeFrees held various scientific and management positions with increasing responsibility at Cytel Corporation, including Director of Medicinal Chemistry, over the period from 1991 until 1999, when Cytel was acquired by the Company. From 1988 to 1991, he served in several scientific positions at Schering-Plough Corporation. Dr. DeFrees received his B.S. in Biochemistry from Albright College, his Ph.D. in Medicinal Chemistry from Purdue University, and his post-doctoral training at the University of Pennsylvania.

Valerie M. Mulligan, 46, has served as our Senior Vice President, Quality and Regulatory Affairs, since March 2007. From October 2005 to March 2007, she served as our Vice President, Quality and Regulatory Affairs. She joined us in 1996 as Manager, Quality Assurance. Prior to joining the Company, she was at Ethicon, Inc. (a Johnson & Johnson Company) from 1992 to 1996, serving most recently as Manager, Corporate Quality Assurance Engineering. From 1983 to 1992, Ms. Mulligan held positions at McNeil Specialty Products Company (a Johnson & Johnson Company) and Squibb-Linson (a Bristol-Myers-Squibb Company). She received her B.Sc. in chemistry, as well as a post-graduate diploma in education, from University College in Dublin.

Bruce A. Wallin, M.D., 58, has served as our Senior Vice President, Clinical Development and Chief Medical Officer since March 2007. From August 2006 to March 2007, he served as Vice President, Clinical Development and Chief Medical Officer. From 2001 to 2005, Dr. Wallin served as Vice President, Clinical Research and Development at Adolor Corporation, where he was responsible for the clinical development of multiple pain management candidates. Prior to joining Adolor, Dr. Wallin was at Abbott Laboratories for nine years and at SmithKline Beecham for 11 years, in similar roles. Dr. Wallin received his Bachelor of Arts degree from Gustavus Adolphus College and his M.D. from the University of Minnesota Medical School.

Section 16(a) Beneficial Ownership Reporting Compliance

Based solely upon a review of reports of stock ownership (and changes in stock ownership) and written representations received by us, we believe that our directors and executive officers met all of their filing requirements under Section 16(a) of the Exchange Act during the year ended December 31, 2007, except for one late filing by each of Dr. Vergis, Mr. Davis, Dr. David Zopf and Ms. Debra Poul, in each case reporting the delivery of shares underlying their restricted stock units in July 2007, and

one filing by Dr. Gage that included one late report of a transaction involving the purchase of 41,600 shares of common stock in June 2007.

Code of Conduct

We have a *Code of Business Conduct and Ethics*, which can be viewed on our website at www.neose.com (under "About Neose Corporate Governance"). We require all employees to adhere to this *Code* in addressing the legal and ethical issues encountered in conducting their work. The *Code of Business Conduct and Ethics* requires that our employees avoid conflicts of interest, comply with all laws and other legal requirements, conduct business in an honest and ethical manner, and otherwise act with integrity and in our best interest. During 2007, all of our employees certified that they reviewed and understood this *Code*.

The *Code of Business Conduct and Ethics* includes procedures for reporting violations of the *Code*. The Sarbanes-Oxley Act of 2002 requires companies to have procedures to receive, retain and treat complaints received regarding accounting, internal accounting controls or auditing matters and to allow for the confidential and anonymous submission by employees of concerns regarding questionable accounting or auditing matters. The *Code of Business Conduct and Ethics* also includes these required procedures, and complies with applicable rules of the SEC and The NASDAQ Stock Market LLC (NASDAQ).

Audit Committee

The Audit Committee consists of three non-employee directors, all of whom are "independent" as defined in our *Corporate Governance Principles* and under the rules of the SEC and NASDAQ. In addition, our Board has determined that each member of the Audit Committee (Dr. Hamilton, Mr. Dovey and Ms. Parker) qualifies as an "audit committee financial expert" as defined in the rules of the SEC. The Audit Committee operates pursuant to a written charter, which can be viewed on our website at www.neose.com (under "About Neose Corporate Governance"). The charter gives the Audit Committee the authority and responsibility for the appointment, retention, compensation and oversight of our independent registered public accounting firm, including pre-approval of all audit and non-audit services to be performed by our independent registered public accounting firm. The charter also gives the Audit Committee broader authority to fulfill its obligations under SEC and NASDAQ requirements.

ITEM 11. EXECUTIVE COMPENSATION.

Compensation Committee

The Compensation Committee of our Board consists of three non-employee directors, all of whom are "independent" under the rules of NASDAQ and as defined in our *Corporate Governance Principles*, and are also "Non-Employee Directors" as defined in SEC Rule 16b-3 and "Outside Directors" as defined under the treasury regulations promulgated under Section 162(m) of the Internal Revenue Code. The Compensation Committee determines the compensation of our Chief Executive Officer, and reviews and takes action on the recommendation of our Chief Executive Officer as to the appropriate compensation of other executive officers. The Compensation Committee is primarily responsible for the administration of our 2004 Equity Incentive Plan, under which stock option grants have been made to employees, including executive officers, and non-employee directors and consultants, and restricted stock units (RSUs) have been granted to executive officers and directors. Refer below to the section entitled "Compensation Discussion and Analysis," under this Item 11, for greater detail regarding the scope of authority of the Compensation Committee and the role others within and outside our organization, such as our management, play in determining compensation levels. The Compensation

Committee is governed by a written charter, which can be viewed on our website at www.neose.com (under "About Neose Corporate Governance").

Compensation Committee Interlocks and Insider Participation

The current members of the Compensation Committee are Douglas J. MacMaster, Jr., L. Patrick Gage, Ph.D. and H. Stewart Parker. None of these individuals has ever been an officer or employee of ours. In addition, none of our executive officers serves as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our Board or the Compensation Committee of our Board.

Compensation Discussion and Analysis

Overview

We are a small company without earnings, competing with companies of all sizes to attract a workforce with the skills and talent necessary to develop drugs and achieve our objectives. Given that funding for compensation is limited, we have tried to devise a compensation structure that can attract management with the essential experience and skills needed at the executive level, while minimizing, to the extent possible, cash outlays. We have done this by combining base salary with variable compensation and stock options.

Each element of our executives' compensation takes into account corporate performance, although as further described below, some elements may focus more heavily on short- or long-term performance and some elements also take into consideration particular recruitment and retention objectives.

Process

The Compensation Committee of our Board (the Committee) is responsible for determining the compensation of our Chief Executive Officer, and reviews and takes action on the recommendation of our Chief Executive Officer as to the appropriate compensation of our other executive officers, including the named executive officers included in the Summary Compensation Table below under this Item 11. The Compensation Committee is primarily responsible for the administration of our 2004 Equity Incentive Plan, under which stock option grants have been made to employees, including the named executive officers, as well as non-employee directors and consultants, and RSUs have been granted to executive officers and directors.

The Committee consists of three non-employee directors, all of whom are "independent" under the rules of NASDAQ and as defined in our *Corporate Governance Principles*, and are also "Non-Employee Directors" as defined in SEC Rule 16(b)-3 and "Outside Directors" as defined under the treasury regulations promulgated under Section 162(m) of the Internal Revenue Code. The Report of the Compensation Committee is set forth below under this Item 11.

The Committee does not use outside consultants. The Committee meets annually at the end of each calendar year and at least once at the beginning of each calendar year regarding compensation decisions. These meetings are typically scheduled months in advance. At its meeting at the end of each year, the Committee determines the information it wishes to receive to enable it to make compensation decisions regarding the budget for annual salary increases for the subsequent year, awarding of bonuses for the year about to be completed, and annual grants of stock options to employees, including executive officers. Based on this information, the Committee makes compensation decisions at its meeting or meetings at the beginning of the subsequent year. Management assembles and distributes to the Committee in advance of the meetings the information requested by the Committee, and conducts annual performance reviews of all employees, including the named executive officers other than the Chief Executive Officer. The results of these reviews are included in the materials circulated to the

Committee, along with the Chief Executive Officer's recommendations for the compensation for our executive officers. The Committee is responsible for monitoring and reviewing the performance of the Chief Executive Officer on an ongoing basis.

The implementation of our compensation approach is supported by the corporate and individual ratings that have been established to inform the Committee about performance. In each case, the possible ratings are: "exceeds expectations," "meets expectations," "meets some expectations" and "below expectations." The Chief Executive Officer makes a recommendation about the rating of the Company based on the achievement of the corporate objectives for the year and the Committee makes the final determination.

Elements of Compensation

The three basic elements of our executive compensation are:

Base salary;

Variable compensation, consisting of annual bonuses based on individual and corporate performance; and

Initial and annual grants of long-term stock options.

We believe this combination of elements provides reasonable fixed compensation on which our executives can rely, while providing both short-term and long-term performance incentives.

Base Salaries

Faced with competition from large pharmaceutical companies and biotechnology companies for employees skilled in regulatory affairs, clinical operations, process development, fermentation, quality control, quality assurance, manufacturing, analytics, and other areas relevant to drug and technology development, we aim to provide sufficient fixed compensation for our executive officers, targeting the 50th percentile of industry benchmarks, using Radford Surveys and other publicly-reported or available information about other companies that we from time to time identify as relevant comparators. The Committee also considers other factors, including internal pay equity, the unique qualifications and experience and performance of particular executives, as well as negotiations and input from search consultants.

Base salaries are reviewed annually for adjustment based on evaluations of corporate and individual performance in the preceding year, again taking into account performance, internal pay equity and industry comparables as well as available information about general and industry-specific salary increase data. Our Chief Executive Officer's performance is evaluated exclusively by the Committee and the performance of other named executive officers is evaluated by our Chief Executive Officer. Ultimately, all salary determinations for our named executive officers are made by the Committee, which is free to accept or reject the recommendations of our Chief Executive Officer.

Annual Bonuses

Under our annual bonus program, each employee is eligible to receive a target annual bonus expressed as a percentage of his or her base salary for the year. Target bonus percentages are 35% for vice presidents, 50% for senior and executive vice presidents, and 75% for our Chief Executive Officer. These target percentages are established annually by the Committee, not with reference to any particular benchmark, but rather based on the experience and judgment of its members. Our Chief Executive Officer's target percentage is set at 75% pursuant to his employment agreement.

Payment of our annual bonuses is based primarily on corporate and individual performance. At the start of each year, our corporate performance objectives are established by our Chief Executive Officer,

the Committee and our Board, and individual performance objectives are established by our Chief Executive Officer for each executive officer (other than our Chief Executive Officer) as a way to communicate our expectations and to maintain and unify our executives' focus on key strategic objectives, as well as to measure performance. For our Chief Executive Officer, his individual performance objectives are the same as our corporate performance objectives.

For 2007, our corporate performance objectives approved by the Committee included:

With respect to NE-180 (GlycoPEG-EPO), complete a Phase II clinical trial in Europe, and continue clinical development, including commencement of an additional Phase II trial;

With respect to GlycoPEG-G-CSF, with our partner, BioGeneriX AG, complete the initial Phase I trial in Europe, complete a second Phase I trial, and take other steps to advance clinical development; and

Move other programs forward, including our collaboration with Novo Nordisk A/S.

The corporate objectives were not specifically weighted. The individual objectives of the named executive officers were designed to support the corporate objectives, and to enable the Chief Executive Officer and the Committee to evaluate the performance of each executive officer.

The achievement, or failure to achieve, the corporate or individual performance objectives described above inform the Committee's determination regarding the payment of annual bonuses, but is not entirely determinative. Whether or not the listed objectives are achieved, the Committee may choose to pay bonuses above or below the target level noted above, based on its own evaluation of each named executive's performance and consideration of other factors it deems relevant, such as changes in the Company's strategy or business objectives necessitated by a changing business environment, or retention value. And just as it seeks input from our Chief Executive Officer when adjusting base salaries, the Committee seeks input of our Chief Executive Officer in evaluating individual executive's performance (other than the performance of the Chief Executive Officer himself) for purposes of awarding annual bonuses.

Annual bonuses for 2007 were paid entirely in cash.

Stock Options

We have also chosen to use equity compensation (primarily stock options) to provide long-term upside to our executives without cash outlay by us, and to align their interests with those of our stockholders. We also believe that stock options and other equity grants serve as an effective retention device for executives.

We adopt annual guidelines, expressed in the number of shares for which options will be granted, for stock option grants based on job level. These guidelines are based on the experience and judgment of members of the Committee, rather than directly on benchmarks. The current option guidelines provide for grants of options to purchase 20,000 shares of Common Stock to vice presidents, and grants to of options to purchase 35,000 shares of Common Stock to senior and executive vice presidents. Other than in extraordinary circumstances, such as promotions, options are granted annually at a previously scheduled meeting in accordance with these guidelines to all employees, including the named executive officers. In all cases, options are priced at the closing price for our Common Stock on the date of grant.

The Committee approves all grants of stock options to executive officers. Generally, each option is exercisable over a ten-year period (subject to earlier termination in the event of a cessation of employment) at the closing price of our Common Stock on the date of grant and vests in equal annual installments over a four-year period. In connection with the recruitment of key executives, we have made exceptions to the vesting schedules of certain grants. This was the case for some of the options

granted to Dr. Vergis when he was hired in 2001, as well as for certain awards made to our named executive officers in March 2007 that were intended to encourage retention in light of our restructuring.

Our stock options will provide a benefit to the executive officer only if he or she remains employed by or otherwise in service to the Company during the vesting period, and then only if the market price of our Common Stock has increased before the expiration of the exercise period. During 2007, the Committee granted stock options to our executive officers to purchase an aggregate of 640,000 shares of Common Stock.

Allocation Between Different Compensation Elements

Rather than setting a total level of target compensation and allocating that total amount among different compensation elements, the Committee determines appropriate levels of the principal elements of our executive officers' compensation independently. The Committee is nonetheless cognizant of total compensation levels and believes that its efforts to appropriately size each of the three principal elements of our executive officers' compensation has resulted in total compensation levels that are appropriate and reasonable.

2007 and 2008 Compensation Actions

On April 30, 2007, we entered into an amended and restated employment agreement with Dr. Vergis, and new change of control agreements with certain executive officers, including: David A. Zopf, our former Executive Vice President and Chief Scientific Officer; Debra J. Poul, our former Senior Vice President, General Counsel and Secretary; A. Brian Davis, our Senior Vice President and Chief Financial Officer; and Bruce A. Wallin, our Senior Vice President, Clinical Development and Chief Medical Officer. The Committee's decision to amend or replace the existing agreements with these executives was made in the wake of our March 2007 restructuring, which included a reduction in force of approximately 40%. The Committee considered the ways in which this restructuring was different from our prior restructurings, how that had affected morale and expectations among employees, and the retention problems inherent in the Company's recent history and current financial situation. The Committee also took into account the promotion of Dr. Wallin from Vice President to Senior Vice President in March 2007. With these factors in mind, the Committee approved the changes to the executives' agreements described below, as part of the executives' retention packages following the March 2007 restructuring.

Amended and Restated Employment Agreement. The Amended and Restated Employment Agreement we entered into with Dr. Vergis on April 30, 2007 (the Vergis Amendment) made the following changes to Dr. Vergis' rights in connection with a cessation of his employment in the absence of a Change in Control due to a termination without Cause or a resignation for Good Reason (as those terms are defined in the Vergis Amendment):

a pro-rata annual bonus will be paid for the year of termination; and

the expiration date of his stock options was extended from December 31st of the year of termination to the first anniversary of termination.

The Vergis Amendment also made the following changes to Dr. Vergis' rights and obligations in connection with a cessation of his employment within 18 months following a Change in Control due to a termination without Cause or a resignation for Good Reason:

a pro-rata annual bonus will be paid for the year of termination;

the expiration date of his stock options was extended from December 31st of the year of termination to the date that is 30 months following termination;

his cash severance was increased from two to 2.5 times his base salary plus target bonus; and

the duration of his post termination non-competition period was increased from 24 to 30 months.

The Vergis Amendment also eliminated our ability to reduce Dr. Vergis' base salary or bonus opportunities without triggering his right to resign and collect severance (whereas his prior agreement allowed certain limited reductions in his base salary and bonus opportunities, if done simultaneously with reductions for other executives).

Change of Control Agreements. The Change of Control Agreements we entered into with Dr. Zopf, Ms. Poul, Mr. Davis and Dr. Wallin on April 30, 2007 (the COC Agreements) made the following changes to each of those executive's rights and obligations in connection with a cessation of employment in the absence of a Change of Control due to a termination without Cause or a resignation for Good Reason (as defined in each COC Agreement):

a pro-rata annual bonus will be paid for the year of termination;

the cash severance was increased from 6 months of base salary to one year of base salary plus target bonus;

the duration of subsidized post-termination medical benefits was extended from 6 to 12 months; and

the duration of the post termination non-competition period was increased from 6 to 12 months.

The COC Agreements also make the following changes to each executive's rights and obligations in connection with a cessation of employment within 12 months following a Change of Control due to a termination without Cause or a resignation for Good Reason:

a pro-rata annual bonus will be paid for the year of termination;

the cash severance was increased from one to 1.5 times base salary plus target bonus;

the duration of subsidized post-termination medical benefits was extended from 12 to 18 months;

the expiration date of stock options was extended from 12 to 18 months following termination; and

the duration of the post termination non-competition period was increased from 12 to 18 months.

In addition to the foregoing, the Committee made year-end compensation determinations for the named executive officers as follows.

At its February 4, 2008 meeting, the Committee made regularly scheduled stock option grants to all employees in accordance with its pre-existing guidelines. In making these grants, the Committee reasoned that the awards are, by nature, forward-looking and intended, in accordance with our compensation strategy, to provide long-term incentive. Furthermore, for these grants, the Committee considered not only the forward-looking nature of the annual stock option grants, but also their potential retention value in light of the numerous restructurings implemented by the Company, including the just announced January 2008 restructuring. Accordingly, consistent with past practice and our option guidelines, the Committee approved the grant of stock options in the full guideline amount for each named executive officer, totalling an aggregate of 170,000 shares of our Common Stock to our named executive officers.

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At the same February 2008 meeting, the Committee also implemented a retention award program designed to retain and motivate those employees who were not terminated as a result of the restructuring implemented by us in January 2008. While non-executive employees were granted both cash and equity awards, the Committee determined that, due to the nature of their positions and the Committee's desire to link their long-term incentives to the Company's long-term performance, executive officers be granted only equity awards as part of the retention award program. As a result, the Committee granted special retention stock options to the named executive officers in amounts equal to the annual stock option grant made at the same February 2008 meeting, totalling options to purchase an aggregate of 170,000 shares of our Common Stock to our named executive officers.

Stock option grants made in 2007 are detailed below in the table entitled "Grants of Plan-Based Awards."

At the same February 2008 meeting, the Committee rated our 2007 performance as "meets some expectations" based on our performance to objectives as of the date of the meeting. The Committee evaluated the individual performance of each named executive officer (with the input of our Chief Executive Officer regarding the performance of named executive officers other than himself) in the context of the challenges faced by us during 2007 and concluded that certain individual performances "meet expectations," while other individual performances "meet some expectations." The Committee, after considering the factors described above under the heading "Base Salaries" and the need to retain and motivate executive management to meet the challenges of 2008, voted to increase the base salary of each named executive officer by 4%.

In addition, based on this rating, and the recommendation of our Chief Executive Officer, the Committee awarded, at its February 2008 meeting, bonuses to the named executive officers at 60% of target for individuals who met expectations (Ms. Poul) and at 50% of target for individuals who met some expectations (Mr. Davis and Dr. Wallin). For Mr. Davis, the award was equal to 25% of his 2007 base salary; for Ms. Poul, the award was equivalent to 30% of her 2007 base salary; and for Dr. Wallin, the award was equivalent to 23.2% of his 2007 base salary. The bonus award for Dr. Wallin reflects a proration of his target bonus amount, due to his promotion from Vice President to Senior Vice President during 2007. Dr. Zopf was not awarded a bonus for 2007 due to his resignation prior to the Committee's determination of awards. In making these awards, the Committee reviewed and considered the individual performance to objectives and recommended rating of each executive, and our progress towards our corporate performance objectives through the date of the meeting. The Committee also took into account the high level of commitment and performance of the executives in the face of significant obstacles and the need to motivate and retain the remaining executives following our January 2008 restructuring.

Having rated our performance as "meets some expectations," the Committee decided to increase Dr. Vergis' base salary by 4% and award him 50% of his target bonus, or 37.5% of his salary.

In March 2008, the Committee set target bonus percentages for 2008. The target percentages for 2008 are the same as those in effect for 2007 and noted above: Chief Executive Officer 75% of base salary; Executive Vice Presidents and Senior Vice Presidents 50% of base salary; and Vice Presidents 35% of base salary.

Severance and Change in Control Arrangements

The specific terms of our severance and change in control arrangements are discussed in detail below under the heading "Potential Payments Upon Termination or Change in Control." As a general matter, however, we believe that reasonable severance and change in control protection for our named executive officers is necessary in order for us to recruit and retain qualified executives.

We have defined the events that would trigger severance rights in a manner that we believe is reasonable and consistent with current, conventional market practices. For example, the definition of "Good Reason" contained in our employment and change in control agreements is intended to be limited to true circumstances of constructive discharge and includes notice and opportunity to cure provisions, so that severance rights are not triggered by us inadvertently.

Similarly, all of the severance commitments in our employment or change in control arrangements are of the "double trigger" variety that is, in order for a severance obligation to arise, there must occur both a change in control and an affirmative action by us or our successor to terminate (or constructively terminate) an executive's employment. Finally, any severance obligation arising under our employment and change in control agreements is conditioned on the affected executive's execution of a release of claims against us and our affiliates.

Tax and Accounting Considerations Affecting Executive Compensation

The compensation paid to our executives is generally subject to taxation at ordinary rates and no particular attempt is made to alter that result. We do, however, attempt to structure our arrangements so that our executives are not subject to tax penalties (such as additional taxes arising under Section 409A of the Internal Revenue Code). Our efforts in this regard have not materially affected the terms of our compensation arrangements.

The deductibility limit of Section 162(m) of the Internal Revenue Code has not been implicated by our compensation arrangements in the past and, accordingly, the Committee has not purposefully altered its compensation approach to conform to the requirements of available Section 162(m) exemptions (although stock options issued under our 2004 Equity Incentive Plan should generally meet the requirements for treatment as "qualified performance-based compensation" and, therefore, gains realized upon the exercise of those options should generally be exempt from the \$1 million deductibility cap of Section 162(m)).

We endeavor to design our equity incentive awards conventionally, so that they are accounted for under the standard governing equity-based arrangements and, more specifically, so that they are afforded fixed treatment under that standard. We have not, however, materially altered the design of our awards as a result of changes over the last few years to the standard for accounting for equity-based compensation.

Compensation Committee Report

We, the members of the Compensation Committee, have reviewed and discussed the foregoing Compensation Discussion and Analysis with management. Based on our review and discussion with management, we have recommended to the Board of Directors that the Compensation Discussion and Analysis be included in the Company's Form 10-K for the year ended December 31, 2007.

Compensation Committee of the Board of Directors:

Douglas J. MacMaster, Jr., Chairman
L. Patrick Gage, Ph.D.
H. Stewart Parker

Summary Compensation Table

The following table provides information about all compensation earned in 2007 by the individuals who served as our Chief Executive Officer during 2007, our Chief Financial Officer and the three other most highly compensated executive officers during 2007 (collectively referred to as the "named executive officers"):

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards \$(1)	Option Awards \$(2)	All Other Compensation (\$)	Total (\$)
George J. Vergis, President and Chief Executive Officer	2007	364,000	136,500	1,073	374,008	7,065	882,646
	2006	322,767	262,500	21,144	486,947	6,940	1,100,298
A. Brian Davis, Senior Vice President and Chief Financial Officer	2007	270,400	67,600	1,073	104,889	56,347(3)	500,309
	2006	248,588	155,368	18,719	121,920	56,774	601,369
David A. Zopf, Former Executive Vice President and Chief Scientific Officer(4)	2007	293,586		952	105,281	5,865	405,684
	2006	276,205	138,102	20,378	137,016	5,740	577,441
Debra J. Poul, Former Senior Vice President and General Counsel(5)	2007	282,984	84,895	1,073	100,288	5,865	475,105
	2006	266,395	133,198	21,272	136,920	5,740	563,525
Bruce A. Wallin, Senior Vice President, Clinical Development(6)	2007	260,000	60,420		64,541	240	385,201

- (1) The amounts shown in this column represent the expense amount recognized for financial statement reporting purposes for the fiscal years ended December 31, 2007 and 2006, in accordance with Statement of Financial Accounting Standards (SFAS) No. 123 (revised 2004), *Share-Based Payment* (SFAS No. 123R). See Note 12 to the Notes to our financial statements included in Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2007 filed with the SEC on March 10, 2008 for assumptions used in recognizing these expense amounts. These amounts reflect RSUs that vested during 2007 or 2006, respectively, that were granted in lieu of bonuses for fiscal years ended December 31, 2004 and 2005 and in lieu of salary increases for the fiscal year ended December 31, 2005. RSUs were only granted to our named executive officers who were executive officers at each respective grant date. Dr. Wallin was not an executive officer on any of the grant dates and thus was not granted any RSUs.
- (2) These amounts represent the expense amount recognized for financial statement purposes for the fiscal years ended December 31, 2007 and 2006, in accordance with SFAS No. 123R. The 2007 amounts reflect that portion of stock options awarded in 2007 and in prior years that vested in 2007. The 2006 amounts reflect that portion of stock options awarded in 2006 and in prior years that vested in 2006. See Note 12 to the Notes to our financial statements included in Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2007 filed with the SEC on March 10, 2008 for assumptions used in determining the grant date fair value of these awards.
- (3) Includes forgiveness of principal and interest of \$29,981 and an additional tax gross-up payment of \$20,501 pursuant to a tuition reimbursement agreement between us and Mr. Davis.

- (4) Dr. Zopf's employment with us terminated on January 7, 2008.
- (5) Ms. Poul's employment with us terminated on February 8, 2008.
- (6) With respect to Dr. Wallin, information for the fiscal year ended December 31, 2006 is omitted because Dr. Wallin was not a named executive officer in our definitive proxy statement filed with the SEC on April 3, 2007.

Grants of Plan-Based Awards

The following table provides information about grants of stock options made during 2007 to each of our named executive officers.

Name	Grant Date	All Other Stock Awards: Number of Shares of Stock or Units	All Other Option Awards: Number of Securities Underlying Options(1)	Exercise or Base Price per Share of Option Awards (\$)	Grant Date Fair Value of Stock and Option Awards (\$)
George J. Vergis	01/31/2007		100,000	2.19	163,000
	03/27/2007		100,000	2.51	171,000
David A. Zopf	01/31/2007		35,000	2.19	57,050
	03/27/2007		35,000	2.51	59,850
Debra J. Poul	01/31/2007		35,000	2.19	57,050
	03/27/2007		35,000	2.51	59,850
A. Brian Davis	01/31/2007		35,000	2.19	57,050
	03/27/2007		35,000	2.51	59,850
Bruce A. Wallin	01/31/2007		20,000	2.19	30,400
	03/27/2007		35,000	2.51	58,100

- (1) The amounts shown in this column reflect stock options granted to our named executive officers pursuant to our 2004 Equity Incentive Plan. The stock options that were granted on January 31, 2007 vest in four equal installments on the first, second, third and fourth anniversary of the grant date. The stock options that were granted on March 27, 2007 vest in two equal installments on six month and one year anniversary of the grant date. The expiration of each stock option is the 10th anniversary of the grant date.

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Outstanding Equity Awards at 2007 Fiscal Year-End

The following table provides information about the equity awards held as of December 31, 2007 by each of our named executive officers.

Name	Option Awards(1)			
	Number of Securities Underlying Unexercised Options: Exercisable	Number of Securities Underlying Unexercised Options: Unexercisable	Option Exercise Price (\$)	Option Expiration Date
George J. Vergis	175,000		38.25	07/11/2011
	5,000		29.00	12/13/2011
	35,000		10.62	12/12/2012
	35,000		7.45	02/12/2013
	45,000	15,000	11.68	02/03/2014
	17,500	17,500	4.22	02/24/2015
	17,500	17,500	2.29	10/07/2015
	12,500	37,500	2.29	01/30/2016
	75,000	225,000	3.08	02/15/2016
		100,000	2.19	01/31/2017
	50,000	50,000	2.51	03/27/2017
David A. Zopf(2)	15,000		13.50	12/02/2008
	12,500		14.00	12/07/2009
	25,000		28.75	12/21/2010
	25,000		29.00	12/13/2011
	30,000		10.62	12/12/2012
	35,000		7.45	02/12/2013
	33,750	11,250	11.68	02/03/2014
	17,500	17,500	4.22	02/24/2015
	8,750	26,250	2.29	01/30/2016
		35,000	2.19	01/31/2017
	17,500	17,500	2.51	03/27/2017
Debra J. Poul(2)	5,000		19.44	01/31/2010
	5,000		28.75	12/21/2010
	7,500		29.00	12/13/2011
	50,000		11.61	05/27/2012
	35,000		10.62	12/12/2012
	35,000		7.45	02/12/2013
	26,250	8,750	11.68	02/03/2014
	17,500	17,500	4.22	02/24/2015
	8,750	26,250	2.29	01/30/2016
		35,000	2.19	01/31/2017
	17,500	17,500	2.51	03/27/2007

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A. Brian Davis	5,000		13.50	12/02/2008
	7,500		14.00	12/07/2009
	10,000		28.75	12/21/2010
	12,000		29.00	12/13/2011
	15,000		7.60	08/13/2012
	20,000		7.45	02/12/2013
	15,000	5,000	11.68	02/03/2014
	35,000	35,000	4.22	02/24/2015
	8,750	26,500	2.29	01/30/2016
		35,000	2.19	01/31/2017
	17,500	17,500	2.51	03/27/2017
Bruce A. Wallin	10,000	30,000	2.53	08/01/2016
		20,000	2.19	01/31/2017
	17,500	17,500	2.51	03/27/2017

- (1) Option awards vest as follows:
- a. Grants with expiration dates in the years 2008 through 2013, are all fully vested.
 - b. Grants with the expiration date of March 27, 2017 vest 50% after six months of the date grant and 50% after the first anniversary of the grant. These grants are 50% vested.
 - c. All other grants vest one-fourth on the first anniversary of the date of grant, one-fourth on the second anniversary of the date of grant, one-fourth on the third anniversary of the date of grant and one-fourth on the fourth anniversary of the date of grant. Grants with expiration dates in 2014 are 75% vested, grants with expiration dates in 2015 are 50% vested, grants with expiration dates in 2016 are 25% vested and grants with expiration date of January 31, 2017 have not vested at all.
 - d. All option awards have a term of 10 years.
- (2) All of the unvested options held by Dr. Zopf and Ms. Poul were forfeited immediately on their respective dates of termination. All of their remaining options expire and are forfeited three months following their termination date (such dates being April 7, 2008 in the case of Dr. Zopf, and May 8, 2008 in the case of Ms. Poul).

Option Exercises and Stock Vested during Fiscal Year 2007

There were no options or other derivative securities exercised in 2007 by our named executive officers. The following table provides information about stock awards held by each of our named executive officers that vested in 2007.

Name	Stock Awards	
	Number of Shares Acquired on Vesting	Value Realized on Vesting (\$)
George J. Vergis	4,039(1)	8,522
David A. Zopf	4,039(1)	8,522
Debra J. Poul	4,039(1)	8,522
A. Brian Davis	4,039(1)	8,522
Bruce A. Wallin(2)		

(1)

The amounts represent awards of RSUs granted in place of cash bonuses for the fiscal year ended December 31, 2005. Each award vests in quarterly installments over the year following grant date of the award. The final vest date for these awards was January 30, 2007. Pursuant to the terms of the award, each award was settled on July 30, 2007 by the delivery of shares of our Common Stock to the award recipient. The value of these shares on the date of delivery was, in each case, \$8,078.

(2)

RSUs were only granted to our named executive officers who were officers at each respective grant date. Dr. Wallin was not an officer on any of the grant dates and thus was not granted any RSUs.

Nonqualified Deferred Compensation for Fiscal Year 2007

The following table provides information about defined contribution or other plans that provide for the deferral of compensation on a basis that is not tax-qualified for each of our named executive officers:

Name	Registrant Contribution in Last Fiscal Year (\$)	Aggregate Earnings in Last Fiscal Year (\$)(1)	Aggregate Withdrawals/ Distributions (\$)(2)	Aggregate Balance at Last Fiscal Year End (\$)
George J. Vergis		(2,787)	24,232	
David A. Zopf		(2,787)	24,232	
Debra J. Poul		(2,787)	24,232	
A. Brian Davis		(2,787)	24,232	
Bruce A. Wallin(3)				

(1)

The amounts shown in this column reflect the aggregate change in value of previously vested RSU awards from January 1, 2007 through the date the RSU awards were settled by delivery of shares of our Common Stock (July 30, 2007).

(2)

The amounts shown in this column reflect the aggregate value of RSU awards that vested prior to January 1, 2007 and that were settled by the delivery of shares of our Common Stock to the award recipient during 2007. The value of each award was calculated using the closing price of our Common Stock on the date of the delivery (July 30, 2007).

(3)

RSUs were only granted to our named executive officers who were officers at each respective grant date. Dr. Wallin was not an officer on any of the grant dates and thus was not granted any RSUs.

Potential Payments upon Termination or Change in Control

The following is a discussion of payments and benefits that would be due to each of our named executive officers upon the termination of his or her employment with us. The amounts in the tables below assume that each termination was effective as of December 31, 2007. These are merely illustrative of the impact of a hypothetical termination of each executive's employment, based on the terms of arrangements then in effect. The amounts to payable upon an actual termination of employment can only be determined at the time of such termination, based on the facts and circumstances then prevailing. David A. Zopf's employment with the Company terminated on January 7, 2008. Dr. Zopf voluntarily terminated his position with us and, therefore, did not receive any payments upon termination other than accrued but unpaid salary and vacation time. Debra J. Poul's employment with the Company terminated on February 8, 2008, as part of the January 2008 restructuring. Upon termination, Ms. Poul received the following pursuant to the terms of her Change of Control Agreement dated April 30, 2007:

a lump sum cash payment of \$15,118 representing a pro-rata portion of her target annual bonus for 2008;

a lump sum cash payment of \$292,894 representing one year of her current base salary;

a lump sum cash payment of \$141,492 representing one year of her current target bonus;

a lump sum cash payment of \$84,895 representing her bonus for 2007;

the continuation of medical benefits for a period of one year commencing from the date of the termination at a monthly cost to her equal to her monthly contribution toward the cost of such coverage immediately prior to her termination with a value of \$5,627;

reasonable executive outplacement services with an approximate value of \$8,500; and

payment of her accrued but unpaid salary and vacation time through her date of termination.

Defined Terms. The following terms are used throughout this section:

Cause means fraud, embezzlement, or any other illegal act committed intentionally by the executive in connection with his or her employment or the performance of his or her duties as an officer or director or, in the case of all executives other than Dr. Vergis, the executive's conviction of, or plea of guilty or *nolo contendere* to, any felony.

Change in Control means a change in ownership or control of us effected through any of the following transactions:

The direct or indirect acquisition by any person or related group of persons (other than us or a person that directly or indirectly controls, is controlled by, or is under common control with, us) of beneficial ownership (within the meaning of Rule 13d-3 of the Exchange Act) of securities possessing more than 50% of the total combined voting power of our outstanding securities;

A change in the composition of our Board over a period of 36 months or less such that a majority of our Board members ceases, by reason of one or more contested elections for Board membership, to be comprised of individuals who either (a) have been Board members continuously since the beginning of such period, or (b) have been elected or nominated for election as Board members during such period by at least a majority of our Board members described in clause (a) who were still in office at the time such election or nomination was approved by our Board;

The consummation of any consolidation, share exchange or merger of us (a) in which our stockholders immediately prior to such transaction do not own at least a majority of the voting power of the entity which survives/results from such transaction, or (b) in which one of our

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stockholders who does not own a majority of our voting stock immediately prior to such transaction, owns a majority of our voting stock immediately after such transaction; or

The liquidation or dissolution of us or any sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all or substantially all of our assets, including stock held in subsidiary corporations or interests held in subsidiary ventures.

Disability means the executive's inability, by reason of any physical or mental impairment, to substantially perform his or her regular duties, as determined by our Board in its sole discretion, which inability is reasonably contemplated to continue for at least one year from its commencement and at least 90 days from the date of our Board's determination.

Good Reason means the occurrence of any of the following events or conditions without the executive's prior written consent:

a change in the executive's title (not including, with regard to Dr. Vergis, his election to the position of Chairman of the Board);

a reduction in the executive's authority, duties or responsibilities, or the assignment to the executive of duties that are inconsistent, in a material respect, with the executive's position;

the relocation of our headquarters more than 15 miles from Horsham, Pennsylvania, unless the move reduces the executive's commuting time;

a reduction in the executive's base salary or in the target amount, expressed as a percentage of base salary, of the annual bonus; or

our failure to pay or make available any material payment or benefit due under to the executive or any other material breach by us of any employment or change of control agreement in place with the executive.

However, any of the events or conditions described above will only constitute Good Reason if (a) the executive provides us with written objection to the event or condition within 60 days following his or her knowledge of the occurrence of the event or the condition, (b) we do not reverse or otherwise cure the event or condition within 30 days of receiving the executive's written objection and (c) the executive resigns his or her employment within 90 days following the expiration of the cure period.

George J. Vergis, Ph.D.

We are a party to an amended and restated employment agreement with Dr. Vergis dated as of April 30, 2007. In accordance with the terms of such agreement, we are obligated to make certain payments to Dr. Vergis related to the termination of his employment.

Termination Without Cause or Resignation for Good Reason. If we terminate Dr. Vergis without Cause or Dr. Vergis resigns for Good Reason, Dr. Vergis shall be entitled to:

a lump sum cash amount equal to a pro-rata portion of his target annual bonus for the calendar year in which the termination occurs;

a lump sum cash amount equal to his then current base salary;

a lump sum cash payment equal to his target annual bonus for the calendar year in which the termination occurs; and

to the extent not already paid, any annual bonus payable with respect to a calendar year that ended prior to his termination.

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In addition to the foregoing payments, all outstanding stock options then held by Dr. Vergis which would have become vested and exercisable had Dr. Vergis remained continuously employed by us for an additional 12 months will immediately become vested and exercisable and all vested and exercisable stock options held by Dr. Vergis as of the date of termination (including those stock options that vest upon termination) will remain exercisable for the shorter of (i) the 12-month period immediately following his cessation of employment, or (ii) the period remaining until the scheduled expiration of the option (determined without regard to his cessation of employment).

Termination Due to Death or Disability. If Dr. Vergis' employment is terminated due to his death or Disability, Dr. Vergis (or his representative(s), heirs, estate or beneficiaries) will be entitled to receive the payments set forth above with regard to a termination without Cause; *provided, however,* that any payments will be offset by the amount of benefits paid to him (or his representative(s), heirs, estate or beneficiaries) pursuant to the life insurance or long-term disability plans, policies or arrangements by virtue of his death or Disability (including, for this purpose, only that portion of such life insurance or disability benefits funded by us or by premium payments made by us).

Termination Following a Change in Control. If Dr. Vergis' employment with us ceases within eighteen months following a Change in Control (either as a result of a termination by us without Cause or a resignation by Dr. Vergis for Good Reason), then Dr. Vergis shall be entitled to:

a lump sum cash amount equal to a pro-rata portion of his target annual bonus for the calendar year in which the termination occurs;

a lump sum cash payment equal to two and a half times his then current base salary;

a lump sum cash payment equal to two and a half times his target annual bonus for the calendar year in which the termination occurs;

to the extent not already paid, any annual bonus payable to Dr. Vergis with respect to a calendar year that ended prior to his termination; and

in the event any of the foregoing payments to Dr. Vergis would result in the imposition of a parachute excise tax under Internal Revenue Code section 4999, an additional "gross-up" payment to insulate Dr. Vergis from the effect of the tax.

In addition to the foregoing payments, all outstanding stock options then held by Dr. Vergis will immediately become vested and exercisable and will remain exercisable for the shorter of (i) the 30-month period immediately following his cessation of employment, or (ii) the period remaining until the scheduled expiration of the option (determined without regard to his cessation of employment).

Timing of Payments Following Termination. All of the payments and benefits described above are contingent upon Dr. Vergis' execution and delivery of a release in a manner consistent with the requirements of the Older Workers Benefit Protection Act (Release). All lump sum payments described above will be paid on the eighth day following the Dr. Vergis' execution and delivery of a Release (provided that such Release has not been revoked by Dr. Vergis). Any annual bonus payable to Dr. Vergis with respect to a calendar year that ended prior to that termination will be paid along with the payment of such bonuses to other employees or officers entitled to a bonus.

Non-Compete Agreement. Dr. Vergis is bound by certain non-competition and non-solicitation covenants which extend for a period of one year following termination of employment (30 months if his employment ceases due to a termination by us without Cause or due to a resignation by Dr. Vergis with Good Reason within 18 months following a Change in Control).

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Assuming Dr. Vergis' employment terminated under each of the circumstances described above on December 31, 2007, the payments and benefits have an estimated value of:

	Salary Continuation (\$)	Target Bonus (\$)	Accrued, but Unpaid Bonus (\$)	Value of Options Subject to Acceleration (\$)(1)	Excise Tax Gross-Up (\$)	Total (\$)
Resignation for Good Reason	364,000	273,000	273,000			910,000
Termination without Cause	364,000	273,000	273,000			910,000
Termination due to Death	164,000(2)	273,000	273,000			710,000
Termination due to Disability(3)						
Termination following a Change of Control	910,000	682,500	273,000		770,796(4)	2,649,106

- (1) This column is intended to represent the value of unvested stock options to purchase an aggregate of 462,500 shares of Common Stock, based on the difference between the exercise price of the options and \$1.07, the closing price of our Common Stock on December 31, 2007. Because the per share closing price of our Common Stock on December 31, 2007 was less than the exercise price of each option that would be subject to acceleration, no amount is shown. The actual value realized will vary depending on the date the option is exercised and the closing price of our Common Stock on such date.
- (2) This amount reflects the \$364,000 lump sum otherwise payable to Dr. Vergis' beneficiary or heir, offset, in accordance with his agreement, by the \$200,000 death benefit payable under our group life plan.
- (3) Our group long-term disability plan would provide Dr. Vergis with monthly payments through age 65 of \$10,000 per month. The present value of that stream of payments would exceed Dr. Vergis' base salary and target bonus and, accordingly, in accordance with Dr. Vergis' agreement, would fully offset the lump sum otherwise payable to him.
- (4) This amount does not reflect the value of Dr. Vergis' thirty-month non-competition and non-solicitation agreement with us. Such value may be offset from the parachute payments attributed to Dr. Vergis in connection with a Change in Control. If the value of that non-competition and non-solicitation agreement is at least \$575,000, no excise tax would be due under Section 4999 of the Internal Revenue Code and no gross-up payment would be necessary.

A. Brian Davis and Bruce A. Wallin, M.D.

We are a party to a change of control agreement with each of Mr. Davis and Dr. Wallin. In accordance with the terms of each individual's agreement, we are obligated to make certain payments related to the termination of each individual's employment.

Termination Without Cause or Resignation for Good Reason. If we terminate the executive's employment without Cause or the executive resigns for Good Reason, the executive shall be entitled to:

a lump sum cash amount equal to a pro-rata portion of the executive's target annual bonus for the calendar year in which the termination occurs;

a lump sum cash payment equal to one year of the then current executive's base salary;

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a lump sum cash payment equal to one year of the executive's target annual bonus for the calendar year in which the termination occurs;

the continuation of medical benefits to the executive (and, if covered immediately prior to such termination, his or her spouse and dependents) for a period of one year commencing from the date of termination at a monthly cost to the executive equal to the employee's monthly contribution, if any, toward the cost of such coverage immediately prior to such termination; and

reasonable executive outplacement services by a provider selected by the mutual agreement of us and the executive.

The payments and benefits described above are in lieu of (and not in addition to) any other severance arrangement maintained by us.

Termination Due to Death or Disability. If the executive's employment is terminated due to death or Disability, the executive (or his or her representative(s), heirs, estate or beneficiaries) will be entitled to receive the payments set forth above with regard to a termination without Cause; *provided, however,* that any payments will be offset by the actuarial present value of benefits payable to the executive (or his or her representative(s), heirs, estate or beneficiaries) pursuant to the life insurance or long-term disability plans, policies or arrangements by virtue of the executive's death or Disability (including, for this purpose, only that portion of such life insurance or disability benefits funded by us or by premium payments made by us).

Termination Following a Change in Control. If the executive's employment ceases within 12 months following a Change in Control (either as a result of a termination by us without Cause or a resignation by the executive for Good Reason), then the executive shall be entitled to:

a lump sum cash amount equal to a pro-rata portion of the executive's target annual bonus for the calendar year in which the termination occurs;

a lump sum cash payment equal to eighteen months of the executive's then current base salary;

a lump sum cash payment equal to one and a half times the executive's target annual bonus for the calendar year in which the termination occurs;

the continuation of medical benefits to the executive (and, if covered immediately prior to such termination, his or her spouse and dependents) for a period of 18 months commencing from the date of termination at a monthly cost to the executive equal to the employee's monthly contribution, if any, toward the cost of such coverage immediately prior to such termination;

reasonable executive outplacement services; and

in the event any of the foregoing payments would result in the imposition of a parachute excise tax under Internal Revenue Code section 4999, an additional "gross-up" payment to insulate the executive from the effect of the tax.

In addition to the foregoing, all outstanding stock options then held by the executive will immediately become vested and exercisable and will remain exercisable for up to 18 months following the executive's date of termination, notwithstanding any inconsistent language in any equity incentive plan or agreement.

Timing of Payments Following Termination. All of the payments and benefits described above are contingent upon the executive's execution and delivery of a Mutual Release. All lump sum payments described above will be paid on the eighth day following the executive's execution and delivery of a Release (provided that such Release has not been revoked by the executive).

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Non-Compete Agreement. Each executive is bound by certain non-competition and non-solicitation covenants, which apply during the term of employment and for a period of 18 months following termination (in the case of a severance event in connection with a Change of Control), and 12 months following termination (in the case of termination for any other reason).

Assuming Mr. Davis' employment is terminated under each of the circumstances described above on December 31, 2007, the payments and benefits have an estimated value of:

	Salary Continuation (\$)	Target Bonus (\$)	Accrued, but Unpaid Bonus (\$)	Medical Benefits \$(1)	Outplacement Services \$(2)	Value of Options Subject to Acceleration \$(3)	Excise Tax Gross-Up (\$)	Total (\$)
Termination without Cause	270,400	135,200	135,200	14,650	8,500			563,950
Termination due to Death	70,400(4)	135,200	135,200	14,650	8,500			363,950
Termination due to Disability	(5)	(5)	(5)	14,650	8,500			23,150
Termination following a Change of Control	405,600	202,800	135,200	21,975	8,500			774,075

- (1) This amount represents the estimated amount of our share of the cost of medical benefits for Mr. Davis and his eligible dependents for 12 or 18 months, as applicable.
- (2) This amount represents the estimated cost to us to provide Mr. Davis with reasonable outplacement services.
- (3) This column is intended to represent the value of unvested stock options to purchase an aggregate of 118,750 shares of Common Stock, based on the difference between the exercise price of the options and \$1.07, the closing price of our Common Stock on December 31, 2007. Because the per share closing price of our Common Stock on December 31, 2007 was less than the exercise price of each option that would be subject to acceleration, no amount is shown. The actual value realized will vary depending on the date the option is exercised and the closing price of our Common Stock on such date.
- (4) This amount reflects the \$270,400 lump sum otherwise payable to Mr. Davis' beneficiary or heir, partially offset, in accordance with the terms of Mr. Davis' agreement, by the \$200,000 death benefit payable under our group life insurance plan.
- (5) Our group long-term disability plan would provide Mr. Davis with monthly payments for through age 65 of \$10,000 per month. This table assumes that the actuarial present value of that stream of payments would exceed twelve months of Mr. Davis base salary plus bonus payments due (\$405,600) and accordingly, in accordance with the terms of Mr. Davis' agreement, would fully offset the lump sum otherwise payable to him.

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Assuming Dr. Wallin's employment is terminated under each of the circumstances described above on December 31, 2007, the payments and benefits have an estimated value of:

	Salary Continuation (\$)	Target Bonus (\$)	Accrued, but Unpaid Bonus (\$)	Medical Benefits \$(1)	Outplacement Services \$(2)	Value of Options Subject to Acceleration \$(3)	Excise Tax Gross-Up (\$)	Total (\$)
Termination without Cause	260,000	130,000	130,000	14,650	8,500			543,150
Termination due to Death	60,000(4)	130,000	130,000	14,650	8,500			343,150
Termination due to Disability	(5)	(5)	(5)	14,650	8,500			23,150
Termination following a Change of Control	390,000	195,000	130,000	21,975	8,500			745,475

- (1) This amount represents the estimated amount of our share of the cost of medical benefits for Dr. Wallin and her eligible dependents for 12 or 18 months, as applicable.
- (2) This amount represents the estimated cost to us to provide Dr. Wallin with reasonable outplacement services.
- (3) This column is intended to represent the value of unvested stock options to purchase an aggregate of 67,500 shares of Common Stock, based on the difference between the exercise price of the options and \$1.07, the closing price of our Common Stock on December 31, 2007. Because the per share closing price of our Common Stock on December 31, 2007 was less than the exercise price of each option that would be subject to acceleration, no amount is shown. The actual value realized will vary depending on the date the option is exercised and the closing price of our Common Stock on such date.
- (4) This amount reflects the \$260,000 lump sum otherwise payable to Dr. Wallin's beneficiary or heir, partially offset, in accordance with the terms of Dr. Wallin's agreement, by the \$200,000 death benefit payable under our group life insurance plan.
- (5) Our group long term disability plan would provide Dr. Wallin with monthly payments for through age 65 of \$10,000 per month. This table assumes that the actuarial present value of that stream of payments would exceed twelve months of Dr. Wallin's base salary plus bonus payments due (\$390,000) and accordingly, in accordance with the terms of Dr. Wallin's agreement, would fully offset the lump sum otherwise payable to him.

Compensation of Directors

Directors who are also our employees receive no additional compensation for serving as a director or as a member of any Committee of our Board. During 2007, each non-employee director was entitled to receive an annual retainer of \$14,000, except for the Chairman of the Board, who was entitled to receive an annual retainer of \$40,000. Upon initial election or appointment to our Board, each non-employee director receives an option to purchase 30,000 shares of our Common Stock (or 25,000 shares in the case of the Chairman of the Board), and on the date of each annual meeting of stockholders, each non-employee director re-elected to our Board receives an option to purchase 10,000

shares of our Common Stock. Each automatic option grant has an exercise price equal to the fair market value of our Common Stock on the date of grant. Each automatic grant is immediately exercisable, and has a term of ten years, subject to earlier termination following the director's cessation of service on our Board. Any shares purchased upon exercise of the option are subject to repurchase should the director's service as a non-employee director cease prior to vesting of the shares. The initial automatic option grant of shares vests in successive equal, annual installments over the director's initial four-year period of Board service. Each annual automatic option vests upon the director's completion of one year of service on our Board, as measured from the grant date. Each outstanding option vests immediately, however, upon certain changes in the ownership or control of the Company.

Non-employee directors were compensated during 2007 for their services at each meeting of our Board they attended at the following rates: \$2,500 for Board meetings attended in person (except for the Chairman of the Board, who was paid at a rate of \$5,000 per meeting attended in person), and \$1,000 for telephonic meetings of our Board attended by any member of our Board. During 2007, non-employee directors were also paid an annual retainer for service on Board Committees and were compensated for their services at each meeting of a Board Committee which they attend, at the following rates:

Committee/Position	Retainer (\$)	Meeting Fee (\$)
<i>Audit Committee</i>		
Chair	8,000	3,000
Member	4,000	1,500
Telephonic meetings or participation by telephone for Chair or member	n/a	1,500
<i>Corporate Governance and Compensation Committees</i>		
Chair	4,000	2,000
Member	2,000	1,000
Telephonic meetings or participation by telephone for Chair or member	n/a	1,000

All Board members are reimbursed for their reasonable travel expenses incurred to attend meetings of our Board or Committees of the Board on which they serve.

In 2007, our directors, except Dr. Vergis who does not receive any additional compensation for his role as director, received the following compensation:

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$)(1)(2)	Total (\$)
L. Patrick Gage, Ph.D.	76,500	15,633	92,133
C. Boyd Clarke(3)	5,500		5,500
Brian H. Dovey	33,000	15,633	48,633
William F. Hamilton, Ph.D.	44,500	15,633	60,133
Douglas J. MacMaster, Jr.	36,500	15,633	52,133
H. Stewart Parker	36,000	24,977	60,977
Mark H. Rachesky, M.D.	21,000	15,633	36,633
Lowell E. Sears(3)	13,500	5,300	18,800
Elizabeth Wyatt(3)	6,500	5,300	11,800

(1)

Reflects the dollar amount recognized for financial statement reporting purposes for the fiscal year ended December 31, 2007, in accordance with SFAS No. 123R and, thus, includes amounts from awards granted in, and prior to, 2007. Assumptions used in the calculation of the grant date fair value of these awards are included in Note 12 to our

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audited financial statements included in Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2007 filed with the SEC on March 10, 2008. The grant date fair value of each option award, computed in accordance with SFAS No. 123R, is as follows:

Name	Grant Date	Option Awards: Number of Securities Underlying Options	Grant Date Fair Value of Option Awards (\$)
L. Patrick Gage, Ph.D.	05/04/2006	10,000	15,900
	05/04/2007	10,000	15,500
Brian H. Dovey	05/04/2006	10,000	15,900
	05/04/2007	10,000	15,500
William F. Hamilton, Ph.D.	05/04/2006	10,000	15,900
	05/04/2007	10,000	15,500
Douglas J. MacMaster, Jr.	05/04/2006	10,000	15,900
	05/04/2007	10,000	15,500
H. Stewart Parker	05/03/2005	30,000	49,941
	05/04/2006	10,000	15,900
	05/04/2007	10,000	15,500
Mark H. Rachesky, M.D.	05/04/2006	10,000	15,900
	05/04/2007	10,000	15,500
Lowell E. Sears	05/04/2006	10,000	15,900
Elizabeth Wyatt	05/04/2006	10,000	15,900

(2)

As of December 31, 2007, our directors, except Dr. Vergis whose outstanding equity awards are listed in the Outstanding Equity Awards at 2007 Fiscal Year-End Table, had the following aggregate number of outstanding equity awards:

Name	Aggregate Number of Outstanding Option Awards	Aggregate Number of Outstanding Restricted Stock Unit Awards
L. Patrick Gage, Ph.D.	107,147	8,197
Brian H. Dovey*	72,147	2,869
William F. Hamilton, Ph.D.	75,154	5,738
Douglas J. MacMaster, Jr.	106,779	8,197
H. Stewart Parker	50,000	2,869
Mark H. Rachesky, M.D.	102,729	5,738
Lowell E. Sears**	368	
Elizabeth Wyatt**	6,457	

*

Mr. Dovey is a managing member of Domain Associates, LLC (Domain), a private venture capital management firm. The number of option awards includes options to purchase 42,147 shares of Common Stock held by Domain that were transferred to Domain from Mr. Dovey pursuant to an arrangement between Mr. Dovey and Domain.

**

Mr. Sears and Ms. Wyatt served on our Board until May 4, 2007.

(3)

Mr. Clarke, Mr. Sears and Ms. Wyatt served on our Board of Directors until May 4, 2007.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT.**Equity Compensation Plan Information**

The following table gives information about our Common Stock that may be issued upon the exercise of options, warrants and rights or the conversion of RSUs under all of our existing equity compensation plans as of December 31, 2007.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights and delivery of shares underlying RSUs	Weighted-average exercise price of outstanding options, warrants, rights, and RSUs (\$)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in second column)
Equity compensation plans approved by securityholders	4,602,061	8.01	1,686,514
Equity compensation plans not approved by securityholders			
Total	4,602,061	8.01	1,686,514

Stock Ownership of our Directors, Executive Officers, and 5% Beneficial Owners

The following table shows information known to us about beneficial ownership (as defined under the regulations of the SEC) of our Common Stock by:

Each person we know to be the beneficial owner of at least five percent of our Common Stock;

Each current director;

Each executive officer named in our Summary Compensation Table; and

All current directors and executive officers as a group.

Unless otherwise indicated, the information is as of April 24, 2008.

On April 24, 2008, there were 54,468,181 shares of our Common Stock outstanding. To calculate a stockholder's percentage of beneficial ownership, we include in the numerator and denominator those shares underlying Common Stock derivatives, such as options, warrants and RSUs, that a person has the right to acquire within 60 days after April 24, 2008. Common Stock derivatives held by other stockholders are disregarded in this calculation. Therefore, the denominator used in calculating beneficial ownership among our stockholders may differ. Unless we have indicated otherwise, each person named in the table below has sole voting power and investment power for the shares listed opposite such person's name.

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Name of Beneficial Owner	Number of Shares of Common Stock Beneficially Owned	Percent of Shares Outstanding
Tang Capital Partners, LP(1) 4401 Eastgate Mall San Diego, CA 92121	4,577,157	8.4%
Eastbourne Capital Management, L.L.C.(2) 1101 Fifth Avenue Suite 160 San Rafael, CA 94901	4,344,932	8.0%
Kopp Investment Advisors, LLC(3) 7701 France Avenue South Suite 500 Edina, MN 55435	3,692,729	6.8%
Visium Asset Management, LLC(4) 950 Third Avenue New York, NY 10022	3,445,849	6.3%
Potomac Capital Management LLC(5) 825 Third Avenue 33 rd Floor New York, NY 10022	3,274,133	6.0%
Felix J. Baker and Julian C. Baker(6) 667 Madison Avenue New York, NY 10021	3,015,292	5.5%
OrbiMed Advisors, LLC(7) 767 Third Avenue 30th Floor New York, NY 10017	2,727,450	5.0%
<i>Directors and Named Executive Officers</i>		
Mark H. Rachesky(8)	4,760,953	8.7%
Brian H. Dovey(9)	4,686,038	8.6%
George J. Vergis(10)	682,985	*
Debra J. Poul(10)	289,247	*
David A. Zopf(10)	32,445	*
A. Brian Davis(10)	232,205	*
L. Patrick Gage(10)	170,044	*
Douglas J. MacMaster, Jr.(10)	158,916	*
William F. Hamilton(10)	143,728	*
H. Stewart Parker(10)	52,869	*
Bruce Wallin(10)	50,000	*
All current directors and executive officers as a group (11 persons)(8)(9)(10)	11,229,495	19.2%

*

Less than one percent.

(1)

According to a Schedule 13G/A filed with the SEC on February 14, 2008: (i) Tang Capital Partners is the record and beneficial owner of 4,577,157 shares, and shares voting and

dispositive power over such shares with Tang Capital Management and Kevin C. Tang, (ii) Tang Capital Management, as the general partner of Tang Capital Partners, may be deemed to beneficially own the 4,577,157 shares held of record by Tang Capital Partners, (iii) Kevin C. Tang, as manager of Tang Capital Management, may be deemed to beneficially own the 4,577,157 shares held of record by Tang Capital Partners. Mr. Tang disclaims beneficial ownership of all shares reported herein except to the extent of his pecuniary interest in such shares. The amount in the table above excludes warrants to purchase 1,113,861 shares of our Common Stock that were purchased in our March 2007 equity financing since, according to the Schedule 13G/A, Tang Capital Partners and its affiliates expressly disclaim beneficial ownership of the shares underlying such warrants based on a provision of the warrants stating that in no event shall the warrant be exercisable to the extent that the issuance of Common Stock upon exercise thereof, after taking into account the Common Stock then owned by Tang Capital Partners and its affiliates, would result in the beneficial ownership by Tang Capital Partners and its affiliates of more than 4.99% of the outstanding Common Stock (the "Issuance Limitation"). Tang Capital Partners has the express right to waive the Issuance Limitation upon sixty-one (61) days written notice to the Company. According to the Schedule 13G/A, the Issuance Limitation presently remains in effect with respect to such warrant and no shares are currently issuable upon exercise of such warrant.

(2)

According to a Schedule 13G/A filed with the SEC on February 12, 2008: (i) each of Eastbourne Capital Management, L.L.C. (Eastbourne) and Richard Jon Barry (Mr. Barry) reported beneficial ownership of, and shared voting and dispositive power over, 4,344,932 shares; (ii) Black Bear Offshore Master Fund, L.P. (Black Bear Offshore) reported beneficial ownership of, and shared voting and dispositive power over, 2,946,514 shares; (iii) Eastbourne is the General Partner of Black Bear Offshore and (vi) Mr. Barry and Eastbourne disclaim beneficial ownership of the shares reported, except to the extent of their respective pecuniary interests therein.

(3)

According to a Schedule 13D filed with the SEC on March 28, 2008: (i) Kopp Investment Advisors, LLC (KIA) is an investment adviser registered under the Investment Advisers Act of 1940; (ii) KIA is wholly owned by Kopp Holding Company LLC (KHC LLC), which is controlled by Mr. Leroy C. Kopp (Mr. Kopp); (iii) KIA reported sole voting power over 3,676,729 shares and shared dispositive power over 1,917,729 shares; (iv) KHC LLC reported beneficial ownership of 3,676,729 shares; and (v) Mr. Kopp reported beneficial ownership of 3,692,729 shares, of which Mr. Kopp reported sole dispositive power over 1,775,000 shares.

(4)

According to a Schedule 13G filed with the SEC on July 11, 2007: (i) Visium Asset Management, LLC (VAM) is the investment advisor to Visium Balanced Fund, LP (VBF), Visium Long Bias Fund, LP (VLBF), Visium Balanced Fund Offshore, Ltd. (VBFO) and Visium Long Bias Fund Offshore, Ltd. (VLBFO), (ii) Visium Capital Management, LLC (VCM) is the General Partner of VBF and VLBF, (iii) Atlas Master Fund, Ltd (AMF), (iv) Dr. Jacob Gottlieb (Dr. Gottlieb) is the principal of VAM and the sole managing member of VCM, (v) VBF reported shared voting and dispositive power and beneficial ownership of 754,049 shares, (vi) VLBF reported shared voting and dispositive power and beneficial ownership of 339,634 shares, (vii) VBFO reported shared voting and dispositive power and beneficial ownership of 1,19,624 shares, (viii) VLBFO reported shared voting and dispositive power and beneficial ownership of 1,088,074 shares, (ix) VAM reported sole voting and dispositive power and beneficial ownership of 3,445,849 shares, (x) AMF reported sole voting and dispositive power and beneficial ownership of 64,468 shares and (xi) Dr. Gottlieb reported sole voting and dispositive power and beneficial ownership of 3,445,849 shares.

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- (5) According to a Schedule 13G filed with the SEC on February 16, 2007: (i) Paul J. Solit (Mr. Solit) is the Managing Member of Potomac Capital Management LLC; (ii) Mr. Solit is the President and sole owner of Potomac Capital Management Inc.; (iii) each of Potomac Capital Management LLC, Potomac Capital Management Inc., and Mr. Solit reported beneficial ownership of 2,197,401 shares; and (iv) each of Potomac Capital Management LLC, Potomac Capital Management Inc., and Mr. Solit reported shared voting and dispositive power over 2,197,401 shares. The amount in the table above also includes 742,574 shares of our Common Stock and warrants to purchase 334,158 shares of our Common Stock that were purchased in our March 2007 equity financing.
- (6) According to a Schedule 13G filed the SEC on April 27, 2007: (i) Baker Bros. Investments I, L.P. reported shared voting and dispositive power and beneficial ownership of 15,752 shares, (ii) Baker Bros. Investments II, L.P. reported shared voting and dispositive power and beneficial ownership of 17,881 shares, (iii) Baker Biotech Fund I, L.P. reported shared voting and dispositive power and beneficial ownership of 808,577 shares, (iv) Baker Brothers Life Sciences, L.P. . reported shared voting and dispositive power and beneficial ownership of 2,073,384, (v) 14159, L.P. reported shared voting and dispositive power and beneficial ownership of 66,368 shares, (vi) Baker/Tisch Investments, L.P. reported shared voting and dispositive power and beneficial ownership of 33,330 shares and (vii) Mr. Felix J. Baker and Julian C. Baker each reported shared voting and dispositive power and beneficial ownership of 3,015,292 shares, by virtue of their ownership of the above mentioned entities that have the power to control the investment decision of the limited partnerships listed above. Includes warrants to purchase 779,704 shares of our Common Stock that were purchased in our March 2007 financing.
- (7) According to a Schedule 13G/A filed with the SEC on February 14, 2008: (i) Samuel D. Isaly (Mr. Isaly) is the President of OrbiMed Advisors LLC; (ii) Mr. Isaly is the Managing Member of OrbiMed Capital LLC; (iii) OrbiMed Advisors LLC reported shared voting and dispositive power and beneficial ownership of 1,603,700 shares; (iv) OrbiMed Capital LLC reported shared voting and dispositive power and beneficial ownership of 1,123,750 shares; and (v) Mr. Isaly reported shared voting and dispositive power and beneficial ownership of 2,727,450 shares. Includes warrants to purchase 846,450 shares of our Common Stock that were purchased in our March 2007 financing.
- (8) Includes 3,538,625 shares and warrants to purchase 1,113,861 shares held by MHR Capital Partners Master Account LP (MHRCPMA), MHR Capital Partners (100) LP (MHRCP 100), MHR Advisors LLC (MHRAL), and OTT LLC, as disclosed in a Form 4 filed with the SEC on April 3, 2007. Dr. Rachesky is a member of OTT LLC and the managing member of MHRAL, the general partner of MHRCPMA, MHRCP 100 and MRLLP. Also includes 108,467 shares issuable to Dr. Rachesky under stock options and RSUs that are deemed exercisable within 60 days after April 24, 2008. Dr. Rachesky disclaims beneficial ownership of the shares held by MHRCPMA, MHRCP 100, MRLLP, and OTT LLC, except to the extent of his pecuniary interest in the funds.
- (9) Includes (i) 3,425,014 shares owned by Domain Partners V, L.P., a Delaware limited partnership (DPV), and DP V Associates, L.P. a Delaware limited partnership (DPVA), of which the general partner is One Palmer Square Associates V, L.L.C., a Delaware limited liability company, of which Mr. Dovey is a Managing Member, (ii) warrants to purchase 1,113,861 shares purchased by DPV and DPVA, (iii) 42,147 shares issuable to Domain Associates, L.L.C. (DA), of which Mr. Dovey is a Managing Member, under stock options that are exercisable within 60 days after April 24, 2008, and (iii) 32,869 shares issuable to Mr. Dovey under stock options and RSUs that are deemed exercisable

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within 60 days after April 24, 2008. Mr. Dovey disclaims beneficial ownership of the shares held by DA, DPV and DPVA, except to the extent of his pecuniary interest in such shares.

(10)

Includes the following shares of common stock issuable under stock options and RSUs that are deemed exercisable within 60 days after April 24, 2008: Vergis 653,750 shares; Poul 251,250 shares; MacMaster 109,056 shares; Davis 203,250 shares; Hamilton 78,645 shares; Gage 102,844 shares; Parker 52,869 shares; and Wallin 50,000; and all current directors and executive officers as a group 4,001,586 shares.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.

Related-Party Transactions

Our Audit Committee charter assigns to the Audit Committee the responsibility to review and approve all of our "related-party transactions," as defined by the SEC. Consistent with this requirement, the Audit Committee reviews and approves transactions in which the amount involved exceeds \$120,000 and the parties meet the definition of "related parties" under the SEC rules. There were no related-party transactions in 2007 with a value in excess of \$120,000, except as noted below.

In March 2007, as part of an approximately \$43 million equity financing transaction with third parties that was unanimously approved by our Board, investment funds affiliated with Dr. Mark H. Rachesky and Brian H. Dovey, two of our directors, purchased Common Stock and warrants to purchase Common Stock for an aggregate purchase price of approximately \$10 million. The participation of these funds in the equity financing was unanimously approved in advance by the Audit Committee. This amount represented approximately 23% of the entire transaction. The investment funds affiliated with Dr. Rachesky purchased approximately 2.5 million shares of Common Stock and warrants to purchase approximately 1.1 million shares of Common Stock for an aggregate purchase price of approximately \$5 million. The investment funds affiliated with Mr. Dovey purchased approximately 2.5 million shares of Common Stock and warrants to purchase approximately 1.1 million shares of Common Stock for an aggregate purchase price of approximately \$5 million. We do not have information available to us of the approximate dollar value of Dr. Rachesky's and Mr. Dovey's personal interests in this transaction.

Independence of Directors

In December 2002, our Board adopted a set of *Corporate Governance Principles*, addressing, among other things, standards for evaluating the independence of our directors. The full text of these *Principles* can be found on our website at www.neose.com (under the section entitled "About Neose Corporate Governance").

According to these *Principles*, no director is considered "independent" unless our Board has affirmatively determined that the director has no material relationship with us (either directly, or as a partner, stockholder or officer of an organization that has such a relationship with the Company). These *Principles* comply with the applicable rules of the SEC and NASDAQ. Pursuant to these *Principles*, our Board undertook its annual review of director independence in February 2008. After considering all relevant facts and circumstances, our Board affirmatively determined that all of the current directors are independent under the standards set forth in the *Corporate Governance Principles* and applicable SEC and NASDAQ rules, with the exception of Dr. Vergis. With respect to those directors who served on our Board during the early part of 2007 but were not re-elected at the May 4, 2007 annual meeting of stockholders, namely C. Boyd Clarke, Lowell E. Sears, and Elizabeth Wyatt, our Board last determined their independence at a meeting held in February 2007, affirmatively determining that Mr. Sears and Ms. Wyatt were independent under the relevant standards, but that Mr. Clarke was not.

Committees of our Board

Our Board has three standing committees: the Audit Committee, which was established in accordance with Section 3(a)(58)(A) of the Exchange Act, the Compensation Committee, and the Corporate Governance Committee. Each committee consists of three non-employee directors, all of whom are "independent" as defined in our *Corporate Governance Principles* and under the applicable rules of the SEC and NASDAQ. William F. Hamilton, Ph.D. (Chairman), Brian H. Dovey and H. Stewart Parker are the current members of the Audit Committee. Douglas J. MacMaster, Jr. (Chairman), L. Patrick Gage, Ph.D., and H. Stewart Parker are the current members of the

Compensation Committee. Dr. Hamilton (Chairman), Dr. Gage, and Mr. MacMaster are the current members of the Corporate Governance Committee. The Chairman of our Board, currently Dr. Gage, chairs the executive sessions of our Board.

For further information on our Audit Committee and Compensation Committee, see their respective descriptions above under Item 10, below the heading "Audit Committee," and under Item 11, below the heading "Compensation Committee," which descriptions are incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The Audit Committee has reappointed KPMG LLP to audit and report on our financial statements and the effectiveness our internal control over financial reporting for 2008.

In appointing KPMG LLP as our independent registered public accounting firm for the fiscal year beginning January 1, 2008, the Audit Committee considered whether KPMG LLP's provision of services other than audit services is compatible with maintaining independence of our independent registered public accounting firm. The Audit Committee pre-approved the fees described below for audit fees, audit-related fees, tax fees and all other fees in accordance with our pre-approval policy as described below and believes such fees are compatible with the independence of KPMG LLP.

Audit Fees. The aggregate fees billed by KPMG LLP for each of the last two fiscal years for professional services rendered for the audit of our annual financial statements, the effectiveness of our internal control over financial reporting and the effectiveness of management's assessment of our internal control over financial reporting (2006 only), for the review of interim financial statements included in our Quarterly Reports on Form 10-Q, and for services that are normally provided by KPMG LLP in connection with statutory and regulatory filings or engagements, were approximately \$319,000 for 2007 and \$255,000 for 2006. Our audit fees for 2007 included approximately \$55,000 related to the preparation of a comfort letter, as well as \$5,000 for the issuance of consents to use KPMG LLP's audit opinions in other registration filings.

Audit-Related Fees. During 2007 and 2006, there were no fees billed that are not reported under Audit Fees above for assurance and related services by KPMG LLP that are reasonably related to the performance of the audits or reviews of our financial statements, the effectiveness of our internal control over financial reporting and the effectiveness of management's assessment of our internal control over financial reporting.

Tax Fees. The approximate aggregate fees billed in the last two fiscal years for professional services rendered by KPMG LLP for tax compliance, tax advice, and tax planning were approximately \$17,000 for 2007 and \$20,000 for 2006.

All Other Fees. There were no fees billed in 2007 or 2006 for products and services provided by KPMG LLP, other than services reported above under Audit Fees or Tax Fees.

Pre-approval Policies and Procedures.

Our Audit Committee is required to pre-approve the engagement of an independent registered public accounting firm to render audit services for the Company, and any changes to the terms of the engagement are required to be pre-approved by the Audit Committee or its Chairman. On an annual basis, the Audit Committee is required to pre-approve the terms of the audit engagement and a description of, and budget for, the non-audit services management proposes to be provided by our independent auditors during the fiscal year. Any changes or additions to the approved list or budget for non-audit services must be pre-approved by the Audit Committee or its Chairman. The required pre-approval policies and procedures were complied with during 2007 and 2006.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) 1. Financial Statements.

The Financial Statements were filed as part of the Annual Report on Form 10-K for the year ended December 31, 2007, as originally filed on March 10, 2008 (the 2007 Form 10-K).

2. Financial Statement Schedules.

All financial statement schedules have been omitted here because they are not applicable, not required, or the information is shown in the Financial Statements filed with the 2007 Form 10-K or the Notes thereto.

3. Exhibits.

The following is a list of exhibits filed as part of the 2007 Form 10-K and this Amendment No. 1 to the 2007 Form 10-K. We are incorporating by reference to our previous SEC filings each exhibit that contains a footnote. For exhibits incorporated by reference, the location of the exhibit in the previous filing is indicated in parentheses.

Exhibit Number	Description
2.1	Purchase and Sale Agreement and Joint Escrow Instructions by and between ARE-PA Region No.6, LLC and Neose Technologies, Inc. dated September 1, 2006. (Exhibit 2.1)(11)
3.1	Fourth Amended and Restated Certificate of Incorporation. (Exhibit B)(10)
3.2	First Amendment of the Fourth Amended and Restated Certificate of Incorporation. (Exhibit 3.1)(17)
3.3	Second Amended and Restated By-Laws. (Exhibit 3.2)(2)
4.1	See Exhibits 3.1, 3.2 and 3.3 for instruments defining rights of holders of common stock.
10.1	1995 Amended and Restated Stock Option/Stock Issuance Plan, as amended. (Appendix B)(4)
10.2	Agreement of Lease, dated as of February 15, 2002, between Liberty Property Leased Partnership and Neose Technologies, Inc. (Exhibit 10.40)(1)
10.3	Master Security Agreement between General Electric Capital Corporation and Neose Technologies, Inc., dated as of December 19, 2002. (Exhibit 10.33)(3)
10.4	Amendment to Master Security Agreement between General Electric Capital Corporation and Neose Technologies, Inc., dated as of December 19, 2002. (Exhibit 10.34)(3)
10.5	Research, Co-Development and Commercialization Agreement between BioGeneriX AG and Neose Technologies, Inc., dated April 20, 2004. (Exhibit 10.5)(5)
10.6	First Amendment to Lease between Liberty Property Limited Partnership and Neose Technologies, Inc., dated May 18, 2004. (Exhibit 10.7)(5)
10.7	Promissory Note of Neose Technologies, Inc. to Liberty Property Limited Partnership, dated May 7, 2004. (Exhibit 10.8)(5)
10.8	Promissory Note of Neose Technologies, Inc. to General Electric Capital Corporation dated August 20, 2004. (Exhibit 10.11)(6)
10.9	Form of Incentive Stock Option Award Agreement under the Neose Technologies, Inc. 2004 Equity Incentive Plan. (Exhibit 10.12)(6)

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- 10.10 Form of Non-Qualified Stock Option Award Agreement under the Neose Technologies, Inc. 2004 Equity Incentive Plan. (Exhibit 10.13)(6)
- 10.11 Form of Annual Director Grant Agreement under the Neose Technologies, Inc. 2004 Equity Incentive Plan. (Exhibit 10.14)(6)
- 10.12 Form of Director Fee Option Grant Agreement under the Neose Technologies, Inc. 2004 Equity Incentive Plan. (Exhibit 10.15)(6)
- 10.13 Promissory Note of Neose Technologies, Inc. to General Electric Capital Corporation, dated December 16, 2004. (Exhibit 10.47)(7)
- 10.14 Form of Restricted Stock Unit Agreement (cliff vesting) between Neose Technologies, Inc. and Certain Employees, Officers and Directors. (Exhibit 10.1)(8)
- 10.15 Form of Restricted Stock Unit Agreement (quarterly vesting) between Neose Technologies, Inc. and Certain Employees, Officers and Directors. (Exhibit 10.2)(8)
- 10.16 Promissory Note of Neose Technologies, Inc. to General Electric Capital Corporation dated July 12, 2005. (Exhibit 10.1)(9)
- 10.17 Post-Closing Property Access Agreement by and between Auxilium Pharmaceuticals, Inc. and Neose Technologies, Inc. dated September 1, 2006. (Exhibit 10.1)(11)
- 10.18 Consent to Property Access Agreement by and among ARE-PA Region No.6, LLC, Auxilium Pharmaceuticals, Inc. and Neose Technologies, Inc. dated September 1, 2006. (Exhibit 10.2)(11)
- 10.19 Modification Agreement by and between Neose Technologies, Inc. and General Electric Capital Corporation dated October 31, 2006. (Exhibit 10.1)(12)
- 10.20 Amendment Number 1 to Research, Co-Development and Commercialization Agreement and Research License and Option Agreement between Neose Technologies, Inc. and BioGeneriX AG dated October 20, 2006. (Exhibit 10.41)(13)
- 10.21 Amended and Restated Research, Development and License Agreement among Neose Technologies, Inc. and Novo Nordisk A/S and Novo Nordisk Health Care AG dated October 31, 2006. (Exhibit 10.42)(13)
- 10.22 Bioprocessing Services Agreement by and between Neose Technologies, Inc. and Diosynth RTP Inc. dated December 7, 2006. (Exhibit 10.43)(13)
- 10.23 Commercial Premium Finance Agreement and Promissory Note from Neose Technologies, Inc. to AFCO Credit Corporation dated March 6, 2007. (Exhibit 10.44)(13)
- 10.24 Securities Purchase Agreement by and among Neose Technologies, Inc. and the purchasers appearing on the signature pages thereto dated March 8, 2007. (Exhibit 10.1)(14)
- 10.25 Registration Rights Agreement by and among Neose Technologies, Inc. and the purchasers appearing on the signature pages thereto dated March 8, 2007. (Exhibit 10.2)(14)
- 10.26 Form of Common Stock Purchase Warrant (U.S.), dated March 8, 2007. (Exhibit 10.3)(14)
- 10.27 Form of Common Stock Purchase Warrant (Non-U.S.), dated March 8, 2007. (Exhibit 10.4)(14)
- 10.28 Amended and Restated Employment Agreement between Neose Technologies, Inc. and George J. Vergis, Ph.D. dated April 30, 2007. (Exhibit 10.6)(15)
- 10.29 Form of Change of Control Agreement between Neose Technologies, Inc. and Certain Executive Officers dated April 30, 2007. (Exhibit 10.7)(15)

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10.30	Change of Control Agreement between Neose Technologies, Inc. and Debra J. Poul dated April 30, 2007. (Exhibit 10.8)(15)
10.31	Neose Technologies, Inc. 2004 Equity Incentive Plan, as amended. (Exhibit 99.1)(16)
10.32#	Research, Development and License Agreement between Neose Technologies, Inc. and Novo Nordisk A/S dated November 2, 2007 (Exhibit 10.32)(18).
10.33#	Research, Development and License Agreement between Neose Technologies, Inc. and Novo Nordisk A/S dated November 2, 2007 (Exhibit 10.33)(18).
23.1	Consent of KPMG LLP (Exhibit 23.1)(18).
24	Powers of Attorney (included as part of the signature page to the 2007 Form 10-K).
31.1*	Certification by Chief Executive Officer pursuant to Rule 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification by Chief Financial Officer pursuant to Rule 13-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

*

Filed herewith.

Portions of this Exhibit were omitted and filed separately with the Secretary of the SEC pursuant to an order of the SEC granting our application for confidential treatment filed pursuant to Rule 24b-2 under the Exchange Act.

Compensation plans and arrangements for executives and others.

#

Portions of this Exhibit were omitted and filed separately with the Secretary of the SEC pursuant to a request for confidential treatment that has been filed with the SEC.

- (1) Filed as an Exhibit to our Annual Report on Form 10-K for the year ended December 31, 2001 (Commission File No. 000-27718).
- (2) Filed as an Exhibit to our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2002 (Commission File No. 000-27718).
- (3) Filed as an Exhibit to our Annual Report on Form 10-K for the year ended December 31, 2002 (Commission File No. 000-27718).
- (4) Filed as an Exhibit to our Proxy Statement filed with the SEC on April 7, 2003 (Commission File No. 000-27718).
- (5) Filed as an Exhibit to our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2004.
- (6) Filed as an Exhibit to our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2004.
- (7) Filed as an Exhibit to our Annual Report on Form 10-K for the year ended December 31, 2004.
- (8) Filed as an Exhibit to our Current Report on Form 8-K filed with the SEC on March 4, 2005.

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- (9) Filed as an Exhibit to our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2005.
- (10) Filed as an Exhibit to our Proxy Statement filed with the SEC on March 30, 2006.
- (11) Filed as an Exhibit to our Current Report on Form 8-K filed with the SEC on September 6, 2006.
- (12) Filed as an Exhibit to our Current Report on Form 8-K filed with the SEC on November 2, 2006.
- (13) Filed as an Exhibit to our Annual Report on Form 10-K for the year ended December 31, 2006.
- (14) Filed as an Exhibit to our Current Report on Form 8-K filed with the SEC on March 13, 2007.
- (15) Filed as an Exhibit to our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2007.
- (16) Filed as an Exhibit to our Registration Statement on Form S-8 filed with the SEC on May 30, 2007.
- (17) Filed as an Exhibit to our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2007.
- (18) Filed as an Exhibit to the 2007 Form 10-K.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, we have duly caused this report to be signed on our behalf by the undersigned, thereunto duly authorized.

NEOSE TECHNOLOGIES, INC.

Date: April 29, 2008

By: /s/ GEORGE J. VERGIS

George J. Vergis
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of Neose and in the capacities and on the dates indicated.

<u>Name</u>	<u>Capacity</u>	<u>Date</u>
<u> /s/ GEORGE J. VERGIS</u>	Chief Executive Officer (Principal Executive Officer)	April 29, 2008
George J. Vergis		
<u> /s/ A. BRIAN DAVIS</u>	Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	April 29, 2008
A. Brian Davis		
<u> *</u>	Director	April 29, 2008
Brian H. Dovey		
<u> *</u>	Chairman	April 29, 2008
L. Patrick Gage		
<u> *</u>	Director	April 29, 2008
William F. Hamilton		
<u> *</u>	Director	April 29, 2008
Douglas J. MacMaster, Jr.		
<u> *</u>	Director	April 29, 2008
H. Stewart Parker		
<u> *</u>	Director	April 29, 2008

Mark H. Rachesky

*By: /s/ A. BRIAN DAVIS

A. Brian Davis
Attorney-in-Fact

Exhibit Index

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PART III

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PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

SIGNATURES

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