



**NOTICE AND MANAGEMENT PROXY CIRCULAR**

**FOR THE**  
**ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS**  
**TO BE HELD ON JUNE 5, 2018**

**APRIL 26, 2018**

**Aptose Biosciences Inc.**  
**Notice of 2018 Annual and Special Meeting of Shareholders**

**NOTICE IS HEREBY GIVEN** that the annual and special meeting (the “Meeting”) of shareholders of Aptose Biosciences Inc. (the “Corporation”) will be held at 1540 Camino Del Mar, Del Mar, California, on June 5, 2018 at 10:00 a.m. (Pacific time).

**What the Meeting is About**

The following items of business will be covered at the Meeting:

1. receiving the financial statements of the Corporation for the fiscal year ended December 31, 2017, including the auditor’s report thereon;
2. appointing KPMG LLP as auditor of the Corporation for the fiscal year ending December 31, 2018 and authorizing the directors to fix its remuneration;
3. electing directors;
4. passing an ordinary resolution, the full text of which is set forth in the accompanying management proxy circular, approving all unallocated options under the share option plan of the Corporation;
5. passing an ordinary resolution, the full text of which is set forth in the accompanying management proxy circular, approving all unallocated awards under the stock incentive plan of the Corporation; and
6. to transact such other business as may be properly brought before the Meeting.

The Meeting may also consider other business that properly comes before the Meeting or any adjournment of the Meeting. The management proxy circular accompanying this notice of meeting provides additional information relating to the matters to be dealt with at the Meeting and forms part of this notice.

**You have the right to vote**

You are entitled to receive notice of and vote at the Meeting, or any adjournment, if you are a holder of common shares of the Corporation at the close of business on May 1, 2018.

You have the right to vote your shares on items 2 and 3 listed above and any other items that may properly come before the Meeting or any adjournment.

**Your vote is important**

If you are not able to be present at the Meeting, please exercise your right to vote by signing and returning the enclosed form of proxy to Computershare Investor Services Inc., 100 University Avenue, 8<sup>th</sup> Floor, Toronto, Canada M5J 2Y1, so as to arrive not later than 5:00 p.m. (Toronto time) on June 1, 2018 or, if the Meeting is adjourned, 48 hours (excluding Saturdays, Sundays and holidays) before any adjournment of the Meeting.

BY ORDER OF THE BOARD OF DIRECTORS

William G. Rice, Ph.D.  
Chairman, President and Chief Executive Officer  
April 26, 2018

## MANAGEMENT PROXY CIRCULAR

April 26, 2018

### PROXY INFORMATION

#### Solicitation of Proxies

The information contained in this management proxy circular (the “Circular”) is furnished in connection with the solicitation of proxies to be used at the annual and special meeting (the “Meeting”) of holders (the “Shareholders”) of common shares (the “Shares”) of Aptose Biosciences Inc. (the “Corporation”, “Aptose”, “we” or “our”) to be held on June 5, 2018 at 10:00 a.m. (Pacific time) at 1540 Camino Del Mar, California and at all adjournments thereof, for the purposes set forth in the accompanying notice of meeting (the “Notice of Meeting”). It is expected that the solicitation will be made primarily by mail but proxies may also be solicited personally by directors, officers, employees or agents of the Corporation. The solicitation of proxies by this Circular is being made by or on behalf of the management of the Corporation. The total cost of the solicitation will be borne by Aptose.

The information contained in this Circular is given as at April 26, 2018 except where otherwise noted. All references to “dollar” or the use of the symbol “\$” are to United States dollars and use of the symbol “CA\$” refers to Canadian dollars, unless otherwise indicated.

#### CAUTION REGARDING FORWARD-LOOKING STATEMENTS

*This Circular contains forward-looking statements within the meaning of securities laws. Such statements include, but are not limited to the Corporation’s plans, objectives, expectations and intentions and other statements including words such as “anticipate”, “contemplate”, “continue”, “believe”, “plan”, “estimate”, “expect”, “intend”, “will”, “should”, “may”, and other similar expressions.*

*Such statements reflect our current views with respect to future events and are subject to risks and uncertainties and are necessarily based upon a number of estimates and assumptions that, while considered reasonable by us are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause our actual results, performance or achievements to be materially different from any future results, performance, or achievements that may be expressed or implied by such forward-looking statement. See our annual information form dated March 27, 2018 for the year ended December 31, 2017 for additional information. A copy of this document can be found on SEDAR at [www.sedar.com](http://www.sedar.com), however we will promptly provide a copy of this document to any securityholder of the Corporation free of charge upon request.*

#### ABOUT VOTING YOUR SHARES

##### Appointment of Proxies

This is the easiest way to vote. Voting by proxy means that you are giving the person or people named on your proxy form (the “proxyholder”) the authority to vote your Shares for you at the Meeting or any adjournment. A proxy form is included with this Circular.

**The persons named on the proxy form will vote your Shares for you, unless you appoint someone else to be your proxyholder. You have the right to appoint a person to represent you at the**

**Meeting other than the persons named on the proxy form. If you appoint someone else, he or she must be present at the Meeting to vote your Shares. If you want to appoint someone else, you can insert that person's name in the blank space provided in the form of proxy. That other person does not need to be a Shareholder of the Corporation.**

If you are voting your Shares by proxy, our transfer agent, Computershare Investor Services Inc. ("Computershare"), must receive your completed proxy form by 5:00 p.m. (Toronto time) on June 1, 2018 or, if the Meeting is adjourned, 48 hours (excluding Saturdays, Sundays and holidays) before any adjournment of the Meeting.

### **Registered Shareholders**

You are a registered Shareholder if your name appears on your Share certificate. Your proxy form tells you whether you are a registered Shareholder.

### **Non-Registered (or Beneficial) Shareholders**

You are a non-registered (or beneficial) Shareholder if your bank, trust company, securities broker or other financial institution holds your Shares for you (your nominee). For most of you, your voting instruction form or proxy tells you whether you are a non-registered (or beneficial) Shareholder.

In accordance with Canadian securities law, we have distributed copies of the Notice of Meeting, this Circular and the form of proxy (collectively, the "meeting materials") to CDS Clearing and Depository Services Inc. and intermediaries (such as securities brokers or financial institutions) for onward distribution to those non-registered or beneficial Shareholders to whom we have not sent the meeting materials directly. We previously mailed to those who requested them, the audited financial statements of the Corporation for the year ended December 31, 2017 and the auditor's report thereon as well as management's discussion and analysis.

The intermediaries are required to forward meeting materials to non-registered or beneficial Shareholders unless a non-registered or beneficial Shareholder has waived the right to receive them. Very often, intermediaries will use a service company such as Broadridge Investor Communication Solutions to forward the meeting materials to non-registered or beneficial Shareholders.

Non-registered or beneficial Shareholders who have not waived the right to receive meeting materials will receive either a voting instruction form or, less frequently, a form of proxy. The purpose of these forms is to permit non-registered or beneficial Shareholders to direct the voting of the Shares they beneficially own. Non-registered or beneficial Shareholders should follow the procedures set out below, depending on what type of form they receive.

- A. **Voting Instruction Form.** In most cases, a non-registered Shareholder will receive, as part of the meeting materials, a voting instruction form. If the non-registered Shareholder does not wish to attend and vote at the Meeting in person (or have another person attend and vote on the non-registered Shareholder's behalf), the voting instruction form must be completed, signed and returned in accordance with the directions on the form. If a non-registered Shareholder wishes to attend and vote at the Meeting in person (or have another person attend and vote on the non-registered Shareholder's behalf), the non-registered Shareholder must complete, sign and return the voting instruction form in accordance with the directions provided and a form of proxy giving the right to attend and vote will be forwarded to the non-registered Shareholder.

**or**

- B. Form of Proxy. Less frequently, a non-registered Shareholder will receive, as part of the meeting materials, a form of proxy that has already been signed by the intermediary (typically by a facsimile or stamped signature), which is restricted as to the number of Shares beneficially owned by the non-registered Shareholder but which is otherwise uncompleted. If the non-registered Shareholder does not wish to attend and vote at the Meeting in person (or have another person attend and vote on the non-registered Shareholder's behalf), the non-registered Shareholder must complete the form of proxy and deposit it with Computershare, 100 University Avenue, 8<sup>th</sup> Floor Toronto, Canada, M5J 2Y1 as described above. If a non-registered Shareholder wishes to attend and vote at the Meeting in person (or have another person attend and vote on the non-registered Shareholder's behalf), the non-registered Shareholder must strike out the names of the persons named in the proxy and insert the non-registered Shareholder's (or such other person's) name in the blank space provided.

***Non-registered Shareholders should follow the instructions on the forms they receive and contact their intermediaries promptly if they need assistance.***

### **Meeting Materials**

The meeting materials are being sent to both registered and non-registered owners of Shares. The Corporation is sending this Circular and other meeting materials indirectly to non-objecting beneficial owners (as defined in National Instrument 54-101 - *Communication with Beneficial Owners of Securities of a Reporting Issuer* ("NI 54-101")). The Corporation intends to pay for intermediaries to forward to objecting beneficial owners (as defined in NI 54-101) this Circular and other meeting materials.

### **Changing Your Vote**

A registered Shareholder who has given a proxy may revoke that proxy by:

- (a) completing and signing a proxy bearing a later date and depositing it with Computershare as described above;
- (b) depositing an instrument in writing executed by the Shareholder or by the Shareholder's attorney authorized in writing:
  - (i) at our registered office at any time before 5:00 p.m. (Toronto time) on June 1, 2018, or on the last business day before any adjournment of the Meeting at which the proxy is to be used, or
  - (ii) with the chair of the Meeting prior to the commencement of the Meeting on the day of the Meeting or any adjournment of the Meeting; or
- (c) in any other manner permitted by law.

A non-registered or beneficial Shareholder may revoke a voting instruction form or a waiver of the right to receive meeting materials and to vote given to an intermediary or to the Corporation, as the case may be, at any time by written notice to the intermediary or the Corporation, except that neither an intermediary nor the Corporation is required to act on a revocation of a voting instruction form or of a waiver of the right to receive materials and to vote that is not received by such intermediary or the Corporation, at least seven (7) days prior to the Meeting.

## VOTING OF PROXIES

You can choose to vote “For”, “Against” or “Withhold”, depending on the item listed on the proxy form. The Shares represented by the proxy form will be voted for, voted against or withheld from voting in accordance with the instructions of the Shareholder on any ballot that may be called for and, if the Shareholder specifies a choice with respect to any matter to be acted upon, the Shares will be voted accordingly.

**If you return your proxy form and do not tell us how you want to vote your Shares, your Shares will be voted by the management representatives named in the proxy form as follows:**

- **FOR the appointment of KPMG LLP as auditor of the Corporation and the authorization of the directors to fix the auditor’s remuneration;**
- **FOR the election of each of the directors nominated for election as listed in this Circular;**
- **FOR the approval of unallocated options under the share option plan of the Corporation; and**
- **FOR the approval of unallocated awards under the stock incentive plan of the Corporation.**

The enclosed form of proxy confers discretionary authority upon the management representatives designated in the form of proxy with respect to amendments to or variations of matters identified in the Notice of Meeting and with respect to other matters that may properly come before the Meeting. At the date of this Circular, management of the Corporation knows of no such amendments, variations or other matters.

## VOTING SECURITIES AND PRINCIPAL HOLDERS OF VOTING SECURITIES

As of April 25, 2018, 31,068,928 Shares are issued and outstanding. Each holder of Shares of record at the close of business on May 1, 2018, the record date established for notice of the Meeting, will be entitled to one vote for each Share held on all matters proposed to come before the Meeting, except to the extent that the Shareholder has transferred any Shares after the record date and the transferee of such Shares establishes ownership of them and makes a written demand, not later than 10 days prior to the Meeting, to be included in the list of Shareholders entitled to vote at the Meeting, in which case the transferee will be entitled to vote such Shares.

To the knowledge of Aptose’s directors and executive officers, no single person or entity beneficially owns, directly or indirectly, or exercises control or direction over more than 10% of the votes attached to all the outstanding Shares.

## PARTICULARS OF MATTERS TO BE ACTED UPON

### 1. Financial Statements

At the Meeting, Shareholders will receive and consider the financial statements of the Corporation for the fiscal year ended December 31, 2017 and the auditor’s report thereon, but no vote by the Shareholders with respect thereto is required or proposed to be taken.

## 2. Appointment and Remuneration of the Auditor

The Board of Directors of the Corporation (the “Board”), on the Audit Committee’s advice, recommends the appointment of KPMG LLP, as auditor of the Corporation. The auditor will be in office until the next annual Shareholders’ meeting or until a successor is named.

**Unless you have specified in the enclosed form of proxy that the votes attaching to the Shares represented by the proxy are to be withheld with respect to the appointment of the auditor, on any ballot that may be called for in the appointment of the auditor, the management representatives designated in the enclosed form of proxy intend to vote the Shares in respect of which they are appointed proxy FOR the appointment of KPMG LLP, Chartered Professional Accountants, as auditor of the Corporation to hold office until the next annual meeting of Shareholders, and authorizing the directors to fix the remuneration of the auditor.**

## 3. Election of Directors

Unless they resign, all directors elected at the Meeting will hold office until our next annual meeting of Shareholders or until their successors are elected or appointed.

**Unless you have specified in the enclosed form of proxy that the votes attaching to the Shares represented by the proxy are to be withheld with respect to the election of each of the directors, on any ballot that may be called for in the election of directors, the management representatives designated in the enclosed form of proxy intend to vote the Shares in respect of which they are appointed proxy FOR the election as directors of each of the proposed nominees whose names are set forth below.**

Pursuant to the articles of the Corporation, the number of directors of the Corporation is set at a minimum of three and a maximum of eleven and the directors are authorized to determine the actual number of directors to be elected from time to time. The Corporation currently has six directors, all of which are being proposed for nomination at the Meeting.

On February 24, 2014, the Board adopted a majority voting policy (the “Majority Voting Policy”). The Majority Voting Policy applies to this election of directors. Under such policy, a director nominee who is elected in an uncontested election with a greater number of votes “withheld” than votes “for” will be considered by the Board not to have received the support of the Shareholders, even though duly elected as a matter of corporate law. Such a nominee will be expected to provide forthwith his or her resignation to the Board, effective on acceptance by the Board. Unless special circumstances apply, the Board will accept the resignation. Within ninety (90) days following the applicable meeting of the Shareholders, the Board will determine whether to accept or reject the resignation offer that has been submitted. Following the Board’s decision on the resignation, the Board will promptly disclose, via press release, its decision (including the reasons for rejecting the resignation offer, if applicable).

The following table sets out for all persons proposed to be nominated by management for election as director, the name and place of residence, all major positions and offices with the Corporation now held by them, the period during which they have served as directors of the Corporation, their present principal occupation and principal occupation for the preceding five years, and the number of Shares beneficially owned, directly or indirectly, by each of them, or over which they exercise control or direction as at the date hereof.

The Corporation has an Audit Committee, a Corporate Governance and Nominating Committee and a Compensation Committee.

<b>Name of Director, Province/State and Country of Residence</b>	<b>Director Since</b>	<b>Present and Past Principal Occupation or Employment</b>	<b>No. of Shares Beneficially Owned, Controlled or Directed</b>
Dr. Denis Burger <sup>(1)(2)(4)</sup> Oregon, United States	September 2007	Chief Scientific Officer of Cytodyn Inc. (2015 to present)  President, Yamhill Valley Vineyards, Inc. (1983 to present) (vineyards)  Founding Chairman, Director, Trinity Biotech plc. (1992 to 1995 Chairman, 1995 to present as Director) (biotechnology company)	16,254 Shares
Dr. Erich Platzer <sup>(2)</sup> Basel, Switzerland	December 2014	Serves on several Boards of Directors (2003 to present)  Investment Advisor, HBM Partners AG (2003 to 2015) (healthcare investment firm)	115,000 Shares
Dr. William G. Rice California, United States	October 2013	Chairman, President and Chief Executive Officer of the Corporation (2013 to present)  Chairman, President and Chief Executive Officer, Cylene Pharmaceuticals Inc. (2003 to 2013) (biotechnology company)	63,014 Shares
Dr. Mark D. Vincent <sup>(3)</sup> Ontario, Canada	September 2007	Physician; consultant medical oncologist, London Regional Cancer Program of Cancer Care Ontario (1990 to present) (cancer care facility)  Professor of Oncology, Western University of Ontario (2008 to present) (university)	6,500 Shares
Warren Whitehead <sup>(1)</sup> Ontario, Canada	April 2011	Financial Consultant (self-employed) (2015 to present)  Serves on several Boards of Directors (2009 to present)  Chief Financial Officer, ProMIS Neurosciences (formerly Amorfix Life Sciences) (2013 to 2015) (biotechnology company)	50,000 Shares

Name of Director, Province/State and Country of Residence	Director Since	Present and Past Principal Occupation or Employment	No. of Shares Beneficially Owned, Controlled or Directed
Caroline M. Loewy <sup>(1)(3)</sup> California, United States	April 25, 2018	Financial and Strategic Consultant (2014 to present) (strategic advisory services)  Chief Financial Officer and Chief Business Officer, Achieve Life Sciences, Inc. (2015 to 2017) (biotechnology company)  Executive Vice President and Chief Financial Officer, Tobira Therapeutics, Inc. (2012 to 2014) (biotechnology company)	-

- (1) Member of the Audit Committee.
- (2) Member of the Compensation Committee.
- (3) Member of the Corporate Governance and Nominating Committee.
- (4) Lead Director of the Corporation.

Dr. Bradley Thompson, who was first elected as director of the Corporation in June 2013, is not standing for re-election at the Meeting.

The information as to principal occupation, business or employment and Shares beneficially owned or controlled is not within the knowledge of management of the Corporation and has been furnished by the respective nominees.

*Dr. Denis Burger:* Dr. Burger currently is the Chief Scientific Officer and member of the board of directors of Cytodyn Inc. (a biotechnology company) as well as Chairman of AMES Devices (a medical device company). Dr. Burger co-founded Trinity Biotech plc, based in Dublin, Ireland, in June 1992 and acted as Chairman from 1992 to 1995 and now serves on the board of directors of the company. Dr. Burger was the past Chairman, Chief Executive Officer and a director of AVI Biopharma Inc., an Oregon based biotechnology company, from 1992 to March 2007. Dr. Burger is also a partner in Sovereign Ventures, a healthcare consulting and funding firm based in Portland, Oregon. Dr. Burger received his MSc and Ph.D. in Microbiology and Immunology from the University of Arizona.

*Dr. Erich Platzer:* Dr. Platzer is a board certified physician in internal medicine, hematology and medical oncology. Previously, Dr. Platzer served as the business director of oncology, as well as the global strategic marketing and therapeutic area head of oncology at Roche, Basel. He was also the medical director in oncology and global development project leader and was responsible for various strategic corporate partnerships. Dr. Platzer is a director of Swiss Business Angel Groups, StartAngels and BioBAC, and has served as a pharmaceutical industry expert on the board of directors of multiple biotech companies in both the U.S. and Europe such as Probiodrug, AOT, and Léman Micro Devices, Credentis. Dr. Platzer co-founded HBM Healthcare Investments (formerly HBM BioVentures) a global leader in healthcare investing. He has over 12 years of experience in academic medicine and research and was a key member of the team at MSKCC that purified human G-CSF in 1983 (recombinant form: Neupogen®). He earned his M.D. from the Medical School and the Institute of Clinical Immunology and Rheumatology of the University of Erlangen, where he also received his “Dr. med. habil.” (M.D., Ph.D.).

*Dr. William G. Rice:* Dr. Rice joined Aptose as Chairman and Chief Executive Officer in October 2013. Prior to joining Aptose, Dr. Rice served as the President, Chief Executive Officer, Chief

Scientific Officer and Chairman of the board of Cylene Pharmaceuticals, Inc., a private biotechnology company (“Cylene”). Prior to Cylene, Dr. Rice was the founder, President, Chief Executive Officer, Chief Scientific Officer and Director of Achillion Pharmaceuticals, Inc. He also served as Senior Scientist and Head of the Drug Mechanism Laboratory at the National Cancer Institute-Frederick Cancer Research and Development Center and served as a faculty member in the division of Pediatric Hematology and Oncology at Emory University School of Medicine. Dr. Rice received his Ph.D. from Emory University’s Laney Graduate School, Department of Biochemistry. He continues to serve as the Chairman of the board of Cylene and is a member of the board of directors of Oncolytics Biotech Inc.

*Dr. Mark Vincent:* Dr. Mark Vincent is a Professor of Oncology at the University of Western Ontario and a staff medical oncologist at the London Regional Cancer Program, where he has been since 1990. Dr. Vincent is also the co-founder and Chief Executive Officer of Sarissa, Inc. since 2000.

*Mr. Warren Whitehead:* Mr. Whitehead is a CPA (CMA) who has held senior financial management positions in several biotechnology and pharmaceutical companies. Most recently Mr. Whitehead was the Chief Financial Officer of ProMIS Neurosciences Inc. (formerly Amorfix Life Sciences Ltd.). Prior to this, he served as Chief Financial Officer of ARIUS Research Inc., providing financial guidance and leadership during the acquisition of ARIUS by Roche in 2008. Prior to ARIUS, Mr. Whitehead was Chief Financial Officer at Labopharm Inc., where he completed a series of public equity financings and a listing on NASDAQ. He is currently the Chairman of the board of directors of PlantForm Corporation.

*Ms. Caroline M. Loewy:* Ms. Loewy is a biopharmaceutical and financial executive with over 25 years of experience in the field. She currently provides strategic advisory services for development stage biopharmaceutical companies, prior to which she co-founded and acted as Chief Financial Officer and Chief Business Officer of Achieve Life Sciences, Inc. Ms. Loewy previously held the position of Chief Financial Officer of both public and private biopharmaceutical companies including Tobira Therapeutics, Inc., Corcept Therapeutics Incorporated, and Poniard Pharmaceuticals, Inc. Prior to her roles in company management, Ms. Loewy spent 11 years as a senior biotechnology equity research analyst at Morgan Stanley and Prudential Securities. She sits on the board of directors of CymaBay Therapeutics Inc., is a founding board member of the Global Genes Project, one of the leading rare disease patient advocacy organizations in the world, and is a member of the National Advisory Council of the Translational Genomics Research Institute (TGen) Center for Rare Childhood Disorders. Ms. Loewy is also a founding board member of the KCNQ2 Cure Alliance Foundation. Ms. Loewy holds a BA degree from the University of California, Berkeley, and an MBA/MS degree from Carnegie Mellon University.

No proposed director is, to the knowledge of the Corporation as at the date of the Circular, or has been, within ten (10) years before the date of this Circular, a director, chief executive officer or chief financial officer of any company (including Aptose) that: (i) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under Canadian securities legislation that was in effect for a period of more than 30 consecutive days, (ii) was subject to cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under Canadian securities legislation that was in effect for a period of more than 30 consecutive days that was issued after the proposed director ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer, (iii) while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets, or (iv) become bankrupt, made a proposal under any legislation relating to

bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromised with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the proposed director.

Moreover, no proposed director of the Corporation has been subject, to the knowledge of the Corporation, to (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority, or (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable securityholder in deciding whether to vote for a proposed director.

#### **4. Approval of Unallocated Options under the Share Option Plan**

The Shareholders approved all unallocated options under the share option plan of the Corporation (the “Share Option Plan” or “SOP”) on June 10, 2015. The maximum total number of shares available for issuance under the Share Option Plan and any other security based compensation arrangement of the Corporation, including the the stock incentive plan of the Corporation (“SIP”), is 17.5% of the number of issued and outstanding Shares. The rules of the Toronto Stock Exchange (the “TSX”) require that, if a listed issuer has security based compensation plans that do not have a fixed maximum number of shares issuable thereunder, the directors and shareholders of the issuer approve and reaffirm the unallocated options, rights or entitlements under such plans every three years.

Additional information concerning the Share Option Plan, including its terms and conditions, can be found under the heading “Equity Compensation Plan Information” of this Circular.

As of April 18, 2018, an aggregate of 4,401,840 options and stock based awards comprised of restricted stock units (the “Restricted Stock Units”) or dividend equivalents (the “Dividend Equivalents”) and, collectively with the Restricted Stock Units, the “Awards”) were granted or awarded, outstanding and unexercised under the Share Option Plan or the SIP, as the case may be, representing approximately 14.3% of the issued and outstanding Shares of the Corporation. Accordingly, as at that date, options, rights and other entitlements to purchase or receive up to an additional 971,019 Shares (3.2% of Shares outstanding) remain available for grant or award under the Share Option Plan or the SIP, as the case may be.

On April 24, 2018, the Board unanimously approved the renewal of all options remaining available for grant under the Share Option Plan (the “SOP Unallocated Options”).

An ordinary resolution will be placed before the Shareholders at the Meeting to approve all the SOP Unallocated Options under the Share Option Plan (the “SOP Unallocated Options Resolution”). Pursuant to the requirements of the TSX, the SOP Unallocated Options Resolution requires the approval of a majority of the votes cast by the Shareholders at the Meeting, but excluding the votes attached to 306,782 Shares held directly or indirectly by insiders of the Corporation that hold options under the Share Option Plan or that are otherwise eligible to participate in the Share Option Plan or SIP. Shareholders’ approval will be effective for three years from the date of the Meeting and does not constitute a change of the Share Option Plan or an increase of the previously approved limit. Whether or not the SOP Unallocated Options Resolution is approved, all options already granted and currently outstanding will remain in effect. However, if the SOP Unallocated Options Resolution is not approved, any SOP Unallocated Options under the Share Option Plan will not be available for future grants, and previously granted options will not be available for reallocation if they are cancelled prior to the exercise, or if they are exercised, which would indeed constitute a reduction of the limit. Therefore, at the Meeting,

Shareholders will be asked to consider, and if deemed advisable, to pass the following SOP Unallocated Options Resolution:

**BE IT RESOLVED AS AN ORDINARY RESOLUTION OF THE SHAREHOLDERS THAT:**

1. all unallocated options under the share option plan (the “Share Option Plan”) of Aptose Biosciences Inc. (the “Corporation”) are approved;
2. the Corporation has the ability to continue granting options under the Share Option Plan until June 5, 2021, which is the date that is three (3) years from the date of the shareholders’ meeting at which shareholders’ approval is being sought; and
3. any director or officer of the Corporation is authorized and directed to execute and deliver for and in the name of and on behalf of the Corporation all such certificates, instruments, agreements, notices and other documents and to do such other acts and things as, in the opinion of such persons, may be necessary or desirable to give effect to the foregoing and facilitate the implementation of the foregoing resolutions.

**Unless you have specified in the enclosed form of proxy that the votes attaching to the Shares represented by the proxy are to be voted against the SOP Unallocated Options Resolution on any ballot that may be called for, the management representatives designated in the enclosed form of proxy intend to vote the Shares in respect of which they are appointed proxy FOR the SOP Unallocated Options Resolution.**

**5. Approval of Unallocated Awards under the Stock Incentive Plan**

The SIP was adopted by the Board on May 5, 2015 and approved by the Shareholders on June 10, 2015. The maximum total number of Shares available for issuance under the SIP and any other security based compensation arrangement of the Corporation, including the Share Option Plan, is 17.5% of the number of issued and outstanding Shares. The rules of the TSX require that, if a listed issuer has security based compensation plans that do not have a fixed maximum number of shares issuable thereunder, the directors and shareholders of the issuer approve and reaffirm the unallocated options, rights or entitlements under such plans every three years.

Under the SIP, the Board may grant Restricted Stock Units or Dividend Equivalents to employees, officers, consultants, independent contractors, advisors and non-employee directors of the Corporation or any affiliate.

Additional information concerning the SIP, including its terms and conditions, can be found under the heading “Equity Compensation Plan Information” of this Circular.

As of April 18, 2018, an aggregate of 4,401,840 options and stock based awards comprised of Restricted Stock Units or Dividend Equivalents were granted or awarded, outstanding and unexercised under the Share Option Plan or the SIP, as the case may be, representing approximately 14.3% of the issued and outstanding Shares of the Corporation. Accordingly, as at that date, options, rights and other entitlements to purchase or receive up to an additional 971,019 Shares (3.2% of Shares outstanding) remain available for grant or award under the Share Option Plan or the SIP, as the case may be.

On April 24, 2018, the Board unanimously approved the renewal of all Restricted Stock Units and Dividend Equivalents remaining available for award under the SIP (the “SIP Unallocated Awards”).

An ordinary resolution will be placed before the Shareholders at the Meeting to approve all the SIP Unallocated Awards under the SIP (the “SIP Unallocated Awards Resolution”). Pursuant to the requirements of the TSX, the SIP Unallocated Awards Resolution requires the approval of a majority of the votes cast by the Shareholders at the Meeting, but excluding the votes attached to 306,782 Shares held directly or indirectly by insiders of the Corporation that hold Awards under the SIP or that are otherwise eligible to participate in the Share Option Plan or SIP. Shareholders’ approval will be effective for three years from the date of the Meeting and does not constitute a change of the SIP or an increase of the previously approved limit. Whether or not the SIP Unallocated Awards Resolution is approved, all Awards already granted and currently outstanding will remain in effect. However, if the SIP Unallocated Awards Resolution is not approved, any SIP Unallocated Awards under the SIP will not be available for future grants, and previously granted Awards will not be available for reallocation if they are cancelled prior to the exercise, or if they are exercised, which would indeed constitute a reduction of the limit. Therefore, at the Meeting, Shareholders will be asked to consider, and if deemed advisable, to pass the following SIP Unallocated Awards Resolution:

**BE IT RESOLVED AS AN ORDINARY RESOLUTION OF THE SHAREHOLDERS THAT:**

1. all unallocated stock-based awards comprised of restricted stock units or dividend equivalents (collectively, the “Awards”) under the stock incentive plan (the “SIP”) of Aptose Biosciences Inc. (the “Corporation”) are approved;
2. the Corporation has the ability to continue granting Awards under the SIP until June 5 , 2021, which is the date that is three (3) years from the date of the shareholders’ meeting at which shareholders’ approval is being sought; and
3. any director or officer of the Corporation is authorized and directed to execute and deliver for and in the name of and on behalf of the Corporation all such certificates, instruments, agreements, notices and other documents and to do such other acts and things as, in the opinion of such persons, may be necessary or desirable to give effect to the foregoing and facilitate the implementation of the foregoing resolutions.

**Unless you have specified in the enclosed form of proxy that the votes attaching to the Shares represented by the proxy are to be voted against the SIP Unallocated Awards Resolution on any ballot that may be called for, the management representatives designated in the enclosed form of proxy intend to vote the Shares in respect of which they are appointed proxy FOR the SIP Unallocated Awards Resolution.**

**STATEMENT OF EXECUTIVE COMPENSATION**

**COMPENSATION DISCUSSION AND ANALYSIS**

**Composition of the Compensation Committee**

The Board, upon the advice of the Compensation Committee, determines executive compensation. The Compensation Committee is currently comprised of independent Board members Dr. Burger, Dr. Platzer and Dr. Thompson. Dr. Burger is chair of the Compensation Committee. The Compensation

Committee met 2 times during the period from January 1, 2017 until December 31, 2017. For more information on the Compensation Committee, please see the section entitled “Compensation” of the Corporation’s Corporate Governance Practices attached hereto as Appendix A.

Members of the Compensation Committee each have direct experience relevant to compensation matters resulting from their respective current and past activities. The members of the Compensation Committee have experience dealing with compensation matters in comparable organizations, including public companies, as well as companies with a strong emphasis on governance in their current and former roles as principal executives.

### **Compensation Objectives and Philosophy**

The Compensation Committee’s mandate is to review and advise the Board on the recruitment, appointment, performance, compensation, benefits and termination of executive officers. The Compensation Committee also administers and reviews procedures and policies with respect to the Share Option Plan, the SIP, employee benefit programs, pay equity and employment equity and reviews executive compensation disclosure where it is publicly disclosed.

Aptose’s executive compensation program is designed to:

- attract and retain qualified, motivated and achievement-oriented individuals by offering compensation that is competitive in the industry and marketplace;
- align executive interests with the interests of Shareholders; and
- ensure that individuals continue to be compensated in accordance with their personal performance and responsibilities and their contribution to the overall objectives of the Corporation.

These objectives are achieved by offering executives and employees a compensation package that is competitive and rewards the achievement of both short-term and long-term objectives of the Corporation. As such, our compensation package consists of three key elements:

- base salary and initial share options;
- short-term compensation incentives to reward corporate and personal performance through potential annual cash bonuses; and
- long-term compensation incentives related to long-term increase in Share value through participation in the Share Option Plan and SIP.

The Compensation Committee reviews each of these items on a stand-alone basis and also reviews compensation as a total package. Adjustments to compensation are made as appropriate following a review of the compensation package as a whole.

### ***Independent Advice***

In March 2015, the Compensation Committee retained Radford (an Aon Consulting Company), to provide independent advice to the Compensation Committee. Radford was retained to assist in developing the Corporation’s compensation philosophy and identifying a peer group of companies as well as perform an assessment of the competitiveness of the Corporation’s executive compensation process. Radford does not provide any services to management. The Compensation Committee has sole authority to retain and terminate any compensation consultant to be used to assist it in the evaluation of executive officer compensation. The Compensation Committee has sole authority to approve such

consultants' fees and retention terms and to obtain advice and assistance from internal or external legal, accounting or other advisors. Radford did not provide any advice to the Compensation Committee in 2017.

### ***Comparator Group***

In 2015, the Corporation, with advice from Radford, its independent compensation consultant, reviewed the compensation of its executive officers against that of its compensation peer group. The Corporation developed a new comparator group taking into account direct competitors for talent, especially for industry specific roles. The comparator group is comprised of 20 publicly traded U.S. and Canadian biotechnology companies which range in size from approximately ½× to 3× the market capitalization of the Corporation (as of April 2015). The companies comprising the comparator group are as follows:

Comparator Group Companies	
Actinium Pharmaceuticals, Inc.	MediciNova, Inc.
Anthera Pharmaceuticals, Inc.	MEI Pharma, Inc.
Argos Therapeutics, Inc.	OncoGenex Pharmaceuticals, Inc.
ArQule, Inc.	Onconova Therapeutics, Inc.
AVEO Pharmaceuticals, Inc.	Oncothyreon Inc.
BIND Therapeutics, Inc.	OXiGENE, Inc.
Celator Pharmaceuticals, Inc.	Stemline Therapeutics, Inc.
CytRx Corporation	Sunesis Pharmaceuticals, Inc.
Fortress Biotech, Inc.	TetraLogic Pharmaceuticals Corporation
Heat Biologics, Inc.	Trillium Therapeutics Inc.

### ***Pay Positioning***

The Corporation targets total cash compensation (salary and short-term incentive) somewhat above the 50<sup>th</sup> percentile of the comparator group, and provides long-term incentive opportunities in the 50<sup>th</sup> to 75<sup>th</sup> percentile of the comparator group. The Compensation Committee believes that this aligns executive compensation with the long-term interests of shareholders and with the Corporation's strategy. In 2015, Radford provided detailed information to the Compensation Committee relating to compensation values, pay mix and incentive vehicles at the comparator group companies. In addition, the Compensation Committee considered compensation in relation to executives located in Central and

Southern California which are regions of relatively higher cost of living and highly competitive for recruitment and retention. Based on this information and taking into account experience in the role, scope of the role, performance and retention risk, the Compensation Committee set compensation for the executives for 2015 aligned with the target pay positioning set out above. Compensation for the executives was not compared to the comparator group by the Compensation Committee in 2017.

### ***Base Salary — Initial Share Options***

In establishing base salaries, the objective of the Compensation Committee is to establish levels that will enable Aptose to attract and retain executive officers that can effectively contribute to the long-term success of the Corporation. Base salary for each executive officer is determined by the individual's skills, abilities, experience, past performance and anticipated future contribution to the success of Aptose. The members of the Compensation Committee use their knowledge of the industry and of industry trends as well as independent third party consultants to assist with the determination of an appropriate compensation package for each executive officer. In certain cases, the Compensation Committee may recommend inclusion of automobile allowances, fitness allowances and the payment of certain professional dues as a component of an overall remuneration package for executives.

In certain cases, executive officers may be granted share options on the commencement of employment with Aptose in accordance with the responsibility delegated to each executive officer for achieving corporate objectives and enhancing shareholder value in accordance with those objectives.

### ***Short-Term Compensation Incentives***

The role of short-term compensation incentives at Aptose is to motivate our executive officers to achieve specified performance objectives and to reward them for their achievement in the event that those objectives are met. Each year, the Compensation Committee approves the annual corporate objectives encompassing scientific, clinical, regulatory, business and corporate development and financial criteria. The annual cash bonus for the executive officers is based, at least in part, on the level of achievement of these annual objectives, assuming these objectives are still relevant at the time of evaluation.

All corporate and executive officer objectives are reviewed by the Compensation Committee and approved by the Board. The Compensation Committee recommends to the Board the awarding of bonuses, payable in cash, stock or share options, to reward extraordinary individual performance.

For each executive officer, during the year ended December 31, 2017, the annual cash bonuses ranged from 30% to 50% of base salary.

Cash bonuses are determined as soon as practicable after the end of the fiscal year and, for the Named Executive Officers (as defined hereinafter), are included in the Summary Compensation Table in the year in respect of which they are earned.

### ***Long-Term Incentive Plans***

The role of long-term compensation incentives at Aptose is to reward an executive's contribution to the attainment of Aptose's long-term objectives, align an executive's performance with the long-term performance of Aptose and to provide an additional incentive for an executive to enhance shareholder value. Long-term incentive compensation for directors, officers, employees and consultants is reviewed

annually and may be accomplished through the grant of share options under the Share Option Plan and of stock-based awards comprised of Restricted Stock Units or Dividend Equivalents under the SIP.

The number of options granted for certain executives of Aptose for the year ended December 31, 2017 was based on achievement of both corporate and executive officer objectives. The Compensation Committee approves the allocation of options and options are priced using the closing market price of the Shares on the TSX on the last trading day prior to the grant. Options to purchase Shares expire ten years from the date of grant and vest over a term determined by the Compensation Committee. The Compensation Committee considers previous grants of options when considering new grant of options.

The granting of options to Named Executive Officers is included in the Summary Compensation Table in the year in which they are earned.

### ***Performance Metrics***

The performance of the Named Executive Officers for the period ended December 31, 2017 was measured with respect to the following objectives:

Achievement of certain milestones relating to the preclinical development and market awareness of CG-806	40%
Achievement of certain milestones relating to the efforts to lift the APTO-253 clinical hold	25%
Metrics related to the improvement of the financial position and market recognition and coverage of the Corporation	25%
Metrics related to corporate development and strategic activities, including in connection with competitive positioning and partnering, intellectual property portfolio and human resources	10%

Each of the above objectives is weighted at 40%, 25%, 25% and 10% respectively in relation to assessment of satisfaction of overall corporate objectives and determination of any general corporate bonuses.

### ***Hedge or Offset Instruments***

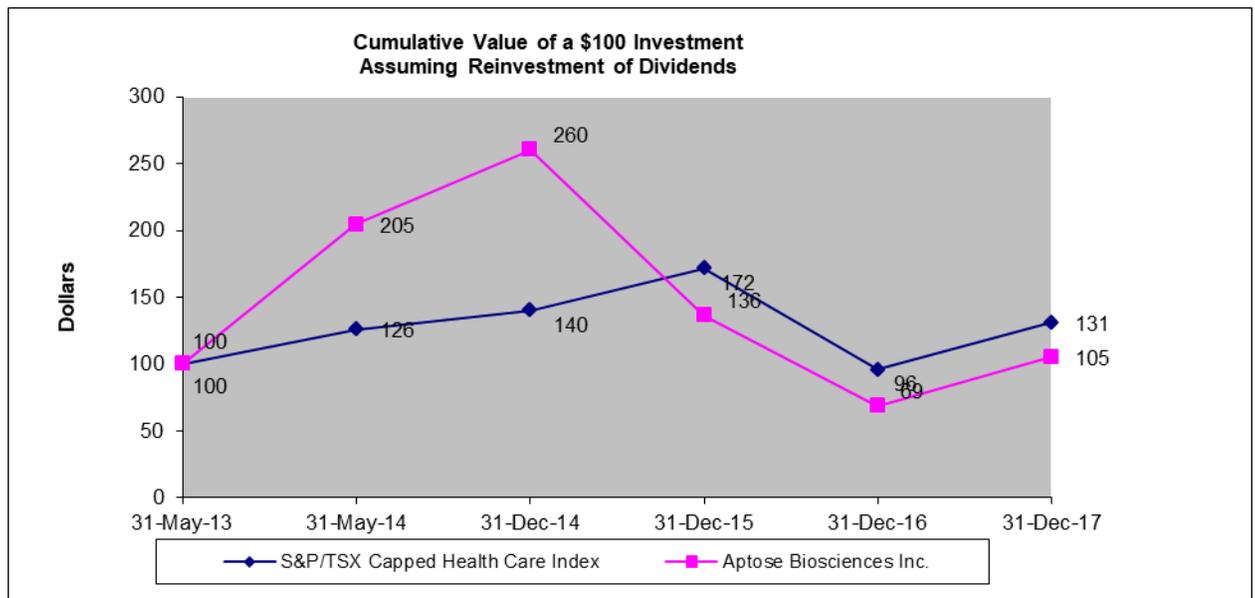
Named Executive Officers or directors are not permitted to purchase financial instruments that are designed to hedge or offset a decrease in market value of equity securities granted as compensation or held, directly or indirectly, by Named Executive Officers or directors, including, for greater certainty, prepaid variable forward contracts, equity swaps, collars, or units of exchange funds.

### *Risk Assessment of Compensation*

The implications of the risks associated with the Corporation’s compensation practices were not considered by the Board or a committee of the Board.

### PERFORMANCE GRAPH

The following graph illustrates our cumulative total Shareholder return (assuming a \$100 investment) for the Shares on the TSX as compared with the S&P/TSX Capped Health Care Index during the period from June 1, 2013 to December 31, 2017.



Compensation levels for the Named Executive Officers have not fluctuated to the same degree as Shareholder returns. Compensation does not solely reflect consideration of Corporation performance. Instead, compensation is determined in light of an overall compensation package that is considered appropriate in the circumstances. The Aptose value trend was increasing from the time of the arrival of the new executive team in late 2013, but the value trend decreased at the end of 2015 and through the second quarter of 2017 due to the clinical hold of APTO-253. The value trend increased thereafter due to progress made on its research programs, specifically CG’806, and continued progress on returning APTO-253 to the clinic.

### SUMMARY COMPENSATION TABLE

The following table details the compensation information for the fiscal years ended December 31, 2015, December 31, 2016 and December 31, 2017 for the Chairman, President and Chief Executive Officer, the Senior Vice President and Chief Financial Officer and the Senior Vice President and Chief Business Officer (each, an “NEO” and, collectively the “Named Executive Officers”):

Name and Principal Position	Fiscal Year Ended	Salary (\$)	Share-based awards (\$)	Option-based awards (\$)	Non-equity incentive plan compensation		Pension value (\$)	All other compensation (\$)	Total compensation (\$)
					Annual incentive plans (\$)	Long-term incentive plans (\$)			
Dr. William G. Rice Chairman, President and Chief Executive Officer	Dec. 31, 2017	534,795	57,500 <sup>(4)</sup>	122,182 <sup>(1)</sup>	260,198	Nil	N/A	Nil	974,675
	Dec. 31, 2016	523,291	Nil	138,202 <sup>(2)</sup>	127,308	Nil	N/A	Nil	788,801
	Dec. 31, 2015	502,707	Nil	517,423 <sup>(3)</sup>	90,000 <sup>(5)</sup>	Nil	N/A	Nil	1,110,130
Mr. Gregory K. Chow Senior Vice President and Chief Financial Officer	Dec. 31, 2017	356,703	57,500 <sup>(4)</sup>	122,182 <sup>(1)</sup>	142,681	Nil	N/A	Nil	679,066
	Dec. 31, 2016	334,434	Nil	138,202 <sup>(2)</sup>	66,837	Nil	N/A	Nil	539,473
	Dec. 31, 2015	320,452	Nil	258,711 <sup>(3)</sup>	51,700 <sup>(5)</sup>	Nil	N/A	Nil	630,862
Mr. Avanish Vellanki Former Senior Vice President and Chief Business Officer <sup>(6)</sup>	Dec. 31, 2017	95,075	Nil	Nil	Nil	Nil	N/A	143,163	238,238
	Dec. 31, 2016	334,434	Nil	138,202 <sup>(2)</sup>	66,837	Nil	N/A	Nil	539,473
	Dec 31, 2015	320,452	Nil	258,711 <sup>(1)</sup>	51,700 <sup>(5)</sup>	Nil	N/A	Nil	630,862
Mr. Ernest Kitt Vice President of Development and Technical Operations <sup>(7)</sup>	Dec. 31, 2017	230,062	28,750 <sup>(4)</sup>	61,091 <sup>(1)</sup>	69,019	Nil	N/A	Nil	388,922
	Dec. 31, 2016	219,093	Nil	57,584 <sup>(2)</sup>	14,367	Nil	N/A	Nil	291,044
	Dec 31, 2015	93,538	Nil	86,237 <sup>(3)</sup>	56,710 <sup>(7)</sup>	Nil	N/A	Nil	236,485

- (1) In determining the fair value of these option-based awards, the Black-Scholes valuation methodology was used with the following weighted average assumptions: (i) expected life of five years; (ii) volatility 98%; (iii) risk free interest rate of 1.32%; and (iv) no dividend yield. The Corporation has decided to use the Black-Scholes valuation methodology because it is equivalent to the option value reported in the Corporation's consolidated financial statements.
- (2) In determining the fair value of these option-based awards, the Black-Scholes valuation methodology was used with the following assumptions: (i) expected life of five years; (ii) volatility 110%; (iii) risk free interest rate of 0.68%; and (iv) no dividend yield. The Corporation has decided to use the Black-Scholes valuation methodology because it is equivalent to the option value reported in the Corporation's consolidated financial statements.
- (3) In determining the fair value of these option-based awards, the Black-Scholes valuation methodology was used with the following assumptions: (i) expected life of five years; (ii) volatility 103.5%; (iii) risk free interest rate of 1.09%; and (iv) no dividend yield. The Corporation has decided to use the Black-Scholes valuation methodology because it is equivalent to the option value reported in the Corporation's consolidated financial statements.
- (4) The value of the share-based awards was determined by applying the number of restricted shares issued by the closing value of the common shares of the Company on the Toronto Stock Exchange on the date prior to the date of grant.
- (5) Annual incentive amounts relate to the period from January 1 to May 31, 2015. No bonus payments were rewarded for the period from June 1, 2015 to December 31, 2015.
- (6) Mr. Vellanki resigned as Senior Vice President and Chief Business Officer effective March 24, 2017.
- (7) Mr. Kitt joined the Corporation effective June 3, 2015. Annual incentive payment included sign on and relocation bonus of 40,000.

## INCENTIVE PLAN AWARDS

### *Outstanding Share-Based Awards and Option-Based Awards*

The following tables show all awards outstanding to each NEO as at December 31, 2017:

Name and Principal Position	Option-based Awards			Share-based Awards			
	Number of securities underlying unexercised options (#)	Option exercise price (\$) <sup>(1)</sup>	Option expiration date	Value of unexercised in-the-money options (\$) <sup>(2)</sup>	Number of shares or units of shares that have not vested (#)	Market or payout value of share-based awards that have not vested (\$)	Market or payout value of vested share-based awards not paid out or distributed (\$)
Dr. William G. Rice Chairman, President and Chief Executive Officer	35,417	2.77	Oct 27, 2023	Nil	Nil	Nil	Nil
	65,136	5.82	Dec 10, 2023	Nil			
	5,281	5.54	Jan 29, 2024	Nil			
	140,000	4.77	Apr 10, 2024	Nil			
	396,129	4.53	Jun 15, 2024	Nil			
	120,000	5.54	Jun 9, 2025	Nil			
	60,000	3.04	Mar 30, 2026	Nil			
	100,000	1.21	Mar 28, 2027	103,000			
	50,000	1.03	Jun 6, 2027	60,500			
Mr. Gregory K. Chow Senior Vice President and Chief Financial Officer	35,417	7.44	Nov 4, 2023	Nil	Nil	Nil	Nil
	35,417	5.82	Dec 10, 2023	Nil			
	35,417	4.77	Apr 10, 2024	Nil			
	22,083	4.53	Jun 15, 2024	Nil			
	64,167	4.20	Jul 18, 2024	Nil			
	60,000	5.54	Jun 9, 2025	Nil			
	60,000	3.04	Mar 30, 2026	Nil			
	100,000	1.21	Mar 28, 2027	103,000			
	50,000	1.03	Jun 6, 2027	60,500			
Mr. Avanish Vellanki Former Senior Vice President and Chief Business Officer <sup>(3)</sup>	Nil	N/A	N/A	N/A	Nil	Nil	Nil
Mr. Ernest Kitt Vice President of Development and Technical Operations	20,000	5.54	Jun 9, 2025	Nil	Nil	Nil	Nil
	25,000	3.04	Mar 30, 2026	Nil			
	50,000	1.21	Mar 28, 2027	51,500			
	25,000	1.03	Jun 6, 2027	30,250			

(1) Certain grants were issued with a Canadian dollar exercise price. Those exercise prices have been converted to US dollars at the closing exchange rate on December 31, 2017, of \$0.7955.

- (2) These amounts are calculated based on the difference between the market value, on the Nasdaq Capital Market, of the securities underlying the options on December 31, 2017 at the end of the fiscal year (\$2.24), and the exercise price of the options.
- (3) Mr. Vellanki resigned as Senior Vice President and Chief Business Officer effective March 24, 2017.

### *Value Vested or Earned During the Year*

The following table sets forth for each NEO the value vested or earned on all option-based awards, share-based awards, and non-equity incentive plan compensation during the year ended December 31, 2017:

Name and Principal Position	Option-based awards – Value vested during the year (\$)	Share-based awards – Value vested during the year <sup>(1)</sup> (\$)	Non-equity incentive plan compensation – Value earned during the year (\$)
Dr. William G. Rice Chairman, President and Chief Executive Officer	Nil	60,105	260,198
Mr. Gregory K. Chow Senior Vice President and Chief Financial Officer	Nil	60,105	142,681
Mr. Avanish Vellanki Former Senior Vice President and Chief Business Officer	Nil	Nil	Nil
Mr. Ernest Kitt Vice President of Development and Technical Operations	Nil	30,053	69,019

(1) These amounts were determined based on the market value of the underlying securities on the date the restricted share units vested.

### **PENSION PLAN BENEFITS**

The Corporation does not provide pension plan benefits to its Named Executive Officers or employees of the Corporation, except under defined contribution plans.

### **TERMINATION AND CHANGE OF CONTROL BENEFITS**

The employment agreements of Dr. Rice and Mr. Chow provide that if their employment is terminated by the Corporation other than for cause, each of Dr. Rice and Mr. Chow shall be entitled to a payment equivalent to 12 months of their respective annual base salaries at the time of termination (Dr. Rice's December 31, 2017 annual base salary represents \$524,509 and Mr. Chow's December 31, 2017 annual base salary represents \$365,000) plus an amount equal to the average bonus remuneration received from the Corporation during the last three years of employment completed prior to the termination date, prorated based on the number of days the executive worked during the year of the termination. In addition, the employment agreements of Dr. Rice and Mr. Chow provide that certain payments related to health benefits will continue to be made for a period of 12 months following termination of their employment.

If the employment agreements are terminated by the Corporation other than for cause, then all unexercised options then held by each are governed by the terms of the Share Option Plan.

The employment agreements of Dr. Rice and Mr. Chow provide that, in the event their employment with the Corporation is terminated within three months immediately preceding or 12 months immediately following the consummation of a change of control, each of Dr. Rice and Mr. Chow would be eligible, subject to certain conditions, to receive a payment equivalent to 18 months of their annual base salaries at the time of termination, plus an amount equal to 150% of the average bonus remuneration received from the Corporation during the last three years of employment completed prior to the termination date, prorated based on the number of days the executive worked during the year of the termination, as well as continuation of the payments related to health benefits for a period of 12 months following the termination following a change of control.

Mr. Kitt is employed at will and his employment agreement does not provide for any termination benefits.

The following table sets out the amount that would have been payable to each NEO had there been a change of control of the Corporation on December 31, 2017 and the severance payment that would have been payable to each NEO had the Corporation terminated employment of the NEO without cause on December 31, 2017:

Name	Termination Without Cause	Change of Control
Dr. William G. Rice	\$683,678 <sup>(1)</sup>	\$1,025,516 <sup>(2)</sup>
Mr. Gregory K. Chow	\$452,073 <sup>(1)</sup>	\$678,109 <sup>(2)</sup>
Mr. Ernest Kitt	\$ Nil	\$ Nil

- (1) This amount represents 12 months of annual base salary at the time of termination, plus an amount equal to the average bonus remuneration received from the Corporation during the last three years of employment completed prior to the termination date, prorated based on the number of days the executive worked during the year of the termination, as well as continuation of the payments related to health benefits for a period of 12 months following the termination.
- (2) This amount represents 18 months of annual base salary at the time of termination, plus an amount equal to 150% of the average bonus remuneration received (assumed at 100%) from the Corporation during the last three years of employment completed prior to the termination date, prorated based on the number of days the executive worked during the year of the termination, as well as continuation of the payments related to health benefits for a period of 12 months following the termination.

## COMPENSATION OF DIRECTORS

The following table details the compensation received by each director for the year ended December 31, 2017:

Name	Fees earned	Share-based awards	Option-based awards	Non-equity incentive plan compensation	Pension value	All other Compensation	Total
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Dr. Denis Burger	76,000	5,750	12,218	Nil	N/A	Nil	93,968
Dr. Bradley Thompson <sup>(2)</sup>	48,000	5,750	12,218	Nil	N/A	Nil	65,968
Dr. Mark Vincent	40,000	5,750	12,218	Nil	N/A	Nil	57,968

Name	Fees earned (\$)	Share-based awards (\$)	Option- based awards (\$)	Non-equity incentive plan compensation (\$)	Pension value (\$)	All other Compensation (\$)	Total (\$)
Mr. Warren Whitehead	40,000	5,750	12,218	Nil	N/A	Nil	57,968
Dr. Erich Platzer	36,000	5,750	12,218	Nil	N/A	Nil	53,968

(1) Dr. Bradley Thompson is not standing for re-election at the Meeting.

Dr. Rice did not receive any compensation for his role as a director of the Corporation.

In the year ended December 31, 2017, all directors (except Dr. Rice) received a grant of 15,000 options and 5,000 Restricted Share Units. The options vest 50% after one year, and 25% for each of the second and third years. The restricted Share Units vested over three months.

In January 2015, the Board approved certain changes related to the compensation of directors effective for the fiscal year 2015. As of January 1, 2015, directors were entitled to an annual fee of \$30,000 with no per meeting fees. The lead director is entitled to an additional annual fee of \$30,000. The chair of each committee is entitled to an annual fee of \$10,000 with each committee member receiving an annual fee of \$6,000 per committee. Upon appointment to the Board a director will be entitled to an option grant of 10,000 options and each year thereafter an additional grant of 6,000 options. Non-executive directors are reimbursed for any out-of-pocket travel expenses incurred in order to attend meetings. Executive directors are not entitled to directors' compensation.

### Incentive Plan Awards

#### *Outstanding Share-Based Awards and Option Based Awards*

The following table sets forth for each director, other than Named Executive Officers who are directors, all option-based and share-based awards outstanding at December 31, 2017:

Name	Option-based Awards			Share-based Awards			
	Number of securities underlying unexercised options (#)	Option exercise price <sup>(1)</sup> (\$)	Option expiration date	Value of unexercised in-the-money options (\$) <sup>(2)</sup>	Number of shares or units of shares that have not vested (#)	Market or payout value of share-based awards that have not vested (\$)	Market or payout value of vested share-based awards not paid out or distributed (\$)
Dr. Denis Burger	5,417	2.05	Nov 28, 2021	Nil	Nil	Nil	Nil
	4,166	1.72	Mar 8, 2022	Nil			
	1,250	4.53	Aug 1, 2022	Nil			
	2,500	4.77	Apr 10, 2024	Nil			
	22,000	5.38	Jan 15, 2025	Nil			
	10,000	3.82	Mar 30, 2026	Nil			
	10,000	1.21	Mar 28, 2027	10,021			
	5,000	1.03	June 6, 2027	6,050			

Name	Option-based Awards			Share-based Awards			
	Number of securities underlying unexercised options (#)	Option exercise price <sup>(1)</sup> (\$)	Option expiration date	Value of unexercised in-the-money options (\$) <sup>(2)</sup>	Number of shares or units of shares that have not vested (#)	Market or payout value of share-based awards that have not vested (\$)	Market or payout value of vested share-based awards not paid out or distributed (\$)
Dr. Erich Platzer	10,000	5.38	Jan 15, 2025	Nil	Nil	Nil	Nil
	10,000	3.04	Mar 30, 2026	Nil			
	10,000	1.21	Mar 28, 2027	10,021			
	5,000	1.03	June 6, 2027	6,050			
Dr. Bradley Thompson <sup>(3)</sup>	3,750	4.77	Apr 10, 2024	Nil	Nil	Nil	Nil
	22,000	5.38	Jan 15, 2025	Nil			
	10,000	3.04	Mar 30, 2026	Nil			
	10,000	1.21	Mar 28, 2027	10,021			
	5,000	1.10	June 6, 2027	5,567			
Dr. Mark Vincent	1,250	2.05	Nov 28, 2021	Nil	Nil	Nil	Nil
	2,083	1.72	Mar 8, 2022	Nil			
	1,250	4.53	Aug 1, 2022	Nil			
	2,500	4.77	Apr 10, 2024	Nil			
	22,000	5.38	Jan 15, 2025	Nil			
	10,000	3.04	Mar 30, 2026	Nil			
	10,000	1.21	Mar 28, 2027	10,021			
	5,000	1.10	June 6, 2027	5,567			
Mr. Warren Whitehead	1,250	2.05	Nov 28, 2021	199	Nil	Nil	Nil
	500	1.72	Mar 8, 2022	247			
	1,250	4.53	Aug 1, 2022	Nil			
	2,500	4.77	Apr 10, 2024	Nil			
	22,000	5.38	Jan 15, 2025	Nil			
	10,000	3.04	Mar 30, 2026	Nil			
	10,000	1.21	Mar 28, 2027	10,021			
	5,000	1.10	June 6, 2027	5,567			

(1) Certain grants were issued with a Canadian dollar exercise price. Those exercise prices have been converted to US dollars at the closing exchange rate on December 31, 2017, of \$0.7955.

(2) These amounts are calculated based on the difference between the market value of the securities underlying the options on December 31, 2017 at the end of the fiscal year (\$2.24), and the exercise price of the options.

(3) Dr. Bradley Thompson is not standing for re-election at the Meeting.

### ***Value Vested or Earned During the Year***

The following table sets forth for each director the value vested or earned on all option-based awards, share-based awards, and non-equity incentive plan compensation during the year ended December 31, 2017.

Name	Option-based awards – Value vested during the year (\$)	Share-based awards – Value vested during the year <sup>(1)</sup> (\$)	Non-equity incentive plan compensation – Value earned during the year (\$)
Dr. Denis Burger	Nil	6,050	Nil
Dr. Erich Platzer	Nil	6,050	Nil
Dr. Bradley Thompson <sup>(2)</sup>	Nil	6050	Nil
Dr. Mark Vincent	Nil	6,050	Nil
Mr. Warren Whitehead	Nil	6,050	Nil

(2) These amounts were determined based on the market value of the underlying securities on the date the restricted share units vested.

(3) Dr. Bradley Thompson is not standing for re-election at the Meeting.

### **INDEBTEDNESS**

As of the date hereof, there is no indebtedness owing to the Corporation by any employees, officers or directors of the Corporation. The Corporation did not provide financial assistance to any employees, officers or directors for the purchase of securities during the year ended December 31, 2017 or from January 1, 2018 to the date hereof.

### **AUDIT COMMITTEE INFORMATION**

Reference is made to the annual information form of the Corporation dated March 27, 2018 for the year ended December 31, 2017, under the heading “Audit Committee” for a disclosure of information related to the Audit Committee required under Form 52-110F1 to National Instrument 52-110 – *Audit Committees* (“NI 52-110”). A copy of this document can be found on SEDAR at [www.sedar.com](http://www.sedar.com), however we will promptly provide a copy of this document to any securityholder of the Corporation free of charge upon request.

On April 25, 2018, Ms. Caroline Loewy joined the Audit Committee upon her appointment as director. Ms. Loewy acted as Chief Financial Officer and Chief Business Officer of Achieve Life Sciences, Inc. and held the position of Chief Financial Officer of both public and private biopharmaceutical companies including Tobira Therapeutics, Inc., Corcept Therapeutics Incorporated, and Poniard Pharmaceuticals, Inc. Prior to her roles in company management, Ms. Loewy spent 11 years as a senior biotechnology equity research analyst at Morgan Stanley and Prudential Securities. Ms. Loewy holds a BA degree from the University of California, Berkeley, and an MBA/MS degree from Carnegie Mellon University.

### **DIRECTORS AND OFFICERS’ LIABILITY**

We purchase and maintain liability insurance for the benefit of directors and officers to cover any liability incurred by such person in such capacities. The policy provides for coverage in the amount of

\$20,000,000. For the period January 1, 2017 to December 31, 2017, the premium cost of this insurance was \$339,670.

## MANAGEMENT CONTRACTS

The management functions of the Corporation are not, in any way, performed in a substantial degree by a person or persons other than the directors or the executive officers of the Corporation.

## EQUITY COMPENSATION PLAN INFORMATION

### General

As of December 31, 2017, the total number of Shares available for issuance by the Corporation under the Share Option Plan and the SIP was 4,812,859. The maximum number of Shares reserved for issuance collectively under the Share Option Plan and any other security based compensation arrangement may not exceed 17.5% of the Corporation's issued and outstanding Shares at any given time. As of December 31, 2017, there were outstanding options to purchase 2,342,840 Shares issued under the Share Option Plan, representing 8.52% of the issued and outstanding Shares of the Corporation. Therefore as of December 31, 2017, 2,470,019 Shares remained available for future issuance under the Share Option Plan and the SIP, representing 9.98% of the issued and outstanding Shares of the Corporation.

### Share Option Plan

The Share Option Plan was established to advance the interests of Aptose by:

- providing Eligible Persons (as defined below) with additional incentives;
- encouraging stock ownership by Eligible Persons;
- increasing the interest of Eligible Persons in the success of Aptose;
- encouraging Eligible Persons to remain loyal to Aptose; and
- attracting new Eligible Persons to Aptose.

The Compensation Committee, as authorized by the Board, administers the Share Option Plan. The maximum total number of Shares available for issuance from treasury under the Share Option Plan together with the SIP and any other security based compensation arrangement is 17.5% of the Corporation's issued and outstanding Shares at any given time. Any exercise of options pursuant to the Share Option Plan will make new option grants available under the Share Option Plan, provided that the maximum number of Shares reserved for issuance collectively under the Share Option Plan and the SIP may not exceed 17.5% of the Corporation's issued and outstanding Shares at any given time.

Under the Share Option Plan, options may be granted to any executive officer, employee, subsidiary of an executive officer or employee, or consultant or consultant entity ("Eligible Persons"). The exercise price of options granted under the Share Option Plan is established by the Board and will be equal to the closing market price of the Shares on the TSX on the last trading day preceding the date of grant. If there is no trading on that date, the exercise price will be the average of the bid and ask on the TSX on the last trading date preceding the date of grant. If not otherwise determined by the Board, an option granted under the Share Option Plan will vest as to 50% on the first anniversary of the date of grant of the

option and an additional 25% on the second and third anniversaries after the date of grant. The Board fixes the term of each option when granted, but such term may not be greater than 10 years from the date of grant. If the date on which an option expires pursuant to an option agreement occurs during, or within 10 days after the last day of, a black out period or other restriction period imposed on the trading of Shares by the Corporation, the expiry date for the option will be the last day of the 10-day period. Options are personal to the participant and a participant may not transfer an option except in accordance with the Share Option Plan.

The Share Option Plan does not limit insider participation and does not provide a maximum number of Shares which may be issued to an individual under the Share Option Plan. The Corporation did not provide financial assistance to any Eligible Person to facilitate the exercise of Options during the year ended December 31, 2017.

The Board may, in its sole discretion, amend, suspend or terminate the Share Option Plan or any portion of it at any time in accordance with applicable legislation, without obtaining the approval of Shareholders. Such amendments could include: (i) amendments of a “housekeeping” nature; (ii) a change to the vesting provisions of options granted pursuant to the Share Option Plan; and (iii) a change to the termination provisions of options granted under the Share Option Plan which does not entail an extension beyond the original expiry date.

Any amendment to any provision of the Share Option Plan is subject to any required regulatory or Shareholder approval. The Corporation is, however, required to obtain the approval of the Shareholders for any amendment related to (i) the maximum number of Shares reserved for issuance under the Share Option Plan, and under any other security based compensation arrangements of the Corporation; (ii) a reduction in the exercise price for options held by insiders of the Corporation; and (iii) an extension to the term of options held by insiders of the Corporation.

If an option holder is terminated without cause, resigns or retires, each option that has vested will cease to be exercisable three months after the option holder’s termination date. Any portion of an option that has not vested on or prior to the termination date will expire immediately. If an option holder is terminated for cause, each option that has vested will cease to be exercisable immediately upon the Corporation’s notice of termination. Any portion of an option that has not vested on or prior to the termination date will expire immediately.

### **Stock Incentive Plan**

The SIP was adopted by the Board on May 5, 2015 and approved by the Shareholders on June 10, 2015. Pursuant to the SIP, the Board may grant Awards to employees, officers, consultants, independent contractors, advisors and non-employee directors of the Corporation or any affiliate (the “SIP Participants”).

The maximum total number of shares available for issuance under the SIP and any other security based compensation arrangement of the Corporation (including the Share Option Plan) is 17.5% of the number of issued and outstanding Shares. Any issuance of Shares covered by an Award or to which an Award relates will make new grants available under the SIP. Since the adoption of the SIP, no Awards have been granted.

Under the SIP, Restricted Stock Units are subject to such restrictions as the Board may impose (including, without limitation, any limitation on the right to receive any dividend or other right or

property with respect thereto), which restrictions may lapse separately or in combination at such time or times, in such installments or otherwise as the Board may deem appropriate; provided, however, that the Restricted Stock Units may not vest until at least three (3) months after the date of grant.

Under the SIP, the Board may also grant Dividend Equivalents to SIP Participants under which the Participant shall be entitled to receive payments (in cash, Shares, other securities, other Awards or other property as determined in the discretion of a committee or subcommittee of the Board appointed from time to time by the Board to administer the SIP) equivalent to the amount of cash dividends paid by the Corporation to holders of Shares with respect to a number of shares determined by the Board.

The SIP does not limit insider participation and does not provide a maximum number of Shares which may be issued to an individual under the SIP. However, no director of the Corporation who is not also an employee of the Corporation or an affiliate may be granted any Awards that exceed in the aggregate \$150,000 (such value computed as of the date of grant in accordance with applicable financial accounting principles) in any calendar year.

Subject to the express provisions of the SIP and to applicable law, the Board shall have full power and authority to: (i) designate SIP Participants; (ii) determine the type of Awards to be granted to each SIP Participant under the SIP and the number of Shares to be covered by each Award; (iii) determine the terms and conditions of any Award or Award Agreement, including any terms relating to the forfeiture of any Award and the forfeiture, recapture or disgorgement of any cash, Shares or other amounts payable with respect to any Award; (iv) amend the terms and conditions of any Award or Award Agreement, subject to the limitations under Section 7 of the SIP; and (v) accelerate the exercisability of any Award or the lapse of any restrictions relating to any Award, subject to the limitations in Section 7 of the SIP.

Except as otherwise determined under the SIP, no Award and no right under such Award shall be transferable by a SIP Participant other than by will or by the laws of descent and distribution, and no Award or right under any such Award may be pledged, alienated, attached or otherwise encumbered.

The Board may from time to time amend, suspend or terminate the SIP, and the Board may amend or alter any previously granted Award, as applicable, without obtaining the approval of Shareholders in order to: (i) correct any defect, supply any omission or reconcile any inconsistency in the SIP or in any Award or award agreement in the manner and to the extent it shall deem desirable to implement or maintain the effectiveness of the SIP; (ii) amend the eligibility for, and limitations or conditions imposed upon, participation in the SIP; (iii) make changes that are necessary or desirable to comply with applicable laws, rules, regulations and policies of any applicable governmental entity or stock exchange; (iv) amend any terms relating to the administration of the SIP, including the terms of any administrative guidelines or other rules related to the SIP; or (v) make any other amendment, whether fundamental or otherwise, not requiring Shareholders' approval under TSX Company Manual, the rules or regulations of the United States SEC or any other securities exchange that are applicable to the Corporation.

Prior approval of the shareholders shall be required for any amendment to the Plan or an Award that would: (i) require shareholder approval under the TSX Company Manual, the rules or regulations of the SEC or any other securities exchange that are applicable to the Corporation; (ii) increase the maximum number of shares authorized under the SIP; (iii) increase the annual limit on Awards granted to non-employee directors; or (iv) amend the amendment provision of the SIP.

Except as otherwise determined under the SIP, upon a SIP Participant's termination of

employment or resignation or removal as a Director during the applicable restriction period, all Restricted Stock Units held by such SIP Participant at such time shall be cancelled by the Corporation; provided, however, that the committee or subcommittee of the Board appointed by the Board from time to time to administer the SIP may waive in whole or in part any or all remaining restrictions with respect to Restricted Stock Units.

### Employee Share Purchase Plan

We have an Employee Share Purchase Plan (“ESPP”), the purpose of which is to assist the Corporation in retaining the services of its employees, to secure and retain the services of new employees and to provide incentives for such persons to exert maximum efforts for the success of the Corporation. The ESPP provides a means by which employees of the Corporation and its affiliates may purchase Shares on the stock market at a 15% discount through accumulated payroll deductions. Eligible participants in the ESPP include all employees, including executive officers, who work at least 20 hours per week and are customarily employed by the Corporation or an affiliate of the Corporation for at least six months per calendar year. Generally, each offering is of three months’ duration with purchases occurring every quarter. Participants may authorize payroll deductions of up to 15% of their base compensation for the purchase of Shares under the ESPP.

During the year ended December 31, 2017, under the ESPP, Named Executive Officers, as a group, and employees did not purchase any Shares pursuant to the ESPP. Since December 31, 2017, there have been no Shares purchased pursuant to the ESPP.

### SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table sets forth certain details as at the end of the year ended December 31, 2017 with respect to compensation plans pursuant to which equity securities of the Corporation are authorized for issuance.

Plan Category	Number of Shares to be issued upon exercise of outstanding options		Weighted-average exercise price of outstanding options	Number of Shares remaining available for future issuance under the equity compensation plans (Excluding Shares reflected in Column (a))		Total options outstanding and available for grant	
	(a)	(b)		(c)	(a) + (c)		
	Number	% of Shares outstanding		Number	% of Shares outstanding	Number	% of Shares outstanding
Equity compensation plans approved by Shareholders	2,342,840	8.52 %	\$3.46	2,470,019	9.98 %	4,812,859	17.5 %

## Securities issuable under equity compensation plans as a percentage of outstanding Shares

The following table provides information on the securities issuable collectively under the Stock Option Plan and SIP, expressed as a number and as a percentage of the Shares as of December 31, 2017:

Equity Compensation Plan		Maximum number of securities issuable under the plan <sup>(1)</sup>	Total number of securities awarded and outstanding under the plan	Total number of securities available for grant under the plan
Stock Option Plan and SIP	Number	4,812,859	2,342,840	2,470,019
	Percentage of outstanding Shares <sup>(2)</sup>	17.5%	8.52%	9.98%

(1) The maximum total number of shares available for issuance under all the security based compensation arrangements of the Corporation is 17.5%. Accordingly, the number of securities issuable, outstanding and available under the Share Option Plan and the SIP are represented together.

(2) As of December 31, 2017, there were 27,502,053 Shares issued and outstanding.

## Annual Burn Rate

The following table provides the annual burn rate associated with the Share Option Plan and the SIP for each of the Corporation's three most recent fiscal years:

Equity Compensation Plan	Fiscal year	Number of securities granted under the plan <sup>(2)</sup>	Weighted average number of securities outstanding <sup>(3)</sup>	Annual burn rate <sup>(1)(4)</sup>
Share Option Plan	2017	826,500	22,313,364	3.7%
	2016	381,900	12,742,614	3.00%
	2015	478,000	11,905,847	4.01%
SIP	2017	150,000	22,313,364	0.67%
	2016	Nil	Nil	Nil
	2015 <sup>(5)</sup>	Nil	Nil	Nil

(1) Based on the new TSX requirement effective October 31, 2017.

(2) Corresponds to the number of securities granted under the plan in the applicable fiscal year.

(3) The weighted average number of securities outstanding during the period corresponds to the number of securities outstanding at the beginning of the period, adjusted by the number of securities bought back or issued during the period multiplied by a time-weighting factor.

(4) The annual burn rate percent corresponds to the number of securities granted under the plan divided by the weighted average number of securities outstanding.

(5) The SIP was adopted by the Board on May 5, 2015 and approved by the Shareholders on June 10, 2015.

## **INTEREST OF CERTAIN PERSONS IN MATTERS TO BE ACTED UPON**

None of the directors or executive officers of the Corporation, none of the persons who have been directors or executive officers of the Corporation at any time since January 1, 2017, none of the proposed nominees for election as a director of the Corporation and none of the associates or affiliates of any of the foregoing has any material interest, direct or indirect, by way of beneficial ownership of securities or otherwise, in any matter scheduled to be acted upon at the Meeting other than the election of directors.

## **INTEREST OF INFORMED PERSONS IN MATERIAL TRANSACTIONS**

Since the commencement of the Corporation's most recently completed fiscal year, no director, proposed director, officer, or associate of a director, proposed director or officer nor, to the knowledge of our directors or officers, after having made reasonable inquiry, any person or company who beneficially owns, directly or indirectly, Shares carrying more than 10% of the voting rights attached to all Shares outstanding at the date hereof, or any associate or affiliate thereof, had any material interest, direct or indirect, in any material transaction of the Corporation, nor do any such persons have a material interest, direct or indirect, in any proposed transaction of the Corporation.

## **STATEMENT OF CORPORATE GOVERNANCE PRACTICES**

Corporate governance relates to the activities of the Board, the members of which are elected by and are accountable to the Shareholders, and takes into account the role of the individual members of management who are appointed by the Board and who are charged with the day-to-day management of Aptose. The Board believes that sound corporate governance practices are essential to contributing to the effective and efficient decision-making of management and the Board and to the enhancement of Shareholder value. The Board and management believe that Aptose has a sound governance structure in place for both management and the Board. Of particular note Aptose has:

- established a written mandate of the Board;
- established a written charter for the Audit Committee;
- established a written charter for the Compensation Committee;
- established a written charter for the Corporate Governance and Nominating Committee;
- established a written Disclosure and Insider Trading Policy; and
- established a written Code of Ethics.

National Instrument 58-101 — *Disclosure of Corporate Governance Practices* ("NI 58-101") and National Policy 58-201 — *Corporate Governance Guidelines* ("NP 58-201") requires issuers, including Aptose, to disclose the corporate governance practices that they have adopted. NP 58-201 provides guidance on governance practices. The Corporation is also subject to NI 52-110, which has been adopted in various Canadian provinces and territories and which prescribes certain requirements in relation to audit committees. The required disclosure under NI 58-101 is attached hereto as Appendix A.

## **2019 SHAREHOLDER PROPOSALS**

For the next annual meeting of Shareholders of Aptose, Shareholders must submit any proposal that they wish to raise at that meeting on or before January 26, 2019.

**ADDITIONAL INFORMATION**

Additional information relating to us, including our most current annual information form (together with documents incorporated therein by reference), our consolidated financial statements for the year ended December 31, 2017, the report of the auditor thereon, management's discussion and analysis of our financial condition and results of operations for the year ended December 31, 2017 can be found on the System for Electronic Document Analysis and Retrieval (SEDAR) at [www.sedar.com](http://www.sedar.com). Copies of those documents are available upon written request to the Vice President of Finance and Administration of Aptose, free of charge to our securityholders. Our financial information is provided in our consolidated financial statements for the year ended December 31, 2017 and management's discussion and analysis of our financial condition and results of operations for the year ended December 31, 2017.

**DIRECTORS' APPROVAL**

The contents and sending of this Circular have been approved by our directors.

(signed) William G. Rice, Ph.D.  
Chairman, President and Chief Executive Officer

**APPENDIX A**  
**Corporate Governance Practices**

Aptose Biosciences Inc. (the “Corporation”) is committed to sound and comprehensive corporate governance policies and practices and is of the view that its corporate governance policies and practices, outlined below, are comprehensive and consistent with NP 58-201 and NI 52-110.

**Board of Directors**

The board of directors of the Corporation (the “Board”) encourages sound and comprehensive corporate governance policies and practices designed to promote the ongoing development of the Corporation.

**Composition of the Board**

The Corporation’s Board is currently composed of seven directors, a majority of whom are independent directors. An “independent” board member, as further defined in NI 52-110, means that such member has no “material relationship” with the issuer. A “material relationship” is a relationship that could, in the view of the Board, be reasonably expected to interfere with the exercise of a member’s judgment. Each year the Board reviews the composition of the Board and assesses whether a Board member is “independent”.

<b>Director</b>	<b>Independent</b>
Denis Burger .....	Yes
Erich Platzer .....	Yes
William G. Rice .....	No
Bradley Thompson <sup>(1)</sup> .....	Yes
Mark Vincent .....	Yes
Warren Whitehead .....	Yes
Caroline Loewy .....	Yes

(1) Dr. Bradley Thompson is not standing for re-election at the Meeting.

Dr. William G. Rice, Ph.D., Chairman, President and Chief Executive Officer of the Corporation is not an independent director because of his role in the Corporation’s management team.

The following table outlines other reporting issuers that Board members are directors of:

<b>Director</b>	<b>Reporting Issuer</b>
William G. Rice .....	Oncolytics Biotech Inc.
Denis Burger .....	Trinity Biotech plc CytoDyn Inc.
Erich Platzer .....	Probiodrug AG
Bradley Thompson <sup>(1)</sup> .....	Oncolytics Biotech Inc.
Mark Vincent .....	—
Warren Whitehead.....	—

<b>Director</b>	<b>Reporting Issuer</b>
Caroline Loewy .....	CymaBay Therapeutics Inc.
(1) Dr. Bradley Thompson is not standing for re-election at the Meeting.	

As they deem appropriate, the independent directors meet without the presence of non-independent directors and members of management. During the year ended December 31, 2017, independent directors met 5 times without the presence of management non-independent directors.

In 2014, further to the appointment of Dr. William G. Rice, Ph.D. as Chairman of the Board and Chief Executive Officer, the Corporation created the position of Lead Director to ensure that the directors have an independent leadership contact and maintain and enhance the quality of the Corporation's corporate governance practices. Dr. Denis Burger, an independent director, is currently the Lead Director. The Lead Director provides leadership to the Board in discharging its mandate and also assists the Board in discharging its stewardship function, which includes (i) satisfying itself as to the integrity of the Chief Executive Officer and the other senior officers of the Corporation and that the Chief Executive Officer and other senior officers create a culture of integrity throughout the organization; (ii) strategic planning; (iii) identifying and managing risks; (iv) succession planning; (v) adopting a disclosure policy; (vi) internal control and management information systems; and (vii) the Corporation's approach to corporate governance. In addition, the Lead Director provides advice, counsel and mentorship to the Chief Executive Officer.

The following table illustrates the attendance record of each director for all Board meetings held for the year ended December 31, 2017.

<b>Director</b>	<b>Meetings Attended</b>
Denis Burger .....	8 of 8
Erich Platzer .....	8 of 8
William G. Rice .....	8 of 8
Bradley Thompson .....	8 of 8
Mark Vincent .....	8 of 8
Warren Whitehead .....	8 of 8

### **Board Mandate**

The Board has adopted a mandate in which it explicitly assumes responsibility for stewardship of the Corporation. The Board is mandated to represent the Shareholders to ensure appropriate succession planning is in place, select the appropriate chief executive officer, assess and approve the strategic direction of the Corporation, ensure that appropriate processes for risk assessment, management and internal control are in place, monitor management performance against agreed benchmarks, and assure the integrity of financial reports. A copy of the Board Mandate is attached hereto as Appendix B.

### **Position Descriptions**

The Board has developed written position descriptions, which are reviewed annually, for the Chair and the chairs of each of the audit committee, the compensation committee and the corporate governance and nominating committee. The Chief Executive Officer also has a written position description that has been approved by the Board and is reviewed annually.

## **Orientation and Continuing Education**

It is the mandate of the Corporate Governance and Nominating Committee to ensure that a process is established for the orientation and education of new directors that addresses the nature and operation of the Corporation's business and their responsibilities and duties as directors (including the contribution individual directors are expected to make and the commitment of time and resources that the Corporation expects from its directors).

The orientation includes an overview of the Corporation's history and operations, a review of industry conditions and competition, an introduction to the Corporation's management team and corporate and business information. Any further orientation is dependent on the needs of the new member and may include items such as formal training sessions and attendance at seminars.

With respect to the continuing education of directors, the Corporate Governance and Nominating Committee ensures that directors receive adequate information and continuing education opportunities on an ongoing basis to enable directors to maintain their skills and abilities as directors and to ensure their knowledge and understanding of the Corporation's business remains current.

## **Ethical Business Conduct**

The Corporation has adopted a Code of Business Conduct and Ethics (the "Code") that applies to the directors, officers and employees of the Corporation and its subsidiaries. Additionally, consultants and agents for the Corporation are expected to abide by the Code.

The Corporate Governance and Nominating Committee regularly monitors compliance with the Code through communications with management and reports through the Disclosure and Insider Trading Policy (as described below) and ensures that management of the Corporation encourages and promotes a culture of ethical business conduct. A copy of the Code may be found at [www.SEDAR.com](http://www.SEDAR.com) under the Corporation's public profile and on our website at [www.aptose.com](http://www.aptose.com).

The Corporation has developed a Disclosure and Insider Trading Policy that covers "whistle blowing" and provides an anonymous means for employees and officers to report violations of the Code or any other corporate policies.

The Board has not granted any waiver of the Code in favour of a director or officer of the Corporation. No material change reports have been filed since the beginning of the Corporation's most recently completed fiscal year that pertain to any conduct of a director or executive officer that constitutes a departure from the Code.

## **Conflicts of Interest**

The Corporate Governance and Nominating Committee monitors the disclosure of conflicts of interest by directors and ensures that no director will vote or participate in a discussion on a matter in respect of which such director has a material interest.

## **Nomination of Directors**

Directors of the Corporation are expected to bring to the Board the broadest possible knowledge and depth of experience from their chosen business or profession. Directors should evidence a demonstrated ability to deal with business, financial and social issues, both nationally and internationally. This implies a capacity to provide additional strength, diversity of views and up-to-date perceptions to the Board and its deliberations.

It is the mandate of the Corporate Governance and Nominating Committee to identify and recommend qualified candidates for the Board. In assessing whether identified candidates are suitable for the Board, the Corporate Governance and Nominating Committee considers: (i) the competencies and skills considered necessary for the Board as a whole; (ii) the competencies and skills that the existing directors possess and the competencies and skills nominees will bring to the Board; and (iii) whether nominees can devote sufficient time and resources to his or her duties as a member of the Board. Potential candidates for membership on the Board will not be denied consideration by reason of race, sex, religion or affiliation with some special constituency group, nor will any candidate be selected solely for such reason.

In addition, the Corporate Governance and Nominating Committee assesses the participation, contribution and effectiveness of the individual members of the Board on an annual basis. All members of the Corporate Governance and Nominating Committee are independent in accordance with the mandate of the Corporate Governance and Nominating Committee.

### **Compensation**

The Compensation Committee is responsible for reviewing and making recommendations to the Board regarding the corporate goals and objectives, performance and compensation of the Chief Executive Officer and other senior executive officers on an annual basis and evaluates the performance of the Chief Executive Officer and other senior executive officers. In addition, the Compensation Committee is responsible for making recommendations to the Board with respect to the compensation policies for the non-employee directors.

The Compensation Committee also reviews and makes recommendations regarding annual bonus policies for employees, the incentive-compensation plans and equity-based plans for the Corporation and reviews executive compensation disclosure before the Corporation publicly discloses this information.

Further information pertaining the compensation of directors and officers can be found in this Circular under the heading “Statement of Executive Compensation”.

### **Other Committees**

The Board does not currently have any other committees.

### **Assessments**

It is the Board’s mandate, in conjunction with the Corporate Governance and Nominating Committee, to assess the participation, contributions and effectiveness of the Chair and the individual members of the Board on an annual basis. The Board also monitors the effectiveness of the Board and its committees and the actions of the Board as viewed by the individual directors and senior management.

The Board has developed a formal questionnaire to be completed by each director on an annual basis for the purpose of formally assessing the effectiveness of the Board as a whole, committees of the Board, and the contribution of individual directors. These questionnaires, and the issues arising therefrom, are intended to be reviewed and assessed by the Lead Director on an annual basis or more frequently from time to time as the need arises. The Lead Director takes appropriate action as required based on the results obtained.

### **Director Term Limits and Other Mechanisms of Board Renewal**

The Board has not adopted term limits for directors or other mechanisms of board renewal at this time as it believes that the imposition of director term limits or other mechanisms of board renewal on a board

implicitly discounts the value of experience and continuity amongst the board members and runs the risk of excluding experienced and potentially valuable board members as a result of arbitrary determination. The Board believes that it can best strike a balance between continuity and fresh perspectives without mandated term limits or other mechanisms of board renewal.

### **Diversity**

The Corporate Governance and Nominating Committee takes diversity, including diversity of experience, perspective, education, race and gender, into consideration as part of its overall recruitment and selection process in respect of its Board and management. The Corporation does not have a formal policy on the representation of women on the Board or management of the Corporation. The Board does not believe that a formal policy will necessarily result in the identification or selection of the best candidates. As such, the Corporation does not see any meaningful value in adopting a formal policy in this respect at this time as it does not believe that it would further enhance gender diversity beyond the current recruitment and selection process carried out by the Corporate Governance and Nominating Committee. However, the Board is mindful of the benefit of diversity on the Board and management of the Corporation and the need to maximize the effectiveness of the Board and management and their respective decision-making abilities.

The Corporate Governance and Nominating Committee believes that having a diverse Board and management team offers a depth of perspective and enhances Board and management operations. The Corporate Governance and Nominating Committee does not specifically define diversity, but values diversity of experience, perspective, education, race and gender as part of its overall annual evaluation of director nominees for election or re-election as well as candidates for management positions. Recommendations concerning director nominees are, foremost, based on merit and performance, but diversity is taken into consideration, as it is beneficial that a diversity of backgrounds, views and experiences be present at the Board and management levels.

In addition, in searches for new directors or officers, the Corporate Governance and Nominating Committee will consider the level of female representation and diversity on the Board and in management and this will be one of several factors used in its search process. This will be achieved through continuously monitoring the level of female representation on the Board and in management positions and, where appropriate, recruiting qualified female candidates as part of the Corporation's overall recruitment and selection process to fill Board or management positions, as the need arises, through vacancies, growth or otherwise. Due to the size of the Corporation, its activities, and its small number of employees, the Corporation has not set measurable objectives for achieving gender diversity. The Corporation will consider establishing measureable objectives as it develops.

The Board has not adopted targets regarding the representation of women on the Board and in executive officer positions due to the small size of the Corporation and the need to consider a balance of criteria in each individual appointment. It is important that each appointment to the Board or in executive officer positions be made, and be perceived as being made, on the merits of the individual and the needs of the Corporation at the relevant time. In addition, targets based on specific criteria such as gender could limit the Board's ability to ensure that the overall composition of the Board or management of the Corporation meets the needs of the Corporation. Currently none (0%) of the executive officers of the Corporation are women and one (17%) of the directors is a woman.

**APPENDIX B**  
**APTOSE BIOSCIENCES INC.**  
**BOARD MANDATE**

**Purpose**

The board of directors (the “Board”) of Aptose Biosciences Inc. (the “Corporation”) is responsible for the proper stewardship of the Corporation. The Board is mandated to represent the shareholders to select the appropriate Chief Executive Officer (“CEO”), assess and approve the strategic direction of the Corporation, ensure that appropriate processes for risk assessment, management and internal control are in place, monitor management performance against agreed bench marks, and assure the integrity of financial reports.

**Membership and Reporting**

1. A majority of the directors of the Board will be “independent” as defined by National Instrument 58-101 — *Disclosure of Corporate Governance Practices* (“NI 58-101”), U.S. securities laws and applicable stock exchange rules. The Board will have no more than the maximum set out in the Corporation’s articles and by-laws, which maximum number the Board will reassess from time to time having consideration for the particular needs of the Corporation.
2. Appointments to the Board will be reviewed on an annual basis. The Corporate Governance and Nominating Committee, in consultation with the CEO, is responsible for identifying and recommending new nominees with appropriate skills to the Board.
4. The Board will report to the shareholders of the Corporation.

**Terms of Reference**

Meetings

1. The Board will meet as required, but at least once quarterly.
2. The independent directors will meet as required, without the non-independent directors and members of management, but at least once quarterly.

Meeting Preparation and Attendance

3. In connection with each meeting of the Board and each meeting of a committee of the Board of which a director is a member, each director will:
  - (a) review thoroughly the materials provided to the directors in connection with the meeting and be adequately prepared for the meeting; and
  - (b) attend each meeting in person, by phone or by video-conference depending on the format of the meeting, to the extent practicable.

Corporate Planning and Performance

4. The Board will:

- (a) adopt a strategic planning process and approve a strategic plan each year; and
- (b) approve and monitor the operational plans and budgets of the Corporation submitted by management at the beginning of each fiscal year.

In establishing corporate performance objectives, the Board will:

- (a) ensure that it has adequate opportunity and information available to it to gain knowledge of the business and the industry sufficient to make fully informed decisions and to adopt meaningful and realistic long-term and short-term strategic objectives for the Corporation. This may include the opportunity for the Board to meet from time to time with industry, medical and scientific experts in related fields of interest;
- (b) ensure that effective policies and processes are in place relating to the proper conduct of the business, the effective management of risk and the values to be adopted by the Corporation; and
- (c) ensure that appropriate and effective environmental and occupational health and safety policies are in place, are operational and are supported by adequate resources.

5. The Board will:

- (a) ensure the integrity of the Corporation's financial reporting and internal control and disclosure policies and processes;
- (b) review the Corporation's quarterly and year-end audited financial statements;
- (c) review annual audit plans and findings and monitor the implementation of audit recommendations;
- (d) ensure that the Board has available to it any independent external advice that may be required from time to time; and
- (e) implement, or delegate the implementation of measures for receiving feedback from stakeholders.

Risk Management and Ethics

6. The Board will:

- (a) ensure that the business of the Corporation is conducted in compliance with applicable laws and regulations and according to the highest ethical standards;
- (b) identify and document the financial risks and other risks that the Corporation faces in the course of its business and ensure that such risks are appropriately managed; and
- (c) adopt a disclosure policy.

Shareholder Communication

7. The Board will ensure that effective communication and disclosure policies are in place between the Board and the Corporation's shareholders, other stakeholders and the public. The Board will determine, from time to time, the appropriate criteria against which to evaluate performance against shareholder expectations and will set corporate strategic goals and objectives within this context. The Board will regularly review its criteria for the evaluation of shareholder expectations to ensure that they remain relevant to changing circumstances.

Supervision of Management

8. The Board will:
  - (a) to the extent feasible, satisfy itself as to the integrity of the CEO and other executive officers and that all such officers are creating a culture of integrity throughout the Corporation;
  - (b) ensure that the CEO is appropriately managing the business of the Corporation;
  - (c) ensure appropriate succession planning is in place (including appointing, training and monitoring senior management), in particular with respect to the CEO position;
  - (d) establish corporate objectives for the CEO annually and evaluate the performance of the CEO against these corporate objectives;
  - (e) consider and approve major business initiatives and corporate transactions proposed by management; and
  - (f) ensure the Corporation has internal control and management information systems in place.

Management of Board Affairs

9. The Board will:
  - (a) ensure that an appropriate governance structure is in place, including a proper delineation of roles and clear authority and accountability among the Board, Board committees, the CEO and the Chief Financial Officer (or its functional equivalent);
  - (b) develop a process for the orientation and education of new members of the Board;
  - (c) support continuing education opportunities for all members of the Board;
  - (d) in conjunction with the Corporate Governance and Nominating Committee, assess the participation, contributions and effectiveness of the Chair of the Board, and individual Board members on an annual basis;
  - (e) monitor the effectiveness of the Board and its committees and the actions of the Board as viewed by the individual directors and senior management;

- (f) ensure that Board meetings operate effectively, agendas are focused on the governance role of the Board, and that the Board is able to function independently of management when required;
- (g) ensure that effective governance policies are in place regarding the conduct of individual directors and employees, including but not limited to, policies relating to insider trading and confidentiality and conflict of interest;
- (h) establish the committees of the Board it deems necessary or as required by applicable law to assist it in the fulfillment of its mandate; and
- (i) disclose on an annual basis the mandate, composition of the Board and its committees.