



**2601 Fourth Avenue
Suite 500
Seattle, Washington 98121
www.oncothyreon.com**

DEAR STOCKHOLDER:

I am pleased to invite you to attend the 2009 annual meeting of stockholders of Oncothyreon Inc. to be held on Friday, June 12, 2009, at 9:00 A.M., local time, at the Hotel Andra, 2000 Fourth Avenue, Seattle, Washington 98121 for the following purposes:

1. elect as Class II directors the two nominees named in the attached proxy statement;
2. approve an amendment to our Restricted Share Unit Plan to increase the number of shares of common stock reserved for issuance under such plan by 300,000 shares;
3. ratify the selection of our independent registered public accountants; and
4. transact such other business as may properly come before the annual meeting or any continuation, postponement or adjournment thereof.

The accompanying Notice of Meeting and Proxy Statement describe these matters. We urge you to read this information carefully.

The board of directors unanimously believes that election of its nominees for directors, approval of the amendment to the Restricted Share Unit Plan and ratification of its selection of the independent registered public accountants are in our best interests and that of our stockholders, and, accordingly, recommends a vote FOR election of the two nominees for directors, FOR the amendment to the Restricted Share Unit Plan and FOR the ratification of the selection of Deloitte & Touche LLP as our independent registered public accountants.

In addition to the business to be transacted as described above, management will speak on our developments of the past year and respond to comments and questions of general interest to stockholders.

It is important that your shares be represented and voted whether or not you plan to attend the annual meeting in person. You may vote on the Internet, by telephone or by completing and mailing the enclosed proxy card or the form forwarded by your bank, broker or other holder of record. Voting over the Internet, by telephone or by written proxy will ensure your shares are represented at the annual meeting. Voting on the Internet or by telephone may not be available to all stockholders. Please review the instructions on the proxy card or the information forwarded by your bank, broker or other holder of record regarding each of these voting options.

Sincerely,

Robert L. Kirkman
President, CEO and Director

April 30, 2009



ONCOTHYREON
2601 Fourth Avenue
Suite 500
Seattle, Washington 98121
www.oncothyreon.com

**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
To Be Held On June 12, 2009**

TO THE STOCKHOLDERS OF ONCOTHYREON INC.

NOTICE IS HEREBY GIVEN that the 2009 annual meeting of stockholders of Oncothyreon Inc., a Delaware corporation, will be held on June 12, 2009, at 9:00 A.M., local time, at the Hotel Andra, 2000 Fourth Avenue, Seattle, Washington 98121, for the following purposes:

1. to elect the two nominees named in the attached proxy statement as Class II directors to the board of directors of Oncothyreon for a three-year term of office expiring at the 2012 annual meeting of stockholders;
2. to approve an amendment to our Restricted Share Unit Plan to increase the number of shares of common stock reserved for issuance under such plan by 300,000 shares;
3. to ratify the selection of Deloitte & Touche LLP as our independent registered public accountants for the year ending December 31, 2009; and
4. to transact such other business as may properly come before the annual meeting or any continuation, postponement or adjournment thereof.

The foregoing items of business are more fully described in the proxy statement accompanying this notice. We are not aware of any other business to come before the meeting.

The board of directors has fixed the close of business on April 16, 2009 as the record date for the determination of stockholders entitled to notice of, and to vote at, this annual meeting and at any continuation, postponement or adjournment thereof. A list of stockholders will be available for inspection at least ten days prior to the annual meeting at our principal executive offices at 2601 Fourth Avenue, Suite 500, Seattle, Washington 98121.

Important Notice Regarding the Availability of Proxy Materials for the Stockholder Meeting to be Held on June 12, 2009: the Proxy Statement for the Annual Meeting and the Annual Report to Stockholders for the year ended December 31, 2008 are available at <http://ir.oncothyreon.com/annual-proxy.cfm>.

By Order of the Board of Directors,

Shashi K. Karan
Corporate Controller and Corporate Secretary

Seattle, Washington
April 30, 2009

ALL STOCKHOLDERS ARE CORDIALLY INVITED TO ATTEND THE ANNUAL MEETING IN PERSON. IF YOU PLAN TO ATTEND, PLEASE NOTIFY US BY CONTACTING INVESTOR RELATIONS AT (206) 769-9219 OR IR@ONCOTHYREON.COM.

WHETHER OR NOT YOU EXPECT TO ATTEND THE ANNUAL MEETING, PLEASE COMPLETE, DATE, SIGN AND RETURN THE ENCLOSED PROXY CARD AS PROMPTLY AS POSSIBLE IN ORDER TO ENSURE YOUR REPRESENTATION AT THE ANNUAL MEETING. A RETURN ENVELOPE (WHICH IS POSTAGE PREPAID IF MAILED IN THE UNITED STATES) IS ENCLOSED FOR THAT PURPOSE. YOU ALSO MAY VOTE YOUR SHARES ON THE INTERNET OR BY TELEPHONE BY FOLLOWING THE INSTRUCTIONS ON YOUR PROXY CARD.

EVEN IF YOU HAVE PROVIDED US WITH YOUR PROXY, YOU MAY STILL VOTE IN PERSON IF YOU ATTEND THE ANNUAL MEETING. PLEASE NOTE, HOWEVER, THAT IF YOUR SHARES ARE HELD OF RECORD BY A BROKER, BANK OR OTHER NOMINEE AND YOU WISH TO VOTE AT THE ANNUAL MEETING, YOU MUST OBTAIN FROM THE RECORD HOLDER A PROXY ISSUED IN YOUR NAME.

**YOUR VOTE IS IMPORTANT!
WHETHER YOU OWN ONE SHARE OR MANY, YOUR PROMPT COOPERATION IN VOTING
YOUR PROXY IS GREATLY APPRECIATED**

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THE ONCOTHYREON 2009 ANNUAL MEETING OF STOCKHOLDERS PROXY STATEMENT

INFORMATION CONCERNING VOTING AND SOLICITATION

General

The enclosed proxy is solicited on behalf of the board of directors of Oncothyreon Inc., a Delaware corporation (the "Company"), for use at the 2009 annual meeting of stockholders to be held on Friday, June 12, 2009, at 9:00 A.M. local time, or at any continuation, postponement or adjournment thereof, for the purposes discussed in this proxy statement and in the accompanying Notice of Annual Meeting and any business properly brought before the annual meeting. Proxies are solicited to give all stockholders of record an opportunity to vote on matters properly presented at the annual meeting. We intend to mail this proxy statement and accompanying proxy card on or about April 30, 2009 to all stockholders entitled to vote at the annual meeting. The annual meeting will be held at the Hotel Andra, 2000 Fourth Avenue, Seattle, Washington 98121.

Who Can Vote

You are entitled to vote if you were a stockholder of record of our common stock, \$0.0001 par value as of the close of business on April 16, 2009. Your shares may be voted at the annual meeting only if you are present in person or represented by a valid proxy.

Shares Outstanding and Quorum

At the close of business on April 16, 2009, 19,492,432 shares of our common stock were outstanding and entitled to vote. Each share of common stock is entitled to one vote on each matter presented. There is no cumulative voting. One-third of the outstanding shares of our common stock entitled to vote, present in person or represented by proxy, will constitute a quorum at the annual meeting.

Proxy Card and Revocation of Proxy

You may vote by completing and mailing the enclosed proxy card. If you sign the proxy card but do not specify how you want your shares to be voted, your shares will be voted by the proxy holders named in the enclosed proxy (i) in favor of the election of both of the director nominees, (ii) in favor of the amendment to our Restricted Share Unit Plan to increase the number of shares of common stock reserved for issuance by 300,000 shares and (iii) in favor of ratification of the selection of Deloitte & Touche LLP as our independent registered public accountants for the year ending December 31, 2009. In their discretion, the proxy holders named in the enclosed proxy are authorized to vote on any other matters that may properly come before the annual meeting and at any continuation, postponement or adjournment thereof. The board of directors knows of no other items of business that will be presented for consideration at the annual meeting other than those described in this proxy statement. In addition, no other stockholder proposal or nomination was received on a timely basis, so no such matters may be brought to a vote at the annual meeting.

If you vote by proxy, you may revoke that proxy at any time before it is voted at the annual meeting. Stockholders of record may revoke a proxy by sending to our corporate secretary at our principal executive

office at 2601 Fourth Avenue, Suite 500, Seattle, WA 98121, a written notice of revocation or a duly executed proxy bearing a later date or by attending the annual meeting in person and voting in person. Attendance at the annual meeting will not, by itself, revoke a proxy. If your shares are held in the name of a broker, bank or other nominee, you may change your vote by submitting new voting instructions to your bank, broker or other record holder. Please note that if your shares are held of record by a broker, bank or other nominee, and you decide to attend and vote at the annual meeting, your vote in person at the annual meeting will not be effective unless you present a legal proxy, issued in your name from the record holder, your broker, bank or other nominee.

Voting of Shares

Stockholders of record as of the close of business on April 16, 2009 are entitled to one vote for each share of our common stock held on all matters to be voted upon at the annual meeting. You may vote by attending the annual meeting and voting in person. You also may vote on the Internet, by telephone or by completing and mailing the enclosed proxy card or the form forwarded by your bank, broker or other holder of record. Voting on the Internet or by telephone may not be available to all stockholders. The Internet and telephone voting facilities will close at 1:00 a.m. Pacific Time on June 12, 2009. Stockholders who vote through the Internet should be aware that they may incur costs to access the Internet, such as usage charges from telephone companies or Internet service providers and that these costs must be borne by the stockholder. Stockholders who vote by Internet or telephone need not return a proxy card or the form forwarded by your bank, broker or other holder of record by mail. If your shares are held by a bank, broker or other nominee, please refer to the instructions they provide for voting your shares. All shares entitled to vote and represented by properly executed proxies received before the polls are closed at the annual meeting, and not revoked or superseded, will be voted at the annual meeting in accordance with the instructions indicated on those proxies. YOUR VOTE IS IMPORTANT.

Counting of Votes

All votes will be tabulated by the inspector of election appointed for the annual meeting, who will separately tabulate affirmative and negative votes, abstentions and broker "non-votes." Shares held by persons attending the annual meeting but not voting, shares represented by proxies that reflect abstentions as to a particular proposal and broker "non-votes" will be counted as present for purposes of determining a quorum. A broker non-vote occurs when a nominee holding shares for a beneficial owner has not received voting instructions from the beneficial owner and does not have discretionary authority to vote the shares. Brokers only have discretionary authority to vote on routine matters. Our Proposal One and Proposal Three are considered routine matters; therefore, if you do not otherwise instruct your broker or other nominee, the broker or nominee has discretionary authority to vote your shares "FOR" our Proposal One and Proposal Three. Our Proposal Two is considered a non-routine matter; therefore, if you do not otherwise instruct your broker or other nominee, the broker or nominee will not be permitted to vote your shares.

Because no definitive statutory or case law authority exists in Delaware as to the proper treatment of abstentions, if you return a proxy card that indicates an abstention from voting in all matters, the shares represented will be counted for the purpose of determining both the presence of a quorum and the total number of votes cast with respect to a proposal (other than the election of directors), but they will not be voted on any matter at the annual meeting. In the absence of controlling precedent to the contrary, we intend to treat abstentions in this matter. Accordingly, abstentions will have the same effect as a vote "AGAINST" a proposal.

Solicitation of Proxies

We will bear the entire cost of solicitation of proxies, including preparation, assembly and mailing of this proxy statement, the proxy and any additional information furnished to stockholders. Copies of solicitation materials will be furnished to banks, brokerage houses, fiduciaries and custodians holding shares of our common stock in their names that are beneficially owned by others to forward to those beneficial owners. We may reimburse persons representing beneficial owners for their costs of forwarding the solicitation materials to

the beneficial owners. Original solicitation of proxies by mail may be supplemented by telephone, facsimile, electronic mail or personal solicitation by our directors, officers or employees. No additional compensation will be paid to our directors, officers or employees for such services. Currently, we do not intend to retain any person to assist in the solicitation of proxies. A list of stockholders entitled to vote at the annual meeting will be available for examination by any stockholder for any purpose germane to the annual meeting during ordinary business hours at our offices at 2601 Fourth Avenue, Suite 500, Seattle, Washington 98121 for the ten days prior to the annual meeting, and also at the annual meeting.

Stockholder Proposals for the 2010 Annual Meeting

Stockholder proposals submitted for inclusion in our proxy materials for our 2010 annual meeting of stockholders pursuant to Rule 14a-8 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), must be received at our principal executive offices no later than the close of business on December 31, 2009. Stockholders who do not wish to use the mechanism provided by the rules of the Securities and Exchange Commission (the “SEC”) in proposing a matter for action at the next annual meeting must notify us in writing of the proposal and the information required by the provisions of our bylaws dealing with advance notice of stockholder proposals and director nominations. The notice must be submitted in writing to us not less than 90 days nor more than 120 days before the first anniversary of the previous year’s annual meeting. Accordingly, any stockholder proposal for next year’s meeting submitted to us on or between February 12, 2010 and March 14, 2010 will be considered filed on a timely basis.

“Householding” of Proxy Materials

We have adopted a procedure approved by the SEC called “householding.” Under this procedure, stockholders of record who have the same address and last name and do not participate in electronic delivery of proxy materials will receive only one set of our proxy materials unless one or more of these stockholders notifies us that they wish to continue receiving individual copies. We believe this will provide greater convenience for our stockholders, as well as cost savings for us, by reducing the number of duplicate documents that are sent to your home.

Stockholders who participate in householding will continue to receive separate proxy cards. Householding will not in any way affect your rights as a stockholder.

If you are eligible for householding and currently receive multiple copies of our proxy materials with other stockholders of record with whom you share an address or if you hold stock in more than one account, and in either case you wish to receive only a single copy of these documents for your household, please contact our corporate secretary at 2601 Fourth Avenue, Suite 500, Seattle, Washington 98121 at (206) 801-2100.

If you participate in householding and wish to receive a separate copy of our Annual Report on Form 10-K or this proxy statement, or if you do not wish to participate in householding and prefer to receive separate copies of these documents in the future, please contact our corporate secretary at the address or telephone number indicated above and we will promptly deliver to you separate copies of these documents.

Beneficial stockholders can request information about householding from their banks, brokers, or other holders of record.

PROPOSAL ONE
ELECTION OF CLASS II DIRECTORS

General

As of the date of this proxy statement, our board of directors is composed of five directors. Our bylaws permit our board of directors to establish by resolution the authorized number of directors, and seven directors are currently authorized. The authorized number of directors may be changed by resolution duly adopted by at least a majority of our entire board of directors, although no decrease in the authorized number of directors will have the effect of removing an incumbent director from the board of directors until such director's term expires.

Our board of directors is divided into three classes of directors, serving staggered three-year terms, as follows:

- Class II directors consist of Christopher S. Henney and W. Vickery Stoughton, whose terms will expire at this annual meeting;
- Class III directors consist of Richard L. Jackson and Robert L. Kirkman, whose terms will expire at the 2010 annual meeting of stockholders; and
- Class I directors consist of Daniel Spiegelman, whose term will expire at the 2011 annual meeting of stockholders.

Directors for a class whose terms expire at a given annual meeting will be up for re-election for three-year terms at that meeting. Each director's term will continue until the election and qualification of his successor, or his earlier death, resignation or removal. Any increase or decrease in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. This classification of our board of directors may have the effect of delaying or preventing changes in control of management. There are no family relationships among any of our directors or executive officers.

Information concerning our incumbent directors is set forth below. Unless otherwise indicated, each position with Oncothyreon described in each director's biography below refers to a position currently with Oncothyreon and, prior to December 10, 2007, with Biomira Inc., our predecessor corporation. On December 10, 2007, Oncothyreon became the successor corporation to Biomira by way of a plan of arrangement effected pursuant to Canadian Law.

Nominees for Class II Directors Election at the 2009 Annual Meeting of Stockholders

There are two nominees standing for election as class II directors this year. Based on the report of the nominating and governance committee, our board of directors has approved the nomination of Christopher S. Henney and W. Vickery Stoughton for re-election as class II directors at the 2009 annual meeting. If elected, each of Messrs. Henney and Stoughton will hold office as a class II director until our 2012 annual meeting of stockholders.

If you sign your proxy or voting instruction card but do not give instructions with respect to the voting of directors, your shares will be voted for the nominees recommended by our board of directors. If you wish to give specific instructions with respect to the voting of directors, you may do so by indicating your instructions on your proxy or voting instruction card. The board of directors expects that the nominees will be available to serve as directors. If Dr. Henney or Mr. Stoughton become unavailable, however, the proxy holders intend to vote for any nominee designated by the board of directors, unless the board of directors chooses to reduce the number of directors serving on the board of directors. In the event that additional persons are nominated for election as directors, the proxy holders intend to vote all proxies received by them in such a manner as to assure the election of Dr. Henney and Mr. Stoughton.

Information Concerning the Nominees for Election as Class II Directors

The following table sets forth information concerning the nominees for election as class II directors at the 2009 annual meeting, including information as to the nominee’s age and business experience as of the record date.

<u>Name of Nominee</u>	<u>Age</u>	<u>Principal Occupation During Past Five Years</u>	<u>Director Since</u>
CHRISTOPHER S. HENNEY, Ph.D.(1)	68	CHRISTOPHER S. HENNEY, Ph.D., has served as the chairman of our board of directors since September 2006 and as a member of our board of directors since March 2005. From 1995 to 2003, Dr. Henney was chairman and chief executive officer of Dendreon Corporation, a publicly traded biotechnology company that he co-founded. Dr. Henney was also a co-founder of Immunex Corporation and ICOS Corporation, both publicly traded biotechnology companies. Dr. Henney currently serves as vice-chairman of the board of directors of Cyclacel Pharmaceuticals, Inc., a development-stage biopharmaceuticals company, and member of the board of directors of AVI BioPharma, Inc., a biopharmaceuticals company. Dr. Henney received a Ph.D. in experimental pathology from the University of Birmingham, England, where he also obtained his D.Sc. for contributions in the field of immunology. Dr. Henney is a former professor of immunology and microbiology and has held faculty positions at Johns Hopkins University, the University of Washington and the Fred Hutchinson Cancer Research Center.	2005
W. VICKERY STOUGHTON(2)	63	W. VICKERY STOUGHTON, M.B.A. has been a member of our board of directors since June 1997. From August 2006 until September 2007, Mr. Stoughton served as president and chief executive officer of MagneVu Corporation, a medical devices company, which filed for bankruptcy in September 2007. From 1996 to 2002, Mr. Stoughton was chairman and chief executive officer of Careside Inc., a research and development, medical devices company, which filed for bankruptcy in October 2002. From October 1995 to July 1996, Mr. Stoughton was president of SmithKline Beecham Diagnostics Systems Co., a diagnostic services and product company, and prior to October 1995 he served as president of SmithKline Beecham Clinical Laboratories, Inc., a clinical laboratory company. From 1988 until May 2008, Mr. Stoughton was a member of the board of directors of SunLife Financial, Inc., a financial services company. Mr. Stoughton received his B.S. in chemistry from St. Louis University and his M.B.A. from the University of Chicago.	1997

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- (1) Member of audit, compensation and nominating and governance committees.
 - (2) Member of audit and compensation committees.

Directors Continuing in Office Until the 2010 Annual Meeting of Stockholders

RICHARD L. JACKSON, Ph.D., age 69, has been a member of our board of directors since May 2003. Dr. Jackson is the chairman of our compensation committee and a member of our nominating and governance committee. Dr. Jackson is president of Jackson Associates, LLC, a biotechnology and pharmaceutical consulting company. Since September 2006, Dr. Jackson has also been president and chief executive officer of Ausio Pharmaceuticals, LLC, a drug development company. From May 2002 to May 2003, Dr. Jackson was president, chief executive officer and chairman of the board of directors of EmerGen, Inc., a biotechnology company. From November 1998 to January 2002, Dr. Jackson served as Senior Vice President, Research and Development for Atrix Laboratories, Inc., a biotechnology company. From January 1993 to July 1998, Dr. Jackson served as senior vice president, discovery research, at Wyeth-Ayerst Laboratories, the pharmaceuticals division of American Home Products Corporation. Dr. Jackson received his Ph.D. in microbiology and his B.S. in chemistry from the University of Illinois.

ROBERT L. KIRKMAN, M.D., age 60, has served as our president and chief executive officer since September 2006. From 2005 to 2006, Dr. Kirkman was acting president and chief executive officer of Xcyte Therapies, Inc., which concluded a merger with Cyclacel Pharmaceuticals, Inc., both development-stage biopharmaceuticals companies, in March of 2006. From 2004 to 2005, Dr. Kirkman was chief business officer and vice president of Xcyte. From 1998 to 2003, Dr. Kirkman was vice president, business development and corporate communications of Protein Design Labs, Inc., a biopharmaceuticals company. Dr. Kirkman holds an M.D. degree from Harvard Medical School and a B.A. in economics from Yale University.

Director Continuing in Office Until the 2011 Annual Meeting of Stockholders

DANIEL K. SPIEGELMAN, M.B.A., age 50, has been a member of our board of directors since June 2008. Mr. Spiegelman is the chairman of our audit committee and a member of our nominating and governance committee. Since 1998, Mr. Spiegelman has been employed at CV Therapeutics, Inc., a biopharmaceutical company, most recently as senior vice president and chief financial officer. From 1992 to 1998, Mr. Spiegelman was an employee at Genentech, Inc., a biotechnology company, and most recently as treasurer. Mr. Spiegelman also serves as a member of the board of directors of Affymax, Inc., a publicly-traded biopharmaceuticals company and Cyclacel Pharmaceuticals, Inc., a development-stage biopharmaceuticals company. Mr. Spiegelman received his B.A. and M.B.A. from Stanford University.

Vote Required and Board of Directors Recommendation

The nominees receiving the greatest number of votes of the shares present and entitled to vote at the annual meeting will be elected as directors.

The board of directors recommends that stockholders vote “FOR” the election of each of Messrs. Henney and Stoughton to the board of directors.

PROPOSAL TWO

TO APPROVE THE AMENDMENT TO THE COMPANY'S RESTRICTED SHARE UNIT PLAN

The stockholders are being asked to approve an amendment to our restricted share unit plan to add 300,000 shares to the total number of shares reserved for issuance under the plan. Our board of directors has approved the increase in the number of shares reserved for issuance under the restricted share unit plan, subject to approval from stockholders at the annual meeting. If stockholders do not approve the amendment to the restricted share unit plan, no shares will be added to the total number of shares reserved for issuance under the restricted share unit plan.

Our directors have an interest in this proposal by virtue of their being eligible to receive equity awards under the restricted share unit plan.

Our board of directors believes that long-term incentive compensation programs align the interests of directors and the stockholders to create long-term stockholder value. Our board of directors believes that plans such as the restricted share unit plan increase our ability to achieve this objective because the restricted share unit plan will help us to recruit, reward, motivate and retain talented persons to serve on our board. Our board of directors and management believe that the ability to continue to grant restricted share units will be important to the future success of Oncothyreon.

Summary of the Restricted Share Unit Plan

The terms of the restricted share unit plan are described in greater detail in the section of this proxy statement captioned, "Executive Compensation — Restricted Share Unit Plan."

Number of Restricted Share Units Granted under the Restricted Share Unit Plan

Each non employee member of our board is entitled to an annual restricted share unit grant equal to Cdn. \$30,000 divided by the closing price of our common stock on the Toronto Stock Exchange on the date of grant. The directors did not receive any such grants in 2008 and on March 11, 2009 each non-employee director received a grant equal to only Cdn. \$27,093 divided by the closing price of our common stock on the Toronto Stock Exchange on the date of grant under the plan because we did not have a sufficient number of shares authorized for issuance under the restricted share unit plan to make a full award. If the stockholders approve this Proposal Two, we anticipate that the board will approve a grant for each non-employee director.

The following table sets forth as of March 31, 2009 (i) the aggregate number of restricted share units held by each of our non-employee directors and (ii) the fair value of such restricted share units (calculated in accordance with SFAS 123(R)).

<u>Name</u>	<u>RSUs(1)</u>	<u>Fair Value (\$)</u>
Christopher S. Henney	75,895	\$480,637
Richard L. Jackson	25,895	85,637
W. Vickery Stoughton	25,895	85,637
Daniel Spiegelman	19,352	27,078

(1) 19,629 restricted share units were issued to former members of our board of directors. To date, 9,709 shares of our common stock have been issued in accordance with the terms of the restricted share unit plan. An additional 9,920 shares of our common stock are issuable to Messrs. Welsh and Blair, our former directors.

Number of Shares of Common Stock Available Under the Restricted Share Unit Plan

If stockholders approve Proposal Two, a total of 466,666 shares of the Company's common stock will be reserved for issuance under the restricted share unit plan. As of March 31, 2009, 156,957 shares were subject to outstanding awards granted under the restricted share unit plan, with a weighted average remaining term of 3.82 years.

If at any time during the term of the plan (i) a dividend is declared on our shares of common stock payable in our shares of common stock, (ii) any or all of the outstanding shares of common stock are exchanged for a different kind or number of shares of our or another company or (iii) there is a distribution of assets or shares to our stockholders outside of the ordinary course of business, our board of directors may in its sole discretion adjust the number of restricted share units under outstanding grants and restricted share units available for future grant under the restricted share unit plan, and thus the number of shares reserved for issuance under the restricted share unit plan.

Vote Required and Board of Directors Recommendation

The affirmative vote of the holders of a majority of the shares of our common stock present or represented and voting at the annual meeting will be required to approve this proposal.

Our board of directors recommends that you vote “FOR” the Amendment to the restricted share unit plan and the increase to the number of shares reserved for issuance thereunder.

PROPOSAL THREE

TO RATIFY THE SELECTION OF DELOITTE & TOUCHE LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS FOR THE YEAR ENDED DECEMBER 31, 2009

Our audit committee has selected the firm of Deloitte & Touche LLP to conduct an audit in accordance with generally accepted auditing standards of our financial statements for the year ending December 31, 2009. A representative of that firm is expected to be present at the annual meeting to respond to appropriate questions and will be given an opportunity to make a statement if he or she so desires. The audit committee has discussed with Deloitte & Touche LLP its independence from us and our management, and this discussion included consideration of the matters in the written disclosures required by the Independence Standards Board and the potential impact that non-audit services provided to us by Deloitte & Touche LLP could have on its independence. This appointment is being submitted for ratification at the meeting. If not ratified, the audit committee will reconsider this appointment, although the audit committee will not be required to appoint different independent auditors. Deloitte & Touche LLP has served as our independent auditors since April 1986.

Fees Billed to Us by Deloitte & Touche LLP during Fiscal 2008

Audit Fees

Fees and related expenses for the 2008 and 2007 audits by Deloitte & Touche LLP of our annual financial statements, its review of the financial statements included in our quarterly reports and other services that are provided in connection with statutory and regulatory filings totaled \$422,601 and \$1,016,155, respectively.

Audit-Related Fees

For the years 2008 and 2007, Deloitte & Touche LLP billed us \$95,786 and \$22,601, respectively, for its services related to acquisitions, consultations on accounting issues, and other audit-related matters.

Tax Fees

For the years 2008 and 2007, Deloitte & Touche LLP billed us \$255,868 and \$828,072, respectively, for professional services related to preparation of our tax returns and tax consulting.

All Other Fees

For the years 2008 and 2007, Deloitte & Touche LLP billed us \$0 and \$10,621, respectively, for other services.

Audit and tax fees decreased in 2008 relative to 2007 due to higher fees in 2007 related to our reorganization as a Delaware corporation in 2007.

Policy on Audit Committee Pre-Approval of Fees

In its pre-approval policy, the audit committee has authorized our chief executive officer or our chief financial officer to engage the services of Deloitte & Touche LLP with respect to the following services:

- audit related services that are outside the scope of our annual audit and generally are (i) required on a project, recurring, or on a one-time basis, (ii) requested by one of our business partners (e.g., a review or audit of royalty payments), or (iii) needed by us to assess the impact of a proposed accounting standard;
- audits of the annual statutory financial statements required by the non-U.S. governmental agencies for our overseas subsidiaries;

- accounting services related to potential or actual acquisitions or investment transactions that if consummated would be reflected in our financial results or tax returns (this does not include any due diligence engagements, which must be pre-approved by the audit committee separately); and
- other accounting and tax services, such as routine consultations on accounting and/or tax treatments for contemplated transactions.

Notwithstanding this delegation of pre-approval authority, the audit committee is informed of all audit and non-related services performed by Deloitte & Touche LLP. On an annual basis prior to the completion of the audit, the audit committee will review a listing prepared by management of all proposed non-audit services to be performed by the external auditor for the upcoming fiscal year, such listing to include scope of activity and estimated budget amount. On an annual basis, prior to completion of the external audit, the audit committee will review a listing prepared by the external auditors of all non-audit services performed during the immediately preceding fiscal year. The audit committee, if satisfied with the appropriateness of the services, will provide ratification to all services prior to completion of the audit. If non-audit services are required subsequent to the annual pre-approval of services, management will seek approval of such services at the next regularly scheduled audit committee meeting. If such services are required prior to the next audit committee meeting, management will confer with the audit committee chairman regarding either conditional approval subject to full audit committee ratification or the necessity to reconvene a meeting. The audit committee has considered the non-audit services provided to us by Deloitte & Touche LLP and has determined that the provision of such services is compatible with Deloitte & Touche LLP's independence.

All audit-related and tax fees were approved by the audit committee.

Vote Required and Board of Directors Recommendation

The affirmative vote of the holders of a majority of the shares of our common stock present or represented and voting at the annual meeting will be required to approve this proposal.

The audit committee has approved the appointment of Deloitte & Touche LLP as our independent registered public accounting firm for the year ending December 31, 2009, and the board of directors recommends that stockholders vote "FOR" ratification of this appointment.

**SECURITY OWNERSHIP OF CERTAIN
BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The following table sets forth certain information regarding beneficial ownership of our capital stock as of March 31, 2009 by (i) each person known by us to be the beneficial owner of more than 5% of any class of our voting securities, (ii) each of our directors, (iii) each of our “named executive officers” and (iv) our directors and executive officers as a group, including shares they had the right to acquire within 60 days after March 31, 2009.

<u>Name of Beneficial Owner(1)</u>	<u>Common Stock Beneficially Owned</u>		<u>Preferred Stock Beneficially Owned</u>		<u>Percent of Combined Classes(5)</u>
	<u>Number of Shares(2)</u>	<u>Percent of Class(3)</u>	<u>Number of Shares</u>	<u>Percent of Class(4)</u>	
5% Stockholders:					
Garth Powis(6)(15)	813,633	4.17%	—	*	4.17%
University of Alberta(7)	—	*	12,500	100%	*
Directors and Executive Officers:					
Christopher S. Henney(8)	61,935	*	—	*	*
Richard L. Jackson(9)	9,359	*	—	*	*
W. Vickery Stoughton(10)	17,551	*	—	*	*
Daniel Spiegelman	—	*	—	*	*
Robert L. Kirkman(11)	377,101	1.90%	—	*	1.90%
Edward A. Taylor(12)	88,512	*	—	*	*
Gary Christianson(13)	4,167	*	—	*	*
Lynn Kirkpatrick (14)(15)	808,572	4.15%	—	*	4.14%
R. Rao Koganty(16)	27,081	*	—	*	*
All directors and executive officers as a group (9 persons)(17)	1,394,278	6.96%	—	*	6.95%

* Represents less than 1% of class or combined classes.

- (1) Except as otherwise indicated, the address of each stockholder identified is c/o Oncothyreon Inc., 2601 Fourth Avenue, Suite 500, Seattle, Washington 98121. Except as indicated in the other footnotes to this table, each person named in this table has sole voting and investment power with respect to all shares of stock beneficially owned by that person.
- (2) Options and warrants exercisable within 60 days of March 31, 2009 are deemed outstanding for the purposes of computing the percentage of shares owned by that person, but are not deemed outstanding for purposes of computing the percentage of shares owned by any other person.
- (3) Based on 19,492,432 shares of common stock issued and outstanding as of March 31, 2009.
- (4) Based on 12,500 shares of Class UA preferred stock issued and outstanding as of March 31, 2009.
- (5) Based on 19,492,432 shares of common stock and 12,500 shares of Class UA preferred stock issued and outstanding as of March 31, 2009.
- (6) The business address for Garth Powis is MD Anderson Cancer Center, 1400 Holcombe Blvd., FC6. 3044, Unit 422, Houston, Texas 77030.
- (7) The business address for the University of Alberta is 222, 8625 — 112 Street, Edmonton, Alberta T6G 2E1.
- (8) Includes 36,935 shares of common stock that Dr. Henney has the right to acquire under outstanding options exercisable within 60 days after March 31, 2009.
- (9) Includes 9,359 shares of common stock that Dr. Jackson has the right to acquire under outstanding options exercisable within 60 days after March 31, 2009.
- (10) Includes 13,385 shares of common stock that Mr. Stoughton has the right to acquire under outstanding options exercisable within 60 days after March 31, 2009.
- (11) Includes 368,768 shares of common stock that Dr. Kirkman has the right to acquire under outstanding options exercisable within 60 days after March 31, 2009.

- (12) Includes 77,496 shares of common stock that Mr. Taylor has the right to acquire under outstanding options exercisable within 60 days after March 31, 2009.
- (13) Includes 4,167 shares of common stock that Mr. Christianson has the right to acquire under outstanding options exercisable within 60 days after March 31, 2009.
- (14) Includes 8,333 shares of common stock that Dr. Kirkpatrick has the right to acquire under outstanding options exercisable within 60 days after March 31, 2009. The business address for Lynn Kirkpatrick is Ensysce Biosciences Inc., 20333 S.H. 249, Suite 600, Houston, TX 77070.
- (15) Lynn Kirkpatrick and Garth Powis are husband and wife. In accordance with Rule 13d-5(b)(1) under the Exchange Act and by virtue of their relationship, Dr. Kirkpatrick and Dr. Powis may be deemed to be part of a “group” for purposes of Section 13(d)(3) of the Exchange Act. Dr. Kirkpatrick and Dr. Powis disclaim that they are part of a “group” by virtue of the relationship described herein, and each disclaims beneficial ownership of all securities of Oncothyreon held by the other, except to the extent of his or her pecuniary interest therein.
- (16) Includes 27,081 shares of common stock that Dr. Koganty has the right to acquire under outstanding options exercisable within 60 days after March 31, 2009.
- (17) Includes 545,524 shares of common stock that can be acquired under outstanding options exercisable within 60 days after March 31, 2009.

The following table sets forth the securities authorized for issuance under Oncothyreon’s equity compensation plan.

Equity Compensation Plan Information as of December 31, 2008

<u>Plan Category</u>	<u>(A) Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights</u>	<u>(B) Weighted Average Exercise Price of Outstanding Options, Warrants and Rights</u>	<u>(C) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (A))(1)</u>
Equity compensation plans approved by security holders:			
Share option plan (\$Cdn.)(2)	1,119,486	\$ 9.85	—
Share option plan (\$U.S.)(2)	103,900	\$ 3.43	725,857
RSU plan	79,549	N.A.	77,408
Equity compensation plans not approved by security holders	—	N.A.	—
Total	1,302,935	N.A.	809,265

- (1) All of these are available for grants of restricted stock, restricted share units and other full-value awards, as well as for grants of stock options and stock appreciation rights. On March 11, 2009, non-employee members of our board of directors received restricted share unit grants. As a result of such grants, unless our stockholders approve Proposal Two, no shares remain for future issuance under the RSU plan.
- (2) Under the terms of the Amended and Restated Share Option Plan, the total number of shares issuable pursuant to options under the plan is 10% of the issued and outstanding shares. Shares issued upon the exercise of options do not reduce the percentage of shares which may be issuable pursuant to options under the Plan.

AUDIT COMMITTEE REPORT FOR THE YEAR ENDED DECEMBER 31, 2008

The audit committee oversees the financial reporting process of Oncothyreon (“Oncothyreon” or the “Company”) on behalf of the Company’s board of directors. Management has the primary responsibility for the financial statements and the reporting process, including the systems of internal controls. In fulfilling its oversight responsibilities, the audit committee reviewed the audited financial statements in the annual report with management, including a discussion of the accounting principles, the reasonableness of significant judgments, and the clarity of disclosures in the financial statements.

The audit committee reviewed with Deloitte & Touche LLP, the Company’s independent registered public accounting firm that is responsible for expressing an opinion on the conformity of those audited financial statements with generally accepted accounting principles and an opinion on the Company’s internal controls over financial reporting, its judgments about Oncothyreon’s accounting principles and the other matters required to be discussed with the audit committee under generally accepted auditing standards, including Statement on Auditing Standards No. 61, as amended, as adopted by the Public Accounting Oversight Board in Rule 3200T. The audit committee has received from Deloitte & Touche LLP the written disclosure and the letter required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant’s communications with the audit committee concerning independence, and the audit committee has discussed with Deloitte & Touche LLP their independence. The audit committee has considered the effect of non-audit fees on the independence of Deloitte & Touche LLP and has concluded that such non-audit services are compatible with the independence of Deloitte & Touche LLP.

The audit committee discussed with Deloitte & Touche LLP the overall scope and plans for its audits. The audit committee meets with the independent registered public accounting firm, with and without management present, to discuss the results of its audits and quarterly reviews, its observations regarding the Company’s internal controls, and the overall quality of the Company’s financial reporting. There were seven meetings of the audit committee during 2008.

In reliance on the reviews and discussions referred to above, the audit committee recommended to the board of directors, and the board of directors has approved, that the 2008 audited financial statements be included in the annual report on Form 10-K for the year ended December 31, 2008 for filing with the Securities and Exchange Commission.

This report has been furnished by the members of the audit committee.

AUDIT COMMITTEE

Daniel Spiegelman, Chairman

W. Vickery Stoughton

Christopher S. Henney

CORPORATE GOVERNANCE AND BOARD MATTERS

Board of Directors and Committee Meetings

During 2008, our board of directors met 12 times. There were seven meetings of the audit committee, three meetings of the compensation committee, and one meeting of the nominating and governance committee during 2008. All of our directors attended more than 75% of the aggregate of all meetings of the board of directors and of the committees on which such director served. Although we do not have a formal policy regarding attendance by members of the board of directors at our annual meeting of stockholders, our directors are encouraged to attend and all of our directors attended the last annual meeting of stockholders.

Determinations Regarding Director Independence

The board of directors has determined that each of our current directors, except Dr. Kirkman, is an “independent director” as that term is defined in NASDAQ Marketplace Rule 4200(a)(15) (on April 13, 2009, the NASDAQ Marketplace Rules were reorganized such that Rule 4200(a)(15) became Rule 5605(a)(2)). In addition, the board of directors previously determined that each of Messrs. Blair, Burley and Welsh, each of whom served on the board of directors for part of 2008, was an “independent director” as that term is defined in NASDAQ Marketplace Rule 4200(a)(15). The independent directors generally meet in executive session at each quarterly board of directors meeting.

The board of directors has also determined that each member of the audit committee, the compensation committee, and the nominating and governance committee meets the independence standards applicable to those committees prescribed by the NASDAQ, the SEC, and the Internal Revenue Service.

Finally, the board of directors has determined that Mr. Spiegelman, the chairman of the audit committee, is an “audit committee financial expert” as that term is defined in Item 407(d)(5) of Regulation S-K promulgated by the SEC.

Code of Conduct

Our board of directors adopted a Code of Business Conduct and Ethics (the “Code of Conduct”) for all our officers, directors, and employees in December 2003, which was last amended on March 13, 2008, and a Code of Ethics for the President and Chief Executive Officer, the Chief Financial Officer and Corporate Controller on March 25, 2003, which was subsequently amended on March 13, 2008, (the “Code of Ethics”). The Code of Conduct details the responsibilities of all our officers, directors, and employees to conduct our affairs in an honest and ethical manner and to comply with all applicable laws, rules, and regulations. The Code of Conduct addresses issues such as general standards of conduct, avoiding conflicts of interest, communications, financial reporting, safeguarding our assets, responsibilities to our customers, suppliers, and competitors, and dealing with governments. The Code of Ethics imposes additional requirements on our senior executive, financial and accounting officers with respect to conflicts of interest, accuracy of accounting records and periodic reports and compliance with laws. Each of the Code of Conduct and Code of Ethics is available on our website at www.oncothyreon.com.

Corporate Governance Guidelines

We have also adopted Corporate Governance Guidelines that outline, among other things, the role of the board of directors, the qualifications and independence of directors, the responsibilities of management, the board of directors, and the committees of the board of directors, board of directors evaluation and compensation, management succession, chief executive officer evaluation, and limitations on the authority of executive management. The Corporate Governance Guidelines are also available on our website at www.oncothyreon.com.

Committees of the Board of Directors

During 2008, our board of directors had three standing committees: the audit committee, the compensation committee, and the nominating and governance committee. All of the committee charters, as adopted by our board of directors, are available on our website at www.oncothyreon.com under “Corporate Governance.” The functions performed by each committee and the members of each committee are described below.

Audit Committee

The audit committee reviews with our independent registered public accounting firm the scope, results, and costs of the annual audit and our accounting policies and financial reporting. Our audit committee has (i) direct responsibility for the appointment, compensation, retention, and oversight of our independent registered public accounting firm, (ii) establishes procedures for handling complaints regarding our accounting practices, (iii) authority to engage any independent advisors it deems necessary to carry out its duties, and (iv) appropriate funding to

engage any necessary outside advisors. The current members of the audit committee are Daniel Spiegelman (Chairman), W. Vickery Stoughton and Christopher S. Henney. S. Robert Blair and Michael C. Welsh were members of the audit committee for portions of 2008. Messrs. Blair and Welsh resigned from our board of directors and the audit committee effective June 4, 2008 and January 1, 2009, respectively. The board of directors has determined that Mr. Spiegelman, the chairman of the audit committee, is an “audit committee financial expert” as that term is defined in Item 407(d)(5) of Regulation S-K promulgated by the SEC. The audit committee report is set forth above. The audit committee reviews and reassesses the adequacy of its charter on an annual basis.

Compensation Committee

The compensation committee oversees our compensation and benefits practices and programs (other than compensation practices of our non-employee directors, which are overseen by the nominating and corporate governance committee). The current members of the compensation committee are Richard L. Jackson (Chairman), Christopher S. Henney and W. Vickery Stoughton. The Compensation Committee Report is set forth in the “Executive Compensation — Compensation Committee Report” section later in this proxy statement.

Nominating and Governance Committee

The nominating and governance committee reviews candidates and makes recommendations of nominees for the board of directors. The nominating and governance committee also oversees our corporate governance and compliance activities and compensation practices with respect to our non-employee directors. The nominating and governance committee has not adopted a formal policy with respect to the consideration of director candidates recommended by stockholders; however, if a stockholder delivered a written request to our corporate secretary which satisfied the notice, information, and other requirements set forth in our bylaws with respect to stockholder proposals, it would receive appropriate consideration. The nominating and governance committee may consider in the future whether our company should adopt a more formal policy regarding stockholder nominations. The current members of the nominating and governance committee are Christopher S. Henney (Chairman), Daniel Spiegelman and Richard L. Jackson. Stephen K. Burley and Michael C. Welsh were members of the nominating and corporate governance committee for portions of 2008. Messrs. Burley and Welsh resigned from our board of directors and the nominating and corporate governance committee effective September 4, 2008 and January 1, 2009, respectively.

The nominating and governance committee evaluates the qualifications of all director recommendations that are properly submitted by stockholders, management, members of the board of directors, and to the extent deemed necessary, third-party search firms. We have in the past paid a third party to assist us in identifying, evaluating, and screening potential candidates for nomination to the board of directors, and we may do so in the future. In assessing potential candidates, the nominating and governance committee considers relevant factors, including, among other things, issues of character, judgment, independence, expertise, diversity of experience, depth of experience in the industry in which we compete, length of service, and other commitments. The specific traits, abilities and experience that the nominating and governance committee and the board look for in determining candidates for election to the board include, but are not limited to:

- the highest ethical character and shared values with our company;
- reputation consistent with our image;
- significant accomplishments within their respective fields;
- active and former chief executive officers of public companies and scientific, government, educational and non-profit institutions;
- recognized leader in the fields of medicine or biological sciences;
- relevant expertise and experience and the ability to offer advice and guidance; and
- ability to exercise sound business judgment.

In addition, the nominating and governance committee considers the suitability of each candidate, taking into account the current members of the board of directors, in light of the current size and composition of the board of directors. After completion of its evaluation of candidates, the nominating and governance committee will recommend a slate of director-nominees to the board of directors. Each of the nominees standing for election to the board of directors at this annual meeting was recommended by the nominating and governance committee.

Communications with the Board of Directors

Stockholders wishing to communicate with our board of directors should send their communications in writing to the attention of our corporate secretary at Oncothyreon Inc., 2601 Fourth Avenue, Suite 500, Seattle, Washington 98121. Our corporate secretary will review the communication, and if the communication is determined to be relevant to our operations, policies, or procedures (and not vulgar, threatening, or of an inappropriate nature not relating to our business), the communication will be forwarded to our Chairman of the Board. If the communication requires a response, our corporate secretary will assist the board of directors in preparing the response.

Compensation of Directors

We pay our non-employee directors an annual cash fee of \$50,000 for their service on our board of directors and its committees. We also pay the chairman of our board an additional annual fee of \$50,000, the Chairman of our audit committee an additional annual fee of \$25,000, and the Chairmen of our other standing committees of the board of directors an additional annual fee of \$5,000 each. In addition, each non-employee member of our board is entitled to an annual restricted share unit grant equal to Cdn. \$30,000 divided by the closing price of our common stock on the Toronto Stock Exchange on the date of grant, although the directors did not receive such grants in 2008. Board members receive cash compensation in the currency of their country of residence without adjusting for any foreign exchange rate. We also reimburse our directors for travel and other necessary business expenses incurred in the performance of their services for us.

Fiscal Year 2008 Director Compensation

The following table sets forth compensation information for our directors for the year ended December 31, 2008. The table excludes Dr. Kirkman who did not receive any compensation from us in his role as director in the year ended December 31, 2008. All compensation numbers are expressed in U.S. dollars.

Name	Fees Earned or Paid in Cash (\$)	Option Awards \$(1)(2)(3)	Total (\$)
Christopher S. Henney	\$100,000	\$72,392	\$172,392
Michael C. Welsh(4)	55,000	9,671	64,671
Richard L. Jackson	55,000	—	55,000
Daniel Spiegelman	41,667	—	41,667
W. Vickery Stoughton	62,500	6,916	69,416
S. Robert Blair(5)	25,000	2,766	27,766
Stephen Burley(6)	12,500	—	12,500

(1) Amounts in these columns represent the aggregate expense recognized for financial statement reporting purposes in 2008 with respect to options granted to our directors, calculated in accordance with Statement of Financial Accounting Standards (“SFAS”) No. 123 (revised 2004), Share Based Payment, (“SFAS 123(R)”) without regard to estimated forfeitures. See Note 12 of Notes to Consolidated Financial Statements contained in our 2008 Annual Report on Form 10-K for a discussion of assumptions made in determining these values.

- (2) As of December 31, 2008, our non-employee directors held RSUs and outstanding options to purchase the number of shares of common stock as follows: Dr. Henney (53,602 options, 56,543 RSUs); Dr. Blair (3,333 options, 3,377 RSUs); Dr. Jackson (9,359 options, 6,543 RSUs); Mr. Stoughton (15,467 options, 6,543 RSUs); Mr. Welsh (14,727 options, 6,543 RSUs).
- (3) Each RSU may be converted into one share of our common stock at the end of the grant period, which is five years for each of the RSUs we have granted.
- (4) Resigned as a director effective January 1, 2009.
- (5) Did not stand for re-election at our 2008 annual stockholders' meeting held on June 4, 2008.
- (6) Resigned as a director on September 4, 2008.

EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

Compensation Philosophy and Objectives

Historically, the principal objectives of the compensation policies and programs of Oncothyreon and its predecessor corporation, Biomira Inc. (which we will refer to throughout this discussion as “us,” “our,” and “we”) have been to attract and retain senior executive management, to motivate their performance toward clearly defined corporate goals, and to align their long term interests with those of our stockholders. In addition, our compensation committee believes that maintaining and improving the quality and skills of our management and appropriately incentivizing their performance are critical factors affecting our stockholders' realization of long-term value.

Our compensation programs have reflected, and for the foreseeable future should continue to reflect, the fact that we are a biopharmaceutical company whose principal compounds are still in early stage clinical trials and subject to regulatory approval. As a result, our revenues have been and will continue to be limited, and we expect to continue to incur net losses for at least the next several years. In an effort to preserve cash resources, our historical compensation programs have focused heavily on long-term equity incentives relative to cash compensation. With a relatively larger equity weighting, this approach seeks to place a substantial portion of executive compensation at risk by rewarding our executive officers, in a manner comparable to our stockholders, for achieving our business and financial objectives.

In addition to long-term equity incentives, we have also implemented annual cash incentive bonus programs for our executive officers and employees. Payments under these cash incentive programs have been tied to corporate and divisional performance objectives, with the relative ratio of corporate to divisional objectives being based on the individual employee's level of responsibilities within the company. Generally, payments to executive officers, particularly the chief executive officer, are more heavily weighted toward achievement of corporate objectives.

We design and implement compensation programs that combine both long term equity elements and cash incentive elements based on annual performance objectives. Our compensation committee has not, however, adopted any formal or informal policies or guidelines for allocating compensation between cash and equity compensation or among different forms of non-cash compensation. The compensation committee's philosophy is that a substantial portion of an executive officer's compensation should be performance-based, whether in the form of equity or cash compensation. In that regard, we expect to continue to use options or other equity incentives as a significant component of compensation because we believe that they align individual compensation with the creation of stockholder value, and we expect any payments under cash incentive plans to be tied to annual performance targets.

Role of Our Compensation Committee

Our compensation committee is comprised of three non-employee members of our board of directors, Dr. Henney, Dr. Jackson and Mr. Stoughton, each of whom is an independent director under the rules of The

NASDAQ Global Market, an “outside director” for purposes of Section 162(m) of the United States Internal Revenue Code of 1986, as amended, which we call Section 162(m), and a “non-employee director” for purposes of Rule 16b-3 under the Exchange Act.

Our compensation committee approves, administers, and interprets our executive compensation and benefit policies. Our compensation committee acts exclusively as the administrator of our equity incentive plans and approves all grants to employees, including our executive officers. Our compensation committee operates pursuant to a written charter under which our board of directors has delegated specific authority with respect to compensation determinations. Among the responsibilities of our compensation committee are the following:

- evaluating our compensation practices and assisting in developing and implementing our executive compensation program and philosophy;
- establishing a practice, in accordance with the rules of The NASDAQ Global Market, of determining the compensation earned, paid, or awarded to our chief executive officer independent of input from him; and
- establishing a policy, in accordance with the rules of The NASDAQ Global Market, of reviewing on an annual basis the performance of our other executive officers with assistance from our chief executive officer and determining what we believe to be appropriate compensation levels for such officers.

The compensation committee’s charter allows the committee to form subcommittees for any purpose that the committee deems appropriate and may delegate to such subcommittees such power and authority as the committee deems appropriate.

Our chief executive officer actively supports the compensation committee’s work by providing information relating to our financial plans, performance assessments of our executive officers, and other personnel related data. In particular, our chief executive officer, as the person to whom our other executive officers report, is responsible for evaluating individual officers’ contributions to corporate objectives as well as their performance relative to divisional and individual objectives. Our chief executive officer, on an annual basis at or shortly after the end of each year, makes recommendations to the compensation committee with respect to merit salary increases, cash bonuses, and stock option grants or other equity incentives for our other executive officers. Our compensation committee meets to evaluate, discuss, modify or approve these recommendations. Without the participation of the chief executive officer, the compensation committee as part of the annual review process conducts a similar evaluation of the chief executive officer’s contribution and performance and makes determinations, at or shortly after the end of each year, with respect to merit salary increases, bonus payments, stock option grants, or other forms of compensation for our chief executive officer.

Our compensation committee has the authority under its charter to engage the services of outside advisors, experts, and others for assistance. The compensation committee did not rely on any outside advisors for purposes of structuring our 2008 compensation plan but did rely on the survey data described below.

Competitive Market Review for 2008

The market for experienced management is highly competitive in the life sciences and biopharmaceutical industries. We seek to attract and retain the most highly qualified executives to manage each of our business functions, and we face substantial competition in recruiting and retaining management from companies ranging from large and established pharmaceutical companies to entrepreneurial early stage companies. We expect competition for appropriate technical, commercial, and management skills to remain strong for the foreseeable future.

In making our executive compensation determinations for 2008, we benchmarked our compensation levels using both Canadian and U.S. professional salary surveys. These include:

- The Wynford Group Management Consultants National Salary Report 2007;
- Radford Global Life Sciences Salary Survey 2007; and
- World At Work Salary Survey 2007.

In evaluating the survey data, our compensation committee compared our compensation practices and levels for each compensation component including base salary, target annual cash incentive opportunity, and equity compensation with the salary survey data. This information was used to determine appropriate levels of compensation based on market benchmarks for various functional titles. Based on this data, our compensation committee believes that our levels of total compensation for our executive officers generally fell at about the fiftieth percentile.

Principal Elements of Executive Compensation

Our executive compensation program consists of five components:

- base salary;
- annual cash bonuses;
- equity-based incentives;
- benefits; and
- severance/termination protection.

We believe that each of these components, combining both short and long-term incentives, offers a useful element in achieving our compensation objectives and that collectively these components have been effective in achieving our corporate goals.

Annual Review Process

Our compensation committee reviews data and makes executive compensation decisions on an annual basis, typically during the last quarter of the year or the first quarter of the new year. In connection with that process, executive officers are responsible for establishing and submitting for review to our chief executive officer (and in the case of our chief executive officer, directly to the compensation committee) their departmental goals and financial objectives. Our chief executive officer then compiles the information submitted and provides it, along with information relating to his own personal goals and objectives, to our compensation committee for review. Our compensation committee, including our chief executive officer with respect to all officers other than himself and excluding our chief executive officer with respect to discussions of his own compensation, reviews, considers, and may amend the terms and conditions proposed by management.

As part of the annual review process, our compensation committee makes its determinations of changes in annual base compensation for executive officers based on numerous factors, including performance over the prior year, both individually and relative to corporate or divisional objectives, established corporate and divisional objectives for the next year, our operating budgets, and a review of survey data relating to base compensation for the position at companies we have identified within our peer group. For 2008, our compensation committee also considered and approved a cash incentive plan for executive officers, with bonuses becoming payable under the plan based on achievement of specified corporate and divisional objectives. During the annual review process, our compensation committee also considered each executive's equity incentive position, including the extent to which he or she was vested or unvested in his or her equity awards and the executive's aggregate equity incentive position.

From time to time, our compensation committee may make off-cycle adjustments in executive compensation as it determines appropriate. For example, in March 2009, our compensation committee considered and approved a special cash bonus for each of our chief executive officer and chief operating officer in connection with the successful completion of the 2008 transaction with Merck KGaA.

Weighting of Compensation Elements

Our compensation committee's determination of the appropriate use and weight of each element of executive compensation is subjective, based on its view of the relative importance of each element in meeting

our overall objectives and factors relevant to the individual executive. Like many biopharmaceutical companies with clinical-stage products, we seek to place a significant amount of each executive's total potential compensation "at risk" based on performance.

Base Salary

Base salary for our chief executive officer and other officers reflects the scope of their respective responsibilities, their relative seniority and experience, and competitive market factors. Salary adjustments are typically based on competitive conditions, individual performance, changes in job duties, and our budget requirements. All compensation data below are designated in U.S. dollars, unless otherwise indicated. For currency translation purposes, we used (i) the average of the Bank of Canada daily noon exchange rate, or U.S. \$1.00: Cdn. \$1.074 and U.S. \$1.00: Cdn. \$1.0671 for compensation paid in 2007 and 2008, respectively, (ii) for compensation that was earned in 2007 and paid in 2008, we used the Bank of Canada daily noon exchange rate on December 31, 2007, or U.S. \$1.00: Cdn. \$0.9881 and (iii) for compensation that was earned in 2008 and paid in 2009, we used the Bank of Canada daily noon exchange rate on December 31, 2008, or U.S. \$1.00: Cdn. \$1.228.

In our offer letter with Dr. Kirkman, we agreed to pay him an initial base salary at \$320,000. Our compensation committee set Dr. Kirkman's base salary based on his experience and our compensation committee's view of market compensation for chief executive officers of public, early stage biopharmaceutical companies. No adjustment was made in Dr. Kirkman's base salary during the annual review process at the end of year 2006. For 2007, Dr. Kirkman's base salary remained at \$320,000. On January 14, 2008, pursuant to instructions from the compensation committee, Dr. Kirkman's base salary was increased to \$375,000 for the 2008 fiscal year.

Variable Cash Compensation — Incentive Bonuses

Until 2008, with respect to our executive officers, and 2009 with respect to other employees, we implemented a variable cash compensation arrangement, or Variable Pay Plan, under which payment of incentive bonuses was contingent on achievement of identified management objectives. These management goals reflected a combination of corporate or divisional objectives for the upcoming year and were typically established at or shortly after the end of the prior year. These objectives were both qualitative and quantitative. For executive officers, particularly our chief executive officer, these objectives tended to be focused at the corporate level, and for lower-level employees, they tended to be relatively more focused at the divisional level. Our compensation committee generally sets performance goals that it believed were attainable but maintained discretion to increase or decrease variable cash incentive compensation as it determined appropriate, regardless of whether the identified objectives were satisfied.

Achievement of target objectives under our variable cash compensation plan typically resulted in payment of a bonus equal to a percentage of the individual executive's or employee's base salary. With respect to executive officers, our compensation committee was responsible for assessing the performance of the individual officer and our company against the established objectives and for determining whether bonus payments would be made. For executives, corporate goals were weighted at 60% and divisional goals were weighted at 40%. For employees other than executives, corporate goals were weighted at 40% and divisional goals were weighted at 60%. We based this weighting structure on our belief that executives are in a greater position to influence the achievement of corporate goals, and therefore, a greater percentage of their bonuses should be tied to corporate rather than divisional goals.

Each goal listed as a corporate or divisional goal was assigned a percentage, based on the importance to us that the goal be achieved. Each goal also typically involved multiple achievement levels. Achieving objectives at "target" would lead to attainment of the expected level of incentive compensation. Less than expected performance could result in either a smaller bonus or no bonus, and superior performance could lead to a larger bonus. The final bonus determination depended both on which goals were achieved and the percentages we assigned to the goals based on their relative importance. Assuming our compensation

committee determined that a bonus had been earned, we typically paid bonuses under the Variable Pay Plan shortly after the end of each year.

Beginning in 2008, with respect to executive officers, and 2009, with respect to other employees, the compensation committee determined to replace the Variable Pay Plan, with a new policy, which we refer to as the performance review policy, that we believe will enhance each individual employee's incentive to contribute to management objectives.

Under the performance review policy, our executive officers and employees are eligible to receive bonuses based on achievement of individualized performance goals. Each goal is assigned a percentage based on the importance to us that the goal be achieved. Generally, achievement of a particular goal will result in the payment of the expected level of incentive compensation associated with such goal. Partial achievement can result in the payment of less or no incentive compensation. In all cases, the compensation committee, with respect to executive officers, and our chief executive officer, with respect to other employees, retains discretion to increase or decrease variable cash incentive compensation as it or he determines appropriate, regardless of whether the identified goals have been achieved.

Typically, the maximum incentive compensation to which an executive officer or employee is entitled is based on a percentage of such individual's base salary. For example, if (i) an executive's base salary is \$100,000, (ii) he is eligible to receive a bonus up to 50% of his base salary, or \$50,000, (iii) the compensation committee has established four performance goals, each weighted at 25% and (iv) the compensation committee determines that the executive has achieved two of the four performance goals, the executive would be eligible to receive, subject to the discretion of the compensation committee, a bonus of \$25,000.

Performance goals may be both qualitative and quantitative and are designed to be specific, measurable and defined by significant achievements that go beyond an individual's job responsibilities. Although performance goals are intended to be achievable with significant effort, we do not expect that every goal will be actually attained in any given year.

Performance goals for our executive officers are tied to corporate objectives. 60% of senior, non-executive employees' performance goals are tied to corporate objectives with the remainder tied to divisional objectives, while 40% of other employees' goals are tied to corporate objectives with the remainder tied to divisional objectives. We have designed the performance review policy in this manner based on our belief that more senior personnel are in a greater position to influence the achievement of corporate objectives, and therefore, a greater number of their performance goals should be tied to corporate rather than divisional objectives.

Our compensation committee is responsible for setting performance goals, assessing whether such goals have been achieved and determining the amount of bonuses (if any) to be paid with respect to our executive officers, while the chief executive officer bears such responsibility for other employees. Performance goals for the upcoming year are typically established at or shortly after the end of the prior year. Assuming that a determination is made that a bonus has been earned, we will typically pay bonuses to employees shortly after the end of each year and to executive officers shortly after the first scheduled meeting of the compensation committee each year.

Under the terms of his offer letter, Dr. Kirkman is entitled to receive a performance bonus of up to 50% of his base salary, assuming achievement of all performance goals. In March 2008, our compensation committee established year 2008 performance goals for Dr. Kirkman including obtaining funds for operations from an equity financing or licensing agreement, increasing the Company's stock price, signing various supply agreements and achieving certain clinical milestones for PX-12, PX-478 and PX-866. The maximum performance bonus that Dr. Kirkman could have earned under the performance review policy for 2008 was \$187,500. On March 6, 2009, the compensation committee approved a performance bonus of \$56,250 for Dr. Kirkman. In addition, the compensation committee approved a special cash bonus of \$120,000 related to the successful completion of the December 2008 transaction with Merck KGaA.

Mr. Taylor, our former chief financial officer, was eligible to receive a performance bonus of up to 40% of his annual base salary, assuming achievement of all performance goals. The compensation committee established 2008 performance goals for Mr. Taylor relating to the same corporate goals established for

Dr. Kirkman, as well as completing activities necessary for the move to the new corporate headquarters. The maximum bonus Mr. Taylor could have earned for 2008 was \$109,908. In connection with Mr. Taylor's departure from our company and pursuant to the terms of our severance agreement with him, we agreed to pay Mr. Taylor \$109,908 in 18 equal monthly installments beginning in January 2009.

Mr. Christianson, our chief operating officer, is eligible to receive a performance bonus of up to 35% of his annual base salary, assuming achievement of all performance goals. The compensation committee established 2008 performance goals for Mr. Christianson relating to the same corporate goals established for Dr. Kirkman, as well as implementation of certain goals with respect to operations activities including overseeing the manufacture of clinical supplies of Stimuvax, completing activities for the second Merck process transfer milestone and completing activities necessary for the move to the new corporate headquarters. The maximum performance bonus that Mr. Christianson could have earned under the performance review policy for 2008 was \$86,520. On March 6, 2009, the compensation committee approved a performance bonus of \$73,500 for Mr. Christianson. In addition, the compensation committee approved a special cash bonus of \$20,000 related to the successful completion of the December 2008 transaction with Merck KGaA.

Dr. Kirkpatrick, our former chief scientific officer, was eligible to receive a performance bonus of up to 40% of her annual base salary, assuming achievement of all performance goals. The compensation committee established 2008 performance goals for Dr. Kirkpatrick relating to the corporate goals established for Dr. Kirkman, as well as implementation of certain goals with respect to our research and development activities. The maximum bonus that Dr. Kirkpatrick could have earned under the performance review policy for 2008 was \$106,500. On March 6, 2009, the compensation committee approved a performance bonus of \$53,250 for Dr. Kirkpatrick.

Dr. Koganty, our former vice president and general manager synthetic biologics business unit, was eligible to receive a performance bonus of up to 30% of his base salary, assuming achievement of all performance goals. The compensation committee established 2008 performance goals for Dr. Koganty relating to obtaining funds for operations from an equity financing or licensing agreement and certain goals with respect to our research and development activities. The maximum bonus Dr. Koganty could have earned under the performance review policy for 2008 was Cdn. \$46,968. In connection with Dr. Koganty's departure from our company and pursuant to the terms of our severance agreement with him, we agreed to pay Dr. Koganty Cdn. \$46,968 in 18 equal monthly installments beginning in January 2009.

Equity-based Incentives

We grant equity-based incentives to employees, including our executive officers, in order to create a corporate culture that aligns employee interests with stockholder interests. We have not adopted any specific stock ownership guidelines, and our equity incentive plans have provided the principal method for our executive officers to acquire an equity position in our company, whether in the form of restricted share units, or RSUs, or options.

Historically, we have granted options and other equity incentives to our officers under our share option plan and restricted share unit plan. Our share option plan permits the grant of stock options for shares of common stock, and our restricted share unit plan permits the allocation of a restricted share unit settled in shares of common stock. All equity incentive programs are administered by our compensation committee. To date, our equity incentive grants have consisted principally of options under the share option plan and, in limited cases, restricted share units under the restricted share unit plan.

The size and terms of any initial option or restricted share units to new employees, including executive officers, at the time they join us is based largely on competitive conditions applicable to the specific position. For non-executive officer grants, our compensation committee has pre-approved a matrix showing appropriate levels of option grants for use in making offers to new employees.

In making its determination of the size of initial option grants for our current officers, our board of directors relied in part on survey data and peer group comparisons. In connection with his becoming our chief executive officer on September 5, 2006, our board of directors approved the grant of an option to Dr. Kirkman

to acquire 450,000 shares of our common stock at an exercise price of Cdn. \$7.38 which vested, or will vest, in three annual installments of 150,000 shares on August 29, 2007, 2008, and 2009. Consistent with the provisions of our share option plan as in effect at the time of grant, the option was priced at the closing price of our shares of common stock on the Toronto Stock Exchange on the day immediately prior to the date of board approval. The exercise prices of all outstanding options granted to Dr. Kirkman had been based on the Toronto Stock Exchange trading price; all options were priced in Canadian dollars. Dr. Kirkman also received an additional option to purchase 137,537 shares of our common stock on May 3, 2007 at an exercise price of Cdn. \$8.04, in connection with the terms of his offer letter, under which he was eligible to receive an additional option award to purchase a number of shares equal to 3% of any shares issued during his first year of employment with us. Such grant has vested or will vest, in four equal annual installments of 34,384 shares on May 3, 2007, 2008, 2009, and 2010. Our compensation committee believes that the size and terms of Dr. Kirkman's stock option grant were reasonable given our early stage of product development and skill requirements for senior management, Dr. Kirkman's industry experience and background, and equity compensation arrangements for experienced chief executive officers at comparably situated companies

In addition, our practice has been to grant refresher options to employees, including executive officers, when our board of directors or compensation committee believes additional unvested equity incentives are appropriate as a retention incentive. For example, in June 2008 and again in March 2009, we granted refresher options to some of our employees (including our executive officers) pursuant to the standard vesting and other terms of our share option plan. We expect to continue this practice in the future in connection with the compensation committee's annual performance review at the beginning of each year. In making its determination concerning additional option grants, our compensation committee will also consider, among other factors, individual performance and the size of the individual's equity grants in the then-current competitive environment. Where our board of directors has approved option grants for executive officers or other employees during a regular quarterly closed trading window under our insider trading policy, we have priced the options based on the closing sales price of our common stock on the first trading day after the window opened.

To date, our equity incentives have been granted with time-based vesting. Most new hire option grants, including for executive officers other than Dr. Kirkman as described above, vest and become exercisable over a four year period with 25% vesting at the end of the first year of employment and the balance vesting annually after the first anniversary of the grant. We expect that additional option grants to continuing employees will typically vest over the same schedule. Although our practice in recent years has been to provide equity incentives principally in the form of stock option grants that vest over time, our compensation committee may consider alternative forms of equity in the future, such as performance shares, restricted share units or restricted stock awards with alternative vesting strategies based on the achievement of performance milestones or financial metrics.

As noted above, consistent with the terms of the share option plan and subject to the policy against pricing options during regularly scheduled closed quarterly trading windows, we have historically priced option grants based on the closing sales price of our shares of common stock trading on the Toronto Stock Exchange. On April 3, 2008 our board of directors amended our share option plan to provide that each option granted pursuant to the plan be priced at the closing price of our shares of common stock on The NASDAQ Global Market on the day of the option grant.

Benefits

We provide the following benefits to our named executive officers, generally on the same basis provided to all of our employees:

For employees based in the United States:

- health, dental insurance and vision (for the employee and eligible dependents);
- flexible spending accounts for medical and dependent care;
- life insurance;

- employee assistance plan (for the employee and eligible dependents);
- short-and long-term disability, accidental death and dismemberment; and
- a 401(k) plan with an employer match into the plan.

As of December 18, 2008 we ceased to have any employees based in Canada. For employees based in Canada, we had provided a flexible benefits plan under which each employee received “credits” to purchase benefits from the following list:

- extended health;
- dental;
- health spending account;
- provincial health care coverage;
- life insurance;
- optional term life insurance;
- accidental death and dismemberment insurance;
- optional accidental death and dismemberment (family option available); and
- purchase of vacation days.

Additionally, we had provided the following benefits to former Canadian employees outside our flexible benefits plan:

- short and long term disability;
- employee and family assistance; and
- group RRSP plan with an employer match into the plan.

Severance/Termination Protection

We entered into offer letters with our named executive officers when each was recruited for his or her current position. These offer letters provide for general employment terms and, in some cases, benefits payable in connection with the termination of employment or a change in control. The compensation committee considers such benefits in order to be competitive in the hiring and retention of employees, including executive officers.

In addition, these benefits are intended to incentivize and retain our officers during the pendency of a proposed change in control transaction and align the interests of our officers with our stockholders in the event of a change in control. The compensation committee believes that proposed or actual change in control transactions can adversely impact the morale of officers and create uncertainty regarding their continued employment. Without these benefits, officers may be tempted to leave the company prior to the closing of the change in control, especially if they do not wish to remain with the entity after the transaction closes. Such departures could jeopardize the consummation of the transaction or our interests if the transaction does not close and we remain independent.

All arrangements with the named executive officers and the potential payments that each of the named executive officers would have received if a change in control or termination of employment would have occurred on December 31, 2008, are described under “— Employment Agreements and Offer Letters” and “— Potential Payments on Termination or Change in Control.”

Accounting and Tax Considerations

Section 162(m) limits the amount that we may deduct for compensation paid to our chief executive officer and to each of our four most highly compensated officers to \$1,000,000 per person, unless certain

exemption requirements are met. Exemptions to this deductibility limit may be made for various forms of “performance-based” compensation. In addition to salary and bonus compensation, upon the exercise of stock options that are not treated as incentive stock options, the excess of the current market price over the option price, or option spread, is treated as compensation and accordingly, in any year, such exercise may cause an officer’s total compensation to exceed \$1,000,000. Under certain regulations, option spread compensation from options that meet certain requirements will not be subject to the \$1,000,000 cap on deductibility. While the compensation committee cannot determine with certainty how the deductibility limit may impact our compensation program in future years, the compensation committee intends to maintain an approach to executive compensation that strongly links pay to performance. While the compensation committee has not adopted a formal policy regarding tax deductibility of compensation paid to our chief executive officer and our four most highly compensated officers, the compensation committee intends to consider tax deductibility under Section 162(m) as a factor in compensation decisions.

Compensation Committee Interlocks and Insider Participation

During 2008, Richard L. Jackson, Christopher S. Henney and W. Vickery Stoughton served on our compensation committee. During 2008, no member of our compensation committee was an officer or employee or formerly an officer of our company, and no member had any relationship that would require disclosure under Item 404 of Regulation S-K of the Securities Exchange Act of 1934. None of our executive officers has served on the board of directors or the compensation committee (or other board committee performing equivalent functions) of any other entity, one of whose executive officers served on our board of directors or on our compensation committee.

Compensation Committee Report

The information contained in this report will not be deemed to be “soliciting material” or to be “filed” with the SEC, nor will such information be incorporated by reference into any future filing under the Securities Act or the Exchange Act, except to the extent that we specifically incorporate it by reference in such filing.

In reliance on the reviews and discussions referred to above and the review and discussion of the section captioned “Compensation Discussion and Analysis” with our management, the compensation committee has recommended to the board of directors and the board of directors has approved, that the section captioned “Compensation Discussion and Analysis” be included in this proxy statement and incorporated by reference in our annual report on Form 10-K.

COMPENSATION COMMITTEE

*Richard L. Jackson, Chairman
Christopher S. Henney
W. Vickery Stoughton*

Summary Compensation Table — 2008, 2007 and 2006

The following table sets forth the compensation earned by or awarded to, as applicable, our principal executive officer, principal financial officer and other executive officers during each of 2006, 2007 and 2008. We refer to these officers in this proxy statement as the “named executive officers.” All compensation data in the table below is expressed in U.S. dollars

Name and Principal Position	Year	Salary \$(1)	Bonus (\$)	Option Awards \$(1)(2)	Non-Equity Incentive Plan Compensation \$(1)(3)	All Other Compensation \$(1)(4)	Total (\$)
Robert L. Kirkman	2008	\$375,000	—	\$1,082,430	\$176,250	\$ 14,730	\$1,648,410
Chief Executive Officer	2007	320,000	—	984,566	116,000	9,936	1,430,502
President and Director	2006	92,308	\$100,000	264,293	—	3,759	460,360
Edward A. Taylor(5)	2008	270,947	—	99,702	—	591,183	961,832
Chief Financial Officer	2007	240,223	—	50,745	92,954	8,064	391,986
Vice President, Finance & Administration	2006	220,186	—	171,630	70,900	12,115	474,831
Gary Christianson(6)	2008	247,200	—	27,840	93,500	30,862	377,156
Chief Operating Officer	2007	92,769	—	11,704	40,000	2,783	147,256
D. Lynn Kirkpatrick	2008	266,250	—	38,688	53,250	9,892	368,080
Chief Scientific Officer	2007	250,000	—	29,845	63,500	8,046	351,391
	2006	41,667	—	2,896	7,938	1,306	53,807
R. Rao Koganty(5)	2008	146,729	—	49,263	—	262,849	458,841
Vice President and General Manager Synthetic Biologics Business Unit	2007	141,527	—	25,373	29,305	7,359	203,564
	2006	129,595	—	—	29,801	5,382	164,778

- (1) Dr. Koganty received his cash compensation denominated in Canadian dollars as did Mr. Taylor until September 2008. For currency translation purposes, we used (a) the average of the Bank of Canada daily noon exchange rate or U.S. \$1.00: Cdn. \$1.0671, U.S. \$1.00: Cdn. \$1.0740 and U.S. \$1.00: Cdn \$1.1343 for 2008, 2007 and 2006, respectively, when translating cash compensation and stock compensation under SFAS 123(R), and (b) the Bank of Canada daily noon exchange rate for December 31, 2008, the last trading day of 2008, or U.S. \$1.00: Cdn. \$1.2228, when translating incentive compensation and severance payments accrued in 2008 for Dr. Koganty. The Bank of Canada “noon exchange rate” is a benchmark rate established by the Bank of Canada.
- (2) Amounts represent the aggregate expense recognized for financial statement purposes, calculated in accordance with SFAS No. 123(R). See Note 12 of Notes to the Consolidated Financial Statements contained in our 2008 annual report on Form 10-K filed with the Securities and Exchange Commission on March 30, 2009 for a discussion of assumptions made in determining the compensation expense of our stock options.
- (3) The amounts in this column represent total performance-based bonuses earned for services rendered during the year under our Variable Pay Plan, for 2006, and performance review policy, for 2007 and 2008, for executive officers, in which all employees were eligible to participate. Under the applicable bonus plan for each year, each executive was eligible to receive a cash bonus based on achievement of a combination of corporate or divisional objectives. Please see “Compensation Discussion and Analysis — Variable Cash Compensation — Incentive Bonuses” above for additional information regarding our variable cash compensation policies for executive officers.
- (4) Except as disclosed in the other footnotes, the amounts in this column consist of contributions made by us pursuant to our 401(k) plan in the United States and to the equivalent Canadian plan in Canada.
- (5) Amounts listed in “All Other Compensation” for Messrs. Taylor and Koganty include accrued severance payments equal to 1.5 times their 2008 salary plus an amount equal to the annual bonus earned in the preceding year plus an additional 20% of their 2008 base salary in lieu of other benefits totaling \$577,017 and \$256,068, respectively.
- (6) Mr. Christianson’s employment with the Company began on August 1, 2007. The amount listed in “All Other Compensation” for Mr. Christianson includes \$22,246 for relocation costs.

Grants of Plan-Based Awards

The following table sets forth each grant of an award made to a named executive officer during 2008 under any of our incentive plans or equity plans.

<u>Name</u>	<u>Grant Date(1)</u>	<u>Estimated Future Payouts Under Non-Equity Incentive Plan Awards Target\$(2)(3)</u>	<u>All Other Option Awards: Number of Securities Underlying Options (#)</u>	<u>Exercise or Base Price of Option Awards (\$/Sh)(1)</u>	<u>Grant Date Fair Value of Stock and Option Awards \$(4)</u>
Robert L. Kirkman(5)	June 4, 2008	\$187,500	45,000	\$3.43	\$131,850
Edward A. Taylor(6)	June 4, 2008	109,908	10,000	3.43	29,300
Gary Christianson(7)	June 4, 2008	86,520	15,000	3.43	43,950
D. Lynn Kirkpatrick(8)	June 4, 2008	106,500	10,000	3.43	29,300
R. Rao Koganty(9)	June 4, 2008	38,410	5,000	3.43	14,650

- (1) Consistent with the provisions of our share option plan in effect at the date of grant, options were priced at the closing sales price of our shares of common stock in trading on The NASDAQ Global Market on the grant date.
- (2) Performance bonuses were earned in 2008. The actual amounts paid to each of the named executive officers for 2008 are set forth in the individual footnotes below.
- (3) There was no set “Threshold” or “Maximum” performance bonus amounts established with respect to our 2008 non-equity incentive plan awards, pursuant to the description set forth under the heading “Variable Cash Compensation — Incentive Bonuses.”
- (4) Amounts reflect the total fair value of stock options granted in 2008, calculated in accordance with SFAS No. 123(R) without regard to estimated forfeitures.
- (5) On March 6, 2009, the compensation committee approved a performance bonus of \$56,250 under the performance review policy and a \$120,000 special bonus related to the successful completion of the 2008 transaction with Merck KGaA.
- (6) Separated from employment on December 31, 2008. In accordance with the severance agreement by and between us and Mr. Taylor, he is entitled to receive \$109,908, or his bonus opportunity for 2008, which amount shall be payable in 18 equal monthly installments beginning January 2009.
- (7) On March 6, 2009, the compensation committee approved a performance bonus of \$73,500 under the performance review policy and a \$20,000 special bonus related to the successful completion of the 2008 transaction with Merck KGaA.
- (8) On March 6, 2009, the compensation committee approved a performance bonus of \$53,250 under the performance review policy.
- (9) For currency translation purposes, we used the Bank of Canada daily noon exchange rate for December 31, 2008, the last trading day of 2008, or U.S. \$1.00: Cdn. \$1.2228, when translating incentive compensation accrued in 2008. The Bank of Canada “noon exchange rate” is a benchmark rate established by the Bank of Canada. Separated from employment on December 31, 2008. In accordance with the severance agreement by and between us and Dr. Koganty, he is entitled to receive \$38,410, or his bonus opportunity for 2008, which amount shall be payable in 18 equal monthly installments beginning January 2009.

Outstanding Equity Awards at 2008 Fiscal Year-End

The following table sets forth the equity awards outstanding at December 31, 2008 for each of the named executive officers. Except as set forth in the footnotes to the following table, each stock option is fully vested.

<u>Name</u>	<u>Option Awards</u>			
	<u>Number of Securities Underlying Unexercised Options (#) Exercisable</u>	<u>Number of Securities Underlying Unexercised Options (#) Unexercisable</u>	<u>Option Exercise Price (\$Cdn. or \$U.S.)(1)</u>	<u>Option Expiration Date</u>
Robert L. Kirkman(17)	300,000	150,000(2)	Cdn. \$7.38	August 29, 2014
	34,384	103,153(3)	8.04	May 3, 2015
	—	45,000(4)	U.S. \$3.43	June 4, 2016
Edward A. Taylor	5,000	—	Cdn. \$37.62	December 3, 2009
	5,000	—	12.60	November 1, 2010
	16,666	—	10.38	March 25, 2011
	2,500	—	11.10	December 9, 2011
	4,166	—	13.20	January 20, 2012
	6,249	2,083(5)	13.62	May 24, 2013
	6,666	—	9.60	December 14, 2013
	16,666	—	6.72	July 28, 2014
	8,333	8,333(6)	7.92	October 10, 2014
	2,083	4,167(7)	8.04	May 3, 2015
	—	5,000(8)	U.S. \$3.43	June 4, 2016
Gary Christianson(17)	4,167	12,499(9)	Cdn. \$6.72	June 29, 2015
	—	15,000(10)	U.S. \$3.43	June 4, 2016
Lynn Kirkpatrick	6,250	—(11)	Cdn. \$9.00	November 7, 2014
	2,083	—(12)	8.04	May 3, 2015
	—	—(13)	U.S. \$3.43	June 4, 2016
R. Rao Koganty	1,666	—	Cdn. \$37.62	December 3, 2009
	2,500	—	12.60	November 1, 2010
	1,666	—	11.10	December 9, 2011
	3,333	—	13.20	January 20, 2012
	9,375	3,125(14)	13.62	May 24, 2013
	3,333	—	9.60	December 14, 2013
	1,041	2,083(15)	8.04	May 3, 2015
	—	2,500(16)	U.S. \$3.43	June 4, 2016

- (1) In April 2008, the board of directors approved an amendment to the Company's amended and restated share option plan, which provided that the exercise price of any future grants would equal the closing price of the Company's common stock traded on The NASDAQ Global Market on the date of grant. All exercise prices preceded by "U.S." are denominated in U.S. dollars.
- (2) This stock option fully vests on August 29, 2009, and vests at a rate of 1/3 annually on the anniversary of grant.
- (3) This stock option fully vests on May 3, 2011, and vests at a rate of 1/4 annually on the anniversary of grant.
- (4) This stock option fully vests on June 4, 2012, and vests at a rate of 1/4 annually on the anniversary of grant.
- (5) This stock option fully vests on May 24, 2009, and vests at a rate of 1/4 annually on the anniversary of grant.
- (6) This stock option fully vests on October 10, 2010, and vests at a rate of 1/4 annually on the anniversary of grant.

- (7) This stock option will continue to vest and be exercisable to December 31, 2010, (3/4 of the common stock underlying this stock option, or 6,249 shares, will have vested on May 3, 2010, the third anniversary of the original grant to purchase 8,333 shares).
- (8) This stock option will continue to vest and be exercisable to December 31, 2010 (1/2 of the common stock underlying this stock option, or 5,000 shares, will have vested on June 4, 2010, the second anniversary of the original grant to purchase 10,000 shares).
- (9) This stock option fully vests on June 29, 2011, and vests at a rate of 1/4 annually on the anniversary of grant.
- (10) This stock option fully vests on June 4, 2012, and vests at a rate of 1/4 annually on the anniversary of grant.
- (11) This stock option ceased to vest on December 31, 2008.
- (12) This stock option ceased to vest on December 31, 2008.
- (13) This stock option ceased to vest on December 31, 2008.
- (14) This stock option fully vests on May 24, 2009, and vests at a rate of 1/4 annually on the anniversary of grant.
- (15) This stock option will continue to vest and be exercisable to December 31, 2010 (3/4 of the common stock underlying this stock option, or 3,124 shares, will have vested on May 3, 2010, the third anniversary of the original grant to purchase 4,166 shares).
- (16) This stock option will continue to vest and be exercisable to December 31, 2010 (1/2 of the common stock underlying this stock option, or 2,500 shares, will have vested on June 4, 2010, the second anniversary of the original grant to purchase 5,000 shares).
- (17) On March 11, 2009, the compensation committee approved options to purchase 100,000 and 30,000 shares of our common stock to Robert L. Kirkman and Gary Christianson, respectively. Each of the options will have an exercise price equal to \$1.10, which price was previously incorrectly reported as \$1.11.

Option Exercises and Stock Vested

None of our named executive officers exercised stock options during fiscal 2008. We have not granted any stock awards to date.

Employment Agreements and Offer Letters

Unless stated otherwise, all compensation data in the section below is expressed in U.S. dollars. Mr. Taylor, our former chief financial officer, was compensated in Canadian dollars through September 30, 2008 and Dr. Koganty, our former vice president and general manager of the synthetic biologics business unit received his cash compensation denominated in Canadian dollars. For currency translation purposes, we used the average of the Bank of Canada daily noon exchange rate for 2008, or U.S. \$1.00: Cdn. \$1.0671 when translating 2008 cash compensation and the Bank of Canada daily noon exchange rate on December 31, 2008, the last trading day of 2008, when translating 2008 stock compensation under SFAS 123(R). The Bank of Canada “noon exchange rate” is a benchmark rate established by the Bank of Canada.

Employee Benefit Plans

Our share option plan and restricted share unit plan provide for the acceleration of vesting of awards in connection with or following a change in control of the company. A “change in control” shall be deemed to have occurred if (i) our board of directors passes a resolution to the effect that, for purposes of the share option plan, a change in control has occurred or (ii) any person or any group of two or more persons acting jointly or in concert becomes the beneficial owner, directly or indirectly, or acquires the right to control or direct, twenty-five (25) per cent or more of our outstanding voting securities or any successor entity in any manner, including without limitation as a result of a takeover bid or an amalgamation with any other corporation or any other business combination or reorganization. See “— Share Option Plan” and “— Restricted Share Unit Plan” below.

Robert L. Kirkman

On August 29, 2006, we entered into an offer letter with Robert L. Kirkman, M.D., our president and chief executive officer. In consideration for his services, Dr. Kirkman was initially entitled to receive a base salary of \$320,000 per year, subject to increases as may be approved by our board of directors. In January 2008, Dr. Kirkman's base salary was increased to \$375,000. Dr. Kirkman is also entitled to receive a performance bonus of up to 50% of his base salary based on his achievement of predetermined objectives and on March 6, 2009, Dr. Kirkman received a performance bonus of \$56,250. In addition, our board may award, in its sole discretion, Dr. Kirkman additional performance bonuses in recognition of his performance and on March 6, 2009, Dr. Kirkman received a special bonus of \$120,000 for the successful completion of our December 2008 transaction with Merck KGaA.

In accordance with the offer letter of August 29, 2006, our board of directors granted Dr. Kirkman an option to purchase 450,000 shares of our common stock at a price of Cdn. \$7.38 per share. As a result of the ProlX acquisition, which we completed in October 2006, and the financing we completed in December 2006, on May 3, 2007, our board of directors granted Dr. Kirkman an additional option to purchase 137,537 shares of our common stock on May 3, 2007 at an exercise price of Cdn. \$8.04, in connection with the terms of his offer letter, under which he was eligible to receive an additional option award to purchase a number of shares equal to 3% of any shares issued during his first year of employment with us and 100% of these shares will vest if there is a change of control transaction.

In addition to the stock option vesting acceleration, Dr. Kirkman will receive the following benefits if we undergo a change of control transaction or if he is terminated without cause:

- lump sum payment of one year base salary, less required withholding; and
- lump sum payment of bonus at the target level for one year following the termination, less required withholding.

Edward Taylor

We entered into an offer letter dated May 3, 1995 with Edward Taylor, our former chief financial officer, vice president finance and administration and corporate secretary. Under the offer letter, Mr. Taylor's employment did not have a specified term. We initially agreed to pay Mr. Taylor a base salary of Cdn. \$88,161 when he was hired in 1995, which was increased from time to time during Mr. Taylor's employment with us. In January 2008, Mr. Taylor's base salary was increased to Cdn. \$274,770. Mr. Taylor's base salary was denominated in Canadian dollars until September 2008, after which time Mr. Taylor's base salary was denominated in U.S. dollars without any adjustment to nominal amounts owed for currency exchange rate purposes.

Under the terms of a severance agreement dated July 6, 1998 with Edward Taylor, if Mr. Taylor's services are no longer required, we will pay him (i) one and one-half times the amount of his annual salary currently in effect, (ii) the annual bonus amount paid to him in relation to the immediately preceding fiscal year, and (iii) an additional sum in lieu of other benefits equal to 20% of his annual salary then in effect. Additionally, shares subject to outstanding options held by Mr. Taylor will continue to vest for two years after the date of his termination. Mr. Taylor's employment with us terminated December 31, 2008.

Gary Christianson

We are parties to an offer letter dated June 29, 2007 with Gary Christianson, our chief operating officer. Under the offer letter, Mr. Christianson's employment does not have a specified term. We initially agreed to pay Mr. Christianson a base salary of \$240,000, which increased to \$247,200 in January 2008 and \$250,000 in March 2009. Mr. Christianson is also entitled to receive a performance bonus of up to 35% of his base salary at target based on his achievement of predetermined objectives and on March 6, 2009, Mr. Christianson received a performance bonus of \$73,500. In addition our board may award, in its sole discretion, Mr. Christianson additional performance bonuses in recognition of his performance and on March 6, 2009,

Mr. Christianson received a special bonus of \$20,000 for the successful completion of our December 2008 transaction with Merck KGaA.

In accordance with the offer letter of June 29, 2007, our board of directors granted Mr. Christianson an option to purchase 16,666 shares of our common stock at a price of Cdn. \$6.72 per share.

In addition, Mr. Christianson's offer letter specifies a lump sum payment equal to the sum of (i) nine months' base salary and (ii) the equivalent of nine months' variable pay, less required withholding, and health insurance coverage for a period of nine months, if his employment is terminated for reasons other than "cause" as defined in his offer letter.

Lynn Kirkpatrick

We are parties to an offer letter dated October 30, 2006 with Lynn Kirkpatrick, our former chief scientific officer. Under the offer letter, Dr. Kirkpatrick's employment does not have a specified term. We initially agreed to pay Dr. Kirkpatrick a base salary of \$250,000, which was increased to \$266,250 in January 2008. Pursuant to the offer letter, our board of directors granted Dr. Kirkpatrick an option to purchase 12,500 shares of our common stock.

In addition, Dr. Kirkpatrick's offer letter specifies a lump sum payment of two year's base pay less any base pay paid to the termination date if employment is severed prior to October 30, 2008 for reasons other than cause as defined in her employment letter. Dr. Kirkpatrick voluntarily terminated employment with us as of December 31, 2008. Dr. Kirkpatrick did not receive any termination payments in connection with the voluntary termination of her employment with us.

R. Rao Koganty

We entered into an offer letter dated December 16, 1985 with Dr. Koganty, our former vice president and general manager, synthetic biologics business unit. At the time we entered the offer letter, Dr. Koganty served as senior scientist in our chemistry group. Under the offer letter, Dr. Koganty's employment does not have a specified term. We initially agreed to pay Dr. Koganty a base salary of Cdn. \$35,261 when he was hired in 1985, which was increased from time to time during Dr. Koganty's employment with us. In January 2008, Dr. Koganty's base salary was increased to Cdn. \$156,560.

Under the terms of a severance agreement dated March 21, 2006 with Dr. Koganty, if Dr. Koganty's services are no longer required, we will pay him (i) one and one-half times the amount of his annual salary currently in effect, (ii) the annual bonus amount paid to him in relation to the immediately preceding fiscal year, and (iii) an additional sum in lieu of other benefits equal to 20% of his annual salary then in effect. Additionally, shares subject to outstanding options held by Dr. Koganty will continue to vest for two years after the date of his termination. Dr. Koganty's employment with us terminated December 31, 2008.

Potential Payments on Termination or Change in Control

The tables below describe the payments and benefits our named executive officers would be entitled to receive assuming that their employment was terminated on December 31, 2008.

Robert L. Kirkman

<u>Name</u>	<u>Change of Control</u>			<u>Termination Other Than for Cause(3)</u>		
	<u>Equity Acceleration(1)</u>	<u>Salary(2)</u>	<u>Insurance Benefits</u>	<u>Equity Acceleration(1)</u>	<u>Salary(2)</u>	<u>Insurance Benefits</u>
Robert L. Kirkman	\$—	\$562,500	\$—	\$—	\$562,500	\$—

(1) The amount shown in this column is calculated as the spread value of all unvested stock options held by Dr. Kirkman on December 31, 2008, assuming a stock price of \$0.80 the last reported sale price of our common stock on The NASDAQ Global Market on December 31, 2008 and \$0.92 the closing price of our common stock on the Toronto Stock Exchange on December 31, 2008. Because the exercise price of all of

Dr. Kirkman's options were greater than the market price on December 31, 2008, the value of the accelerated options would be zero.

- (2) The amount shown in this column is equal to Dr. Kirkman's base salary for 2008 plus 100% of the bonus that he is to receive under the performance review policy. Such payments will be made within 60 days following a change of control or termination other than for cause.
- (3) For purposes of Dr. Kirkman's offer letter, "cause" includes, among other things (i) willful engaging in illegal conduct or gross misconduct which is injurious to us, (ii) being convicted of, or entering a plea of nolo contendere or guilty to, a felony or a crime of moral turpitude, (iii) engaging in fraud, misappropriation, embezzlement or any other act or acts of dishonesty resulting or intended to result directly or indirectly in a gain or personal enrichment of him at our expense, (iv) material breach of any of our written policies, or (v) willful and continual failure substantially to perform his duties, which failure has continued for a period of at least 30 days after written notice by us.

Edward Taylor

Pursuant to the severance agreement that we entered into with Mr. Taylor on July 6, 1998, as amended by our share option plan with respect to continued vesting, we are required to pay Mr. Taylor the following amounts upon a termination without cause or if there is a constructive termination, to be paid in equal installments over 18 months:

- one and one half times his base salary;
- an amount equal to the annual bonus earned in the preceding year;
- an additional 20% of his base salary in lieu of other benefits; and
- shares subject to outstanding stock options will continue to vest for two years after the date of termination.

Mr. Taylor's employment terminated on December 31, 2008, and by virtue of his severance agreement described above, he is entitled to benefits with the value set forth in the table below:

<u>Name</u>	<u>Equity Acceleration(1)</u>	<u>Salary(2)</u>	<u>Insurance Benefits</u>
Edward Taylor	\$—	\$577,017	\$—

- (1) The amount shown in this column is calculated as the spread value of all unvested stock options held by Mr. Taylor on December 31, 2008 that would continue to vest for two years after his termination date, assuming a stock price of \$0.80, the last reported sale price of our common stock on The NASDAQ Global Market on December 31, 2008 and \$0.92 the closing price of our common stock on the Toronto Stock Exchange on December 31, 2008. Because the exercise price of all of Mr. Taylor's options were greater than the market price on December 31, 2008, the value of the accelerated options would be zero.
- (2) The amount shown in this column is one and one half times Mr. Taylor's base salary for 2007, plus an amount equal to the annual bonus earned with respect to the preceding year, plus an additional 20% of his base salary in lieu of other benefits.

The payments described above for Mr. Taylor are based upon his agreement to (1) not become engaged or employed by one of our competitors, and (2) not recruit any of our employees for a period of two years from the date of termination.

As of the date hereof, we are in compliance with our obligations under the severance agreement with Mr. Taylor.

Gary Christianson

Mr. Christianson's offer letter specifies a lump sum payment equal to the sum of (i) nine months' base salary and (ii) the equivalent of nine months' variable pay, less required withholding, and health insurance coverage for a period of nine months, if his employment is terminated for reasons other than "cause" as defined in his offer letter.

Assuming Mr. Christianson's employment terminated without cause on December 31, 2008, by virtue of his offer letter, he would be entitled to benefits with the value set forth in the table below:

<u>Name</u>	<u>Termination After a Change of Control</u>			<u>Termination Outside a Change of Control</u>		
	<u>Equity Acceleration(1)</u>	<u>Salary(2)</u>	<u>Insurance Benefits</u>	<u>Equity Acceleration(1)</u>	<u>Salary(2)</u>	<u>Insurance Benefits</u>
Gary Christianson . . .	\$—	\$250,290	\$7,047	\$—	\$250,290	\$7,047

- (1) The amount shown in this column is calculated as the spread value of all unvested stock options held by Mr. Christianson on December 31, 2008, assuming a stock price of \$0.80 the last reported sale price of our common stock on The NASDAQ Global Market on December 31, 2008 and \$0.92 the closing price of our common stock on the Toronto Stock Exchange on December 31, 2008. Because the exercise price of all of Mr. Christianson's options were greater than the market price on December 31, 2008, the value of the accelerated options would be zero.
- (2) The amount shown in this column is equal to the sum of (i) nine months' base salary and (ii) the equivalent of nine months' variable pay. If Mr. Christianson is a "specified employee" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended, and any final regulations and official guidance promulgated thereunder, at the time of his separation from service, then, if required, the amounts shown in this column, which are otherwise due on or within the six month period following the separation from service will accrue, to the extent required, during such six month period and will become payable in a lump sum payment six months and one day following the date of separation from service.

The payments described above for Mr. Christianson are based upon his agreement to (1) not become engaged or employed by one of our competitors, and (2) not recruit any of our employees for a period of two years from the date of termination.

Lynn Kirkpatrick

Dr. Kirkpatrick voluntarily terminated employment with us as of December 31, 2008. Dr. Kirkpatrick was, therefore, not entitled to certain payments for termination other than for cause, and did not receive any such payments in connection with the voluntary termination of her employment with us.

R. Rao Koganty

The severance agreement that we entered into with Dr. Koganty on March 21, 2006, as amended by our share option plan with respect to continued vesting, requires us to pay him the following amounts upon a termination without cause or if there is a constructive termination, to be paid in equal installments over 18 months:

- one and one half times his base salary;
- an amount equal to the annual bonus earned in the preceding year;
- an additional 20% of his base salary in lieu of other benefits; and
- shares subject to outstanding stock options will continue to vest for two years after the date of termination.

Dr. Koganty's employment terminated on December 31, 2008, and by virtue of the severance agreement described above, he is entitled to benefits with the value set forth in the table below:

<u>Name</u>	<u>Equity Acceleration(1)</u>	<u>Salary(2)(3)</u>	<u>Insurance Benefits</u>
R. Rao Koganty	\$—	\$256,068	\$—

- (1) The amount shown in this column is calculated as the spread value of all unvested stock options held by Dr. Koganty on December 31, 2008 that would continue to vest for two years after his termination date, assuming a stock price of \$0.80, the last reported sale price of our common stock on The NASDAQ Global Market on December 31, 2008 and \$0.92 the closing price of our common stock on the Toronto Stock Exchange on December 31, 2008. Because the exercise price of all of Dr. Koganty's options were greater than the market price on December 31, 2008, the value of the accelerated options would be zero.
- (2) The amount shown in this column is one and one half times Dr. Koganty's base salary for 2008, plus an amount equal to the annual bonus earned in the preceding year, plus an additional 20% of his base salary in lieu of other benefits.
- (3) For currency translation purposes, we used the Bank of Canada daily noon exchange rate for December 31, 2008, the last trading day of 2008, or U.S. \$1.00: Cdn. \$1.2228, when translating compensation accrued in 2008. The Bank of Canada "noon exchange rate" is a benchmark rate established by the Bank of Canada

The payments described above for Dr. Koganty are based upon his agreement to (1) not become engaged or employed by one of our competitors, and (2) not recruit any of our employees for a period of two years from the date of termination.

As of the date hereof, we are in compliance with our obligations under the severance agreement with Dr. Koganty.

Share Option Plan

Our board of directors adopted our share option plan on December 9, 1992 and our stockholders approved it on May 26, 1993. Our share option plan was amended and restated as of May 3, 2007. Unless further amended by our stockholders, our share option plan will terminate on May 3, 2017. Our share option plan provides for the grant of nonstatutory stock options to selected employees, directors and persons or companies engaged to provide ongoing management or consulting services for us, or any entity controlled by us. The employees, directors and consultants who have been selected to participate in our share option plan are referred to below as "participants."

Share Reserve

The total number of shares of common stock issuable pursuant to options granted under our share option plan shall, at any time, be 10% of our issued and outstanding shares of common stock. We had reserved a total of 1,949,243 shares of our common stock for issuance pursuant to our share option plan as of December 31, 2008. As of December 31, 2008, options to purchase 1,223,386 shares of our common stock were outstanding and 725,857 shares of our common stock were available for future grant under our share option plan.

Administration

The compensation committee of our board of directors administers our share option plan. Under our share option plan, the plan administrator has the power, subject to certain enumerated restrictions in our share option plan, to determine the terms of the awards, including the employees, directors and consultants who will receive awards, the exercise price of the award, the number of shares subject to each award, the vesting schedule and exercisability of each award and the form of consideration payable upon exercise.

Share Options

The exercise price of the shares subject to options granted under our share option plan shall be determined by our board of directors but shall not be less than the fair market value of the shares. Until April 3, 2008, for purposes of our share option plan, the fair market value meant the closing price of our common stock as reported by the Toronto Stock Exchange on the day preceding the day on which the option is granted. If no trade of shares of our common stock was reported on the Toronto Stock Exchange that day, then the fair market value was not less than the mean of the bid and ask quotations for our common stock on the Toronto Stock Exchange at the close of business on such preceding day. On April 3, 2008, our board of directors amended our option plan to provide that options granted pursuant to the plan be priced at the closing price of our shares of common stock on The NASDAQ Global Market on the day of the option grant.

Termination of Service Provider Relationship

Upon the termination without cause of a participant's employment or service with us (or any of our subsidiaries), other than a termination due to death or retirement (as such terms are defined in our share option plan), the participant's option will continue to vest and may be exercised at any time up to and including, but not after, the date which is 180 days after the date of the termination or the date prior to the close of the business on the expiry date of the option, whichever is the earlier. If termination is for cause, the option will immediately terminate in its entirety. An option may never be exercised after the expiration of its term.

For our president or any of our vice presidents, in the event of a termination of the participant's service or employment with us (or any of our subsidiaries) without cause, any option granted to the participant will continue to vest and may be exercised at any time up to and including, but not after, the date which is the second anniversary of the date of his or her termination or the date before the close of business on the expiry date of his or her option, whichever is the earlier.

In the event of the retirement, as such term is defined in our share option plan, of the participant while in the employment of us (or any of our subsidiaries), any option granted to the participant will continue to vest and may be exercised by the participant in accordance with the terms of the option at any time up to and including, but not after, the expiry date of the option.

In the event of the death of the participant while in the employment or service of us (or any of our subsidiaries), the option will continue to vest and may be exercised by a legal representative of the participant at any time up to and including, but not after, the date which is 180 days after the date of the death of the optionee or before the close of business on the expiry date of the option, whichever is earlier.

Effect of a Change in Control

Our share option plan provides that, if a change in control occurs, as such term is defined in our share option plan, including our merger with or into another corporation or the sale of all or substantially all of our assets, or if there is an offer to purchase, a solicitation of an offer to sell, or an acceptance of an offer to sell our shares of common stock made to all or substantially all of the holders of shares of common stock, a participant, who at the time of the change of control is an employee, director or service provider, shall have the right to immediately exercise his or her option as to all shares of common stock subject to such option, including as to those shares of common stock with respect to which such option cannot be exercised immediately prior to the occurrence of the change of control, and the participant shall have 90 days from the date of the change of control to exercise his or her option (unless the option expires prior to such date).

Transferability

Unless otherwise determined by the plan administrator, our share option plan generally does not allow for the sale or transfer of awards under our share option plan other than by will or the laws of descent and distribution, and may be exercised only during the lifetime of the participant and only by that participant.

Additional Provisions

Our board of directors has the authority to amend (subject to stockholder approval in some circumstances) or discontinue our share option plan, so long as that action does not materially and adversely affect any option rights granted to a participant without the written consent of that participant.

During the period January 1 to December 31, 2008, options to purchase 150,600 shares of common stock were granted under our share option plan at exercise prices of Cdn. \$4.60 per share, with respect to options granted prior to April 3, 2008 and U.S. \$3.43 for options granted on and after April 3, 2008.

Restricted Share Unit Plan

Our board of directors adopted our restricted share unit plan on May 18, 2005 and our stockholders approved it on May 18, 2005. Our restricted share unit plan was amended May 3, 2007. Our restricted share unit plan provides for the grant of restricted share units to non-employee members of our board of directors. The directors who receive restricted share units under our restricted share unit plan are referred to below as participants.

Share Reserve

We have reserved a total of 166,666 of our shares of common stock for issuance pursuant to our restricted share unit plan. As of December 31, 2008, grants covering 79,549 shares of our common stock were outstanding, 77,408 shares of our common stock were available for future grant under our restricted share unit plan and 9,709 shares had been issued upon conversion of RSUs.

Administration

The compensation committee of our board of directors administers our restricted share unit plan. Under our restricted share unit plan, the plan administrator has the power, subject to certain enumerated restrictions in our restricted share unit plan, to determine the terms of the grants, including the directors who will receive grants, the grant period (as such term is defined in our restricted share unit plan) of any awards, and any applicable vesting terms in order for the restricted share units to be issued, and such other terms and conditions as the board of directors deems appropriate.

Each grant of restricted share units will be evidenced by a written notice, which we call the notice of grant, with such notice, in connection with our restricted share unit plan, governing the terms and conditions of the grant. Each notice of grant will state the number of restricted share units granted to the participant and state that each restricted share unit, subject to and accordance with the terms of our restricted share unit plan, will entitle the participant to receive one share of our common stock in settlement of a restricted share unit granted pursuant to our restricted share unit plan.

Right to Restricted Share Units in the event of Death, Retirement, or Resignation

In the event of the death of a participant while a director of us, and with respect to each grant of restricted share units for which the grant period has not ended and for which the restricted share units have not been otherwise issued prior to the date of death, all unvested restricted share units will immediately vest and the shares of our common stock subject to such restricted share units will be issued by the later of the end of the calendar year of the date of death, or by the 15th day of the third calendar month following the participant's date of death.

In the event the participant's service as a director terminates for any reason other than death, and provided such participant is not a specified employee (as such term is defined in our restricted share unit plan) on the date of his or termination, with respect to the restricted share units as to which the release date (as such term is defined in our restricted share unit plan) has not occurred, and for which shares of our common stock have not been issued, the participant will receive such shares as if the grant period had ended and such shares will be issued by the later of the end of the calendar year of the date of termination or by the 15th day of the third calendar month following the date of the termination. If the participant is a specified employee on the

date of his or her termination, and if such termination is for any reason other than death, with respect to the restricted share units as to which the release date has not occurred, and for which shares of our common stock have not been issued, the participant will receive such shares as if the grant period had ended and such shares will be delivered by the 30th day of the date following the date which is six months following the participant's date of termination.

Effect of a Change in Control

In the event of a change in control (as such term is defined in our restricted share unit plan), with respect to all grants of restricted share units that are outstanding as of the date of such change in control, all unvested restricted share units will immediately vest and each participant who has received any such grants will be entitled to receive, on the date that is ten business days following the change in control date, an amount in full settlement of each restricted share unit covered by the grant. Such amount will be either one share of our common stock for each restricted share unit, or if so specified in a written election by the participant, a cash payment equal to the special value (as such term is defined in our restricted share unit plan) for each covered restricted share unit.

Transferability

The rights or interests of a participant under our restricted share unit plan will not be assignable or transferable, other than by will or the laws governing the devolution of property in the event of death and such rights or interests will not be encumbered.

Additional Provisions

Our board of directors has the authority to amend (subject to stockholder approval in some circumstances), suspend or terminate our restricted share unit plan in whole or in part from time to time.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

In addition to the arrangements described below, we have also entered into the arrangements which are described where required under the heading titled "Executive Compensation — Employment Agreements and Offer Letters" and "Potential Payments in Termination or Change in Control" above.

Approval of Related Party Transactions

We have adopted a formal policy that our executive officers, directors, holders of more than 5% of any class of our voting securities, or any member of the immediate family of or any entities affiliated with any of the foregoing persons, are not permitted to enter into a related party transaction with us without the prior consent of our audit committee, or other independent members of our board of directors in the case it is inappropriate for our audit committee to review such transaction due to a conflict of interest. Any request for us to enter into a transaction with an executive officer, director, principal stockholder, or any of such persons' immediate family members or affiliates, in which the amount involved exceeds \$120,000 must first be presented to our audit committee for review, consideration and approval. In approving or rejecting the proposed agreement, our audit committee shall consider the relevant facts and circumstances available and deemed relevant to the audit committee, including, but not limited to whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related party's interest in the transaction. We have determined that there were no new related party transactions to disclose in fiscal year 2008. All of the transactions described below were entered into prior to the adoption of this policy.

Acquisition of ProlX Pharmaceuticals Corporation

On October 30, 2006, we completed the acquisition of ProlX in connection with which we hired Dr. Lynn Kirkpatrick, the chief executive officer and president of ProlX, to be our chief scientific officer.

Dr. Kirkpatrick continued to serve as our chief scientific officer until December 31, 2008. Under the terms of the merger agreement with ProlX, we paid the ProlX stockholders \$3.0 million in cash and an aggregate of 17,877,777 shares of common stock of Biomira (which were exchanged for an aggregate of 2,979,629 shares of our common stock in connection with the transaction pursuant to which we became the successor corporation to Biomira).

In addition, and subject to applicable regulatory requirements, we may make up to two future payments to former ProlX stockholders, including Dr. Kirkpatrick, based on the achievement of specified milestones. We are obligated to issue shares of our common stock with a fair market value equal to \$5.0 million at the time of issuance to former stockholders of ProlX upon the initiation of the first phase 3 clinical trial of a ProlX product. We are further obligated to issue shares of our common stock with a fair market value equal to \$10.0 million at the time of issuance upon regulatory approval of a ProlX product in a major market. For purposes of determining the number of our shares issuable in connection with these milestones, if any, we will use the average closing sale price of our common stock as reported on The NASDAQ Global Market for the ten consecutive trading days ending three trading days immediately preceding the date of issuance. As described under the caption "Registration Rights," we have agreed to provide registration rights under the Securities Act of 1933, as amended, with respect to these shares. Of the total consideration paid at closing, Dr. Kirkpatrick and her husband, Dr. Garth Powis, who was also a ProlX stockholder, were entitled to receive 4,801,438 and 4,881,798 shares of common stock of Biomira, respectively (which were exchanged for 800,239 and 813,633 shares of our common stock, respectively, in connection with the transaction pursuant to which we became the successor corporation to Biomira). In addition, Dr. Kirkpatrick and Dr. Powis received cash payments of \$800,783 and \$814,594 respectively. If any future payments are made, Dr. Kirkpatrick and Dr. Powis will receive approximately 26.86% and 27.31% of such payments, respectively, based on their prior ownership interest in ProlX.

Registration Rights

Subject to applicable regulatory requirements, we are required to use commercially reasonable efforts to file a resale registration statement with respect to the shares of our common stock issued in connection with the achievement of each milestone described in "Acquisition of ProlX" above within thirty (30) business days following the date of issuance of such shares and use commercially reasonable efforts to have such registration statement declared effective as promptly as practicable following the filing. This obligation is subject to our ability to postpone the filing or effectiveness of the registration statement for a period of 60 days if we believe disclosure of the information in the registration statement would be materially detrimental to us.

Indebtedness of Directors and Officers

None of our or any of our subsidiaries' current or former directors or executive officers is indebted to us or any of our subsidiaries, nor are any of these individuals indebted to another entity which indebtedness is the subject of a guarantee, support agreement, letter of credit or other similar arrangement or understanding provided by us, or any of our subsidiaries. Two non-executive employees at our Tucson facility are indebted to us for an aggregate principal amount of approximately \$194,000 (excluding accrued and unpaid interest).

None of our directors, executive officers, or associates of any of them, is, or, at any time since the beginning of the most recently completed financial year has been, indebted to us or any of our subsidiaries, to another entity which indebtedness is the subject of a guarantee, support agreement, letter of credit or other similar arrangement or understanding provided by us or any of our subsidiaries, or pursuant to any stock purchase program or any other program.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires our directors and executive officers, and persons who own more than ten percent of a registered class of our equity securities, to file reports of ownership of, and transactions in, our securities with the Securities and Exchange Commission and NASDAQ. Such directors, executive officers, and ten-percent stockholders are also required to furnish us with copies of all Section 16(a) forms that they file.

Based solely on a review of the copies of such forms received by us, or written representations from certain reporting persons, we believe that during fiscal 2008, our directors, executive officers, and ten-percent stockholders complied with all Section 16(a) filing requirements applicable to them.

ANNUAL REPORT

A copy of our combined annual report to stockholders and annual report on Form 10-K for the fiscal year ended December 31, 2008 will be mailed to the stockholders of record as of April 16, 2009 together with the mailing of this proxy statement. An additional copy may be obtained from our website, www.oncothyreon.com, or will be furnished, without charge, to beneficial stockholders or stockholders of record upon request in writing to Shashi Karan, Corporate Secretary, Oncothyreon Inc., 2601 Fourth Avenue, Suite 500, Seattle, Washington 98121 or by telephone to (206) 801-2100. Copies of exhibits to the annual report on Form 10-K are available for a nominal fee.

OTHER MATTERS

We know of no other matters to be submitted for consideration by the stockholders at the annual meeting. If any other matters properly come before the annual meeting, it is the intention of the persons named in the enclosed proxy card to vote the shares they represent as the board of directors may recommend.

It is important that your shares be represented at the meeting, regardless of the number of shares which you hold. You are therefore urged to execute and return, at your earliest convenience, the accompanying proxy card in the postage-prepaid envelope enclosed. You may also submit your proxy over the Internet or by telephone. For specific instructions, please refer to the information provided with your proxy card.

By Order of the Board of Directors,



Shashi K. Karan
Corporate Controller and Corporate Secretary

Seattle, Washington
April 30, 2009

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