

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 14A

INFORMATION REQUIRED IN PROXY STATEMENT
SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934

Filed by the Registrant ☒

Filed by a Party other than the Registrant ☐

Check the appropriate box:

- ☐ Preliminary Proxy Statement
- ☐ **Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- ☒ Definitive Proxy Statement
- ☐ Definitive Additional Materials
- ☐ Soliciting Material Pursuant to §240.14a-12

Aptose Biosciences Inc.
(Name of Registrant as Specified in Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check all boxes that apply):

- ☒ No fee required
- ☐ Fee paid previously with preliminary materials
- ☐ Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1)



NOTICE AND PROXY STATEMENT
FOR THE
ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS
TO BE HELD ON JUNE 18, 2024

May 14, 2024

Letter from Our Chairman, President, and CEO

Dear Fellow Shareholders,

During 2023, Aptose advanced the company's lead precision therapeutic tuspetinib (TUS) toward the goal of developing a tuspetinib-containing triple drug ("triplet") combination therapy as a new standard of care for frontline therapy of patients with newly diagnosed acute myeloid leukemia (AML). In addition, despite challenges in the markets, we achieved key development timelines and executed on multiple fronts during 2023.

AML is a highly aggressive cancer of the bone marrow and blood, and there is a tremendous unmet need for a therapy that can extend survival of newly diagnosed AML patients and improve their quality of life. Newly diagnosed AML patients typically fail frontline (1L) therapies, and responses to subsequent salvage therapies in the relapsed or refractory (R/R) setting are decidedly limited. This highlights the need for a more effective triplet combination to increase survival in the frontline setting.

Current standard of care (SOC) treatment in the 1L setting for many newly diagnosed AML patients includes a doublet combination of venetoclax and a hypomethylating agent (VEN+HMA). Exploratory triplet therapies using current agents added to VEN+HMA have achieved notable response rates but are inadequate because of toxicities and the limited activity across subpopulations of AML patients. In contrast, tuspetinib is a convenient, orally administered, once daily kinase inhibitor with an excellent safety profile and broad activity across AML populations with adverse genetics. We believe these properties position tuspetinib as an ideal agent for addition to the VEN+HMA backbone therapy to create a superior triplet (TUS+VEN+HMA) frontline therapy to treat newly diagnosed AML.

While the goal for the tuspetinib program is to move into frontline therapy with newly diagnosed AML patients in a triplet combination, the regulatory path to the frontline triplet began with a clinical trial with TUS single agent in patients with relapsed or refractory (R/R) AML and then transitioned through a trial with the TUS+VEN doublet therapy in R/R AML patients. This was essential so that we and regulatory bodies could understand the safety, tolerability, convenience, response activities, and contribution of component that tuspetinib can deliver to a triplet combination therapy.

- During 2023, our clinical team successfully completed the Phase 1/2 dose escalation and dose exploration trial of tuspetinib as a single agent in R/R AML patients. Tuspetinib achieved durable, objective clinical responses in patients with a diversity of adverse genetics at four active dose levels, all of which were well tolerated with no dose-limiting toxicities. Tuspetinib demonstrated an excellent safety profile, with no instances of drug-related QTc prolongation, differentiation syndrome or muscle damage in any patient. Plus, continuous dosing of tuspetinib was possible when patients achieved remission because tuspetinib did not cause myelosuppression in those patients, which distinguishes our drug from many others in development.
- In our scientific presentations during 2023 we described how tuspetinib targets resistance mechanisms used by AML cells to become resistant to the BCL-2 inhibitor venetoclax and how tuspetinib can combine synergistically with venetoclax in animal models. In addition, we demonstrated that tuspetinib-resistant AML cells are hypersensitive (2000-fold) to venetoclax. This mechanistic complementarity provided a rationale for us to combine tuspetinib with venetoclax to evaluate the TUS+VEN doublet in the R/R AML population.
- We initiated the Phase 1/2 APTIVATE trial with the TUS+VEN doublet therapy during 2023, and then subsequently completed it ahead of schedule in early 2024, and we demonstrated TUS+VEN maintained a highly favorable safety profile and broad activity in R/R AML patients with adverse genetics and who had failed prior therapies.
- Additional studies were performed during 2023 to advance tuspetinib, including a food effect study in healthy human volunteers and a 13-week chronic safety-toxicology study in animal species. Such ancillary studies are required by regulatory agencies to advance an agent toward commercialization, and tuspetinib performed admirably in both studies.

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We heard from a number of key opinion leaders (KOLs) in AML that they had great enthusiasm for the safety and activity of tuspentinib. These KOLs voiced their belief that tuspentinib can have its greatest AML patient impact as a frontline triplet therapy by improving the response rates, the depth of responses, the durability of responses, the quality of life, and the long-term survival across a diversity of AML patients, relative to the current standard of care (VEN+HMA) in frontline AML patients who are ineligible for intensive chemotherapy. Indeed, we heard this same message consistently from major pharma companies. Such pharma companies are interested primarily in the TUS+VEN+HMA triplet for frontline AML patients because of the estimated \$1Bn annual commercial impact for tuspentinib in the frontline AML setting, and they are eager to see our preliminary triplet pilot data anticipated later this year. These KOLs, potential partners, and our internal team all agree that the primary focus for tuspentinib should be on the TUS+VEN+HMA triplet in frontline AML. The safety, convenience, and broad activity of tuspentinib as a single agent and in combination with venetoclax distinguish tuspentinib from competitor agents and position the tuspentinib-containing TUS+VEN+HMA triplet regimen to potentially become a new standard of care for frontline treatment of newly diagnosed AML.

For these reasons, we are focusing our resources on the TUS+VEN+HMA triplet, which has the potential to deliver the greatest patient impact, the greatest commercial impact, and the greatest return to our investors. Therefore, our next step to build value as quickly as possible will be to initiate the TUS+VEN+HMA triplet pilot study in frontline newly diagnosed AML patients and to select the optimal triplet dosage of tuspentinib, which will be driven by CR/CRh rates, MRD negativity, and safety data. In collaboration with a partner, after selecting appropriate Phase 2 doses of the triplet, we plan to transition into registrational studies that compare the safety and efficacy of the TUS+VEN+HMA triplet to the VEN-HMA control for frontline newly diagnosed AML patients.

Let me now leave you with a quick summary of why we believe tuspentinib may be the best agent to combine with SOC (VEN+HMA) and why the TUS+VEN+HMA triplet can become a new standard of care for frontline therapy of newly diagnosed AML patients.

- TUS combines synergistically with venetoclax (VEN)
- TUS safety profile indicates no observed overlapping toxicity with SOC
- Current data provide evidence for increased efficacy and safety when added to SOC
- TUS has broad antileukemic activity across AML populations (TP53^{MUT}, FLT3^{MUT/WT}, NKRAS^{MUT})
- TUS has extended patent coverage beyond competitors and has the potential for premium pricing
- TUS has \$1Bn+ market potential in the frontline AML setting
- TUS+VEN+HMA may fill the sizeable gaps left by competitors and combine further with future agents

And now a quick update on our second asset luxetpinib (LUX or CG-806). LUX is active in AML patients and in B-cell cancer patients but was not consistently achieving the desired exposure levels to drive responses. Because absorption of the original G1 formulation hampered the effectiveness of luxetpinib, a new generation (or G3) formulation was developed. We now report clinical evaluation of the G3 formulation has been completed. G3 formulation was tested in a single dose bioavailability study across five dose levels and then with continuous dosing using two different dose levels. The G3 formulation achieved our desired plasma exposure benchmark, with approximately 10-fold better absorption, and better tolerability than the original formulation. We are seeking alternative development paths and collaborations for LUX.

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Importantly, during 2023, we continued disciplined financial management of our operations. We reduced spending on numerous fronts and prioritized investments in the tuspetinib clinical program. We financed corporate activities with cash gleaned from our At-the-Market (or ATM) Facility and Committed Equity Facility, and we entered into an agreement with our strategic partner Hanmi Pharmaceutical to raise \$7.3M of additional capital.

Subsequent to the end of 2023, in January of 2024 we closed financings with gross proceeds of \$13.7 million, inclusive of a \$9.7 million public offering and a separate \$4 million private placement with Hanmi Pharmaceutical. The total number of Common Shares outstanding after the closing of the Public Offering, including the Over-Allotment Option, and the Private Placement was 15.7 million.

In summary, I'm happy to report on the significant progress we made in 2023 and we look forward to important milestones in 2024, especially as we prepare to initiate the triplet pilot study of tuspetinib. We are especially grateful for the patients, families and investigators who are participating in advancing our essential work and support our efforts to create superior therapeutics. I thank our entire Aptose organization and thank you, my fellow shareholders, for your support and for being part of our journey. We are eager to report our progress to you throughout the coming year.

Sincerely,

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

Aptose Biosciences Inc.
Notice of 2024 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 on June 18, 2024 at 8:00 a.m. (Eastern time). The Meeting will be conducted as an online only meeting. There will be no physical location for shareholders and duly appointed proxyholders to attend. Shareholders and duly appointed proxyholders are invited to attend by live webcast accessible directly online at web.lumiagm.com/413029776, where they will be able to listen, vote, and submit questions during the Meeting.

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, 2023, including the auditor’s report thereon;
2. Proposal No. 1 – electing seven directors to serve until the 2025 Annual Meeting of Shareholders;
3. Proposal No. 2 – appointing KPMG LLP as the independent registered public accounting firm of the Corporation for the fiscal year ending December 31, 2024;
4. Proposal No. 3 – passing an advisory (non-binding) resolution on the compensation of the Corporation’s named executive officers, as more particularly described in the accompanying proxy statement (the “Proxy Statement”);
5. Proposal No. 4 – approving the potential issuance of common shares of the Corporation (the “Shares”) to the holders of certain warrants in excess of 19.99% of our outstanding Shares pursuant to the Nasdaq Listing Rules;
6. Proposal No. 5 – passing a resolution, the full text of which is set forth in the Proxy Statement, approving one or more adjournments of the Meeting, if necessary or appropriate, if a quorum is present, to permit further solicitation of proxies if there are not sufficient votes at the time of the Meeting to approve Proposal No. 4; and
7. transacting such other business as may be properly brought before the Meeting.

The shareholders may also consider other business that properly comes before the Meeting or any adjournment of the Meeting. The Proxy Statement 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 Shares at the close of business on May 10, 2024.

You have the right to vote your Shares on items 2 through 5 listed above and any other items that may properly come before the Meeting or any adjournment.

The Notice of Meeting, Proxy Statement and the form of proxy will be mailed to you on or around May 28, 2024. Detailed instructions regarding shareholders’ voting process are also available on our website at <https://www.apdose.com/investors/news-events/ir-calendar>.

Your vote is important.

If you are not able to attend 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, 8th Floor, Toronto, Canada M5J 2Y1, so as to arrive not later than 5:00 p.m. (Toronto time) on June 14, 2024 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
May 14, 2024

**IMPORTANT NOTICE REGARDING THE INTERNET AVAILABILITY OF PROXY
MATERIALS FOR THE ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS TO BE
HELD ON JUNE 18, 2024.**

Our Notice of 2024 Annual and Special Meeting of Shareholders, Proxy Statement and Annual Report to Shareholders are available on the Corporation's website at <https://www.aptose.com/investors/news-events/ir-calendar>.

Copies are also available upon written request to the Senior Vice President, Chief Financial Officer, Chief Business Officer and Corporate Secretary (i) at our principal executive and registered office located at 251 Consumers Road, Suite 1105, Toronto, Ontario, Canada, M2J 4R3; or (ii) at our executive headquarters located at Suite 120, 12770 High Bluff Drive, San Diego, California, 92130.

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GENERAL INFORMATION ABOUT THE PROXY STATEMENT

The information contained in this proxy statement (the “Proxy Statement”) is furnished in connection with the solicitation of proxies by Aptose Biosciences Inc. (the “Corporation”, “Aptose”, “we” or “our”) to be used at the annual and special meeting (the “Meeting”) of holders (the “Shareholders”) of common shares (the “Shares”) of the Corporation to be held on June 18, 2024 at 8:00 a.m. (Eastern time) and at all adjournments thereof, for the purposes set forth in the accompanying notice of meeting (the “Notice of Meeting”). The Meeting will be held online at web.lumiagm.com/413029776. There will be no physical location for shareholders and duly appointed proxyholders to attend.

The information contained in this Proxy Statement is given as at May 10, 2024 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.

In order to maintain its listing on Nasdaq, the Corporation effected a reverse stock split on a fifteen (15) to one (1) Share basis, and the Shares commenced trading on a post-reverse stock split basis at market open on Tuesday, June 6, 2023. All Share and per Share amounts have been adjusted retroactively to reflect the reverse stock split as if it had occurred at the beginning of the earliest period presented.

QUESTIONS ABOUT THE ANNUAL AND GENERAL MEETING AND VOTING YOUR SHARES

What are the date, time and place of the Meeting?

The Meeting will be held on June 18, 2024 at 8:00 a.m. (Eastern time). The Meeting will be held online at web.lumiagm.com/413029776. There will be no physical location for shareholders and duly registered proxyholders to attend. The online Meeting will be accessible 15 minutes before the start time.

How can I access the Meeting virtually?

To participate in the Meeting virtually, visit web.lumiagm.com/413029776. Registered Shareholders and duly appointed and registered proxyholders will be able to listen, vote and ask questions via the virtual meeting platform. It is to be noted, however, that questions cannot be submitted prior to the Meeting. Non-registered Shareholders who have not appointed themselves as proxyholders will only be able to attend the online Meeting as “Guests” and will not be able to vote or ask questions at the Meeting. To access the Meeting virtually, registered Shareholders and duly appointed proxyholders will need an Internet connection and an Internet-connected device (such as a desktop, laptop, tablet or cell phone) running the most updated version of applicable software and plugins. The virtual meeting platform is fully supported across browsers (Microsoft Edge, Chrome, Firefox and Safari). Participants in the online Meeting must be connected to Internet at all times during the Meeting in order to vote when balloting commences. A summary of the information Shareholders will need to attend the Meeting virtually is provided below:

1. Registered Shareholders and duly appointed proxyholders can participate in the Meeting virtually by clicking “**I have a login**” and entering a Username and Password before the start of the Meeting.
 - a. Registered Shareholders – The 15-digit control number located on the form of proxy or in the email notification you received is the Username and the Password is “aptose2024”.

- b. Duly appointed proxyholders – Following the registration of the proxyholder with Computershare Investor Services Inc. (“Computershare”), Computershare will provide the proxyholder with a Username after the voting deadline has passed. The Password to the online Meeting is “aptose2024”.
2. Voting at the Meeting will only be available for registered Shareholders and duly appointed and registered proxyholders. Non-registered Shareholders who have not appointed themselves may attend the Meeting virtually by clicking “**I am a guest**” and completing the online form. This will allow them to listen to the online Meeting; however, they will not be able to vote or submit questions.
3. Registered Shareholders who use a 15-digit control number to login to the online Meeting and who accept the terms and conditions will be revoking any and all previously submitted proxies. However, in such a case, registered Shareholders will be provided the opportunity to vote by ballot on the matters put forth at the Meeting. If registered Shareholders do not wish to revoke all previously submitted proxies, they should not accept the terms and conditions, in which case they can only enter the online Meeting as a guest.

If you attend the Meeting virtually, it is important that you remain connected to the internet at all times during the online Meeting in order to vote when balloting commences. It is your responsibility to ensure connectivity for the duration of the Meeting. You will be able to access the online Meeting 15 minutes before the start time and should allow ample time for online check-in, which will begin at 7:45 a.m. (Eastern time) on June 18, 2024.

Why is the Meeting held virtually?

By conducting our Meeting online, the Board aims to provide Shareholders a convenient opportunity to participate in the Meeting without incurring significant travel costs or being restricted by time constraints.

The format of the Meeting has been designed to ensure that Shareholders who attend the Meeting online will be afforded the same rights and opportunities to participate as they have in previous annual shareholders’ meetings. Directors will also attend the Meeting via the virtual platform.

Can I submit questions prior or at the Meeting?

Registered Shareholders and duly appointed and registered proxyholders can ask questions during the online Meeting via the virtual meeting platform. It is to be noted, however, that questions cannot be submitted prior to the Meeting. Questions pertinent to the Meeting matters will be answered at a designated time during the Meeting, subject to time constraints. The chair of the Meeting reserves the right to edit or reject questions it deems irrelevant to meeting matters, profane or inappropriate.

The chair of the Meeting has broad authority to conduct the Meeting in an orderly manner. To ensure the Meeting is conducted in a manner that is fair to all Shareholders, the chair of the Meeting may exercise its discretion in recognizing Shareholders who wish to participate, in determining the order in which questions are answered, and the amount of time devoted to each question. However, consistent with prior annual shareholders’ meetings, questions submitted in accordance with the rules of conduct generally will be addressed in the order received during the allotted time for questions.

Who can vote at the Meeting?

Only Shareholders as of the close of business on the record date, being May 10, 2024, are entitled to receive notice of and vote on matters to be presented at the Meeting, or any adjournment or postponement thereof, in the manner and subject to the procedures described in this Proxy Statement and the accompanying form of proxy.

At the close of business on the record date, 16,309,393 Shares were issued and outstanding.

Each Shareholder is entitled to one vote per Share held on all matters to come before the Meeting. Shares of Aptose are the only securities of Aptose which will have voting rights at the Meeting.

What is the quorum for the Meeting?

The presence at the opening of the Meeting of two persons who are entitled to vote either as Shareholders or as proxyholders and holding or representing not less than 33⅓% of the outstanding Shares entitled to vote at the Meeting as of the record date will constitute a quorum for the transaction of business at the Meeting. In general, Shares represented by a properly signed and returned form of proxy, or properly voted by Internet or telephone, or voted by your broker will be counted as Shares present and entitled to vote at the Meeting for purposes of determining a quorum. Shares represented by proxies marked “Abstain” and “broker non-votes” are also counted in determining whether a quorum is present.

What does it mean to vote by proxy?

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

The management representatives named on the form of proxy 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 form of proxy. 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, must receive your completed form of proxy by 5:00 p.m. (Eastern time) on June 14, 2024 or, if the Meeting is adjourned, 48 hours (excluding Saturdays, Sundays and holidays) before any adjournment of the Meeting.

What’s the difference between registered and non-registered (beneficial) Shareholders?

The voting process is different depending on whether you are a registered or non-registered (beneficial) Shareholder:

Registered Shareholders

You are a registered Shareholder if your name appears on your Share certificate or in the registers of the Corporation maintained by Computershare. Your form of proxy tells you whether you are a registered Shareholder. We mail copies of the Notice of Meeting, this Proxy Statement and the form of proxy (collectively, the “proxy materials”) directly to registered Shareholders. We have previously mailed our annual report to all registered Shareholders.

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 (as 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 and SEC rules, we have distributed copies of the proxy materials and the annual report 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 proxy materials and the annual report directly.

The intermediaries are required to forward proxy materials and the annual report 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 proxy materials to non-registered or beneficial Shareholders.

How do I vote?

Most non-registered or beneficial Shareholders who have not waived the right to receive proxy materials will receive a voting instruction form (“VIF”). Registered Shareholders will, and some non-registered (beneficial) Shareholders may receive a form of proxy. Shareholders should follow the additional procedures set out below, depending on what type of form they receive. Detailed instructions regarding Shareholders’ voting process are also available on the Investors page of our website at <https://www.aptose.com/investors/news-events/ir-calendar>.

1. Voting Instruction Form. If the non-registered Shareholder does not wish to attend and vote at the Meeting (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, so that the intermediary may vote on the non-registered Shareholder’s behalf.

If a non-registered Shareholder wishes to attend and vote at the Meeting (or have another person attend and vote on the non-registered Shareholder’s behalf), the non-registered Shareholder must complete, sign and return the VIF in accordance with the directions provided. If the non-registered Shareholder wishes to attend and vote at the Meeting, they must appoint themselves as proxyholder. Otherwise, the non-registered Shareholder will only be able to attend the Meeting as a “Guest”, and will not be able to vote or ask questions at the Meeting. Non-registered Shareholders should visit our website at <https://www.aptose.com/investors/news-events/ir-calendar> to obtain additional instructions on how to vote online during the Meeting.

Non-registered Shareholders who wish to appoint themselves as a proxy holder in order to attend the Meeting virtually or who wish to appoint a proxyholder other than a management representative to represent them at the online Meeting must submit their VIF prior to registering themselves or their proxyholder, as applicable. Registering themselves or the proxyholder, as applicable, is an additional step once a non-registered Shareholder has submitted their VIF. Failure to register themselves or another person other than a management representative as duly appointed proxyholder will result in the non-registered Shareholder or the proxyholder not receiving a Username to participate in the Meeting. To register a proxyholder (be it themselves or another person other than a management representative), non-registered Shareholders must visit <https://www.computershare.com/aptose> by 5:00 p.m. (Eastern time) on June 14, 2024 or, if the Meeting is adjourned, 48 hours (excluding Saturdays, Sundays and holidays) before any adjournment of the Meeting, and provide Computershare with their information or their proxyholder’s contact information, as applicable, so that Computershare may provide them or the proxyholder, as applicable, with a Username via email. Without a Username, non-registered Shareholders who appointed themselves as proxyholders and proxyholders will only be able to attend the Meeting as “Guests” and will not be able to vote or ask questions at the Meeting.

Or

2. Form of Proxy. A registered Shareholder will receive a form of proxy to be completed, signed and returned in accordance with the directions on the form, if the registered Shareholder does not wish to attend and vote at the Meeting virtually (or have another person attend and vote on the registered Shareholder's behalf).

Registered Shareholders who wish to appoint a proxyholder other than a management representative to represent them at the online Meeting must submit their form of proxy prior to registering their proxyholder. Registering the proxyholder is an additional step once a registered Shareholder has submitted their proxy. Failure to register a duly appointed proxyholder will result in the proxyholder not receiving a Username to participate in the Meeting. To register a proxyholder, registered Shareholders must visit <https://www.computershare.com/aptose> by 5:00 p.m. (Eastern time) on June 14, 2024 or, if the Meeting is adjourned, 48 hours (excluding Saturdays, Sundays and holidays) before any adjournment of the Meeting, and provide Computershare with their proxyholder's contact information, so that Computershare may provide the proxyholder with a Username via email. Without a Username, proxyholders will only be able to attend the Meeting as "Guests" and will not be able to vote or ask questions at the Meeting.

Registered Shareholders may also attend and vote at the Meeting. Registered Shareholders wishing to attend the Meeting virtually should visit our website at <https://www.aptose.com/investors/news-events/ir-calendar> to obtain additional instructions on how to vote online during the Meeting. The 15-digit control number provided on the registered Shareholder's form of proxy will be required.

Less frequently, a non-registered Shareholder will receive, as part of the proxy 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 (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, 8th Floor, Toronto, Canada, M5J 2Y1 as described above.

If a non-registered Shareholder wishes to attend and vote at the Meeting (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 if they intend to participate in the Meeting virtually, insert the non-registered Shareholder's (or such other person's) name in the blank space provided. The non-registered Shareholder must then register themselves or the other person, as applicable, as proxyholder. Registering themselves or the other person, as applicable, is an additional step once a non-registered Shareholder has submitted their completed form of proxy. Failure to register themselves or the other person, as applicable, as duly appointed proxyholder will result in the non-registered Shareholder or the proxyholder, as applicable, not receiving a Username to participate in the online Meeting. To register a proxyholder (be it themselves or another person), non-registered Shareholders must visit <https://www.computershare.com/aptose> by 5:00 p.m. (Eastern time) on June 14, 2024 or, if the Meeting is adjourned, 48 hours (excluding Saturdays, Sundays and holidays) before any adjournment of the Meeting, and provide Computershare with their information or their proxyholder's contact information, as applicable, so that Computershare may provide them or the proxyholder, as applicable, with a Username via email. Without a Username, non-registered Shareholders who appointed themselves as proxyholders and proxyholders will only be able to attend the Meeting as "Guests" and will not be able to vote or ask questions at the Meeting.

3. United States non-registered (beneficial) Shareholders. If a non-registered Shareholder in the United States wishes to attend and vote at the online Meeting, they must first obtain a valid legal proxy from their broker, bank or other agent and then register in advance to attend the Meeting. The U.S. non-registered Shareholder should follow the instructions from their broker or bank included with these proxy materials, or contact their broker or bank to request a legal form of proxy. After first obtaining a valid legal proxy from their broker, bank or other agent, the U.S. non-registered Shareholder must then register to attend the online Meeting by submitting a copy of their legal proxy to Computershare. Requests for registration should be directed to:

Computershare
100 University Avenue
8th Floor
Toronto, Ontario
M5J 2Y1

OR

Email at: uslegalproxy@computershare.com

Requests for registration must be labelled as “Legal Proxy” and be received no later than by 5:00 p.m. (Eastern time) on June 14, 2024. U.S. non-registered Shareholders will receive a confirmation of their registration by email receipt of their registration materials by Computershare. U.S. non-registered Shareholders will then be able to attend the Meeting and vote and ask questions at web.lumiagm.com/413029776. U.S. non-registered Shareholders are required to register their appointment at www.computershare.com/appointee. If U.S. non-registered Shareholders do not follow the procedures set out above, they will only be able to attend the Meeting virtually as “Guests” and will not be able to vote or ask questions at the online Meeting.

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

How do I request a copy of proxy materials?

To request a printed copy of the proxy materials, please contact your broker, if you are a non-registered Shareholder, or if you are a registered Shareholder, contact our Senior Vice President, Chief Financial Officer, Chief Business Officer and Corporate Secretary at Aptose Biosciences Inc., Suite 120, 12770 High Bluff Drive, San Diego, California, telephone: 858-926-2730.

The proxy materials are being sent or made available to both registered and non-registered owners of Shares. The Corporation is sending proxy 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) the proxy materials.

What am I voting on at the Meeting?

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, 2023, including the auditor's report thereon;
2. Proposal No. 1 – electing seven directors to serve until the 2025 Annual Meeting of Shareholders;
3. Proposal No. 2 – appointing KPMG LLP as the independent registered public accounting firm of the Corporation for the fiscal year ending December 31, 2024;
4. Proposal No. 3 – passing an advisory (non-binding) resolution on the compensation of the Corporation's named executive officers;
5. Proposal No. 4 – approving the potential issuance of Shares to the holders of certain warrants in excess of 19.99% of our outstanding Shares pursuant to the Nasdaq Listing Rules (the "Nasdaq 20% Issuance Proposal");
6. Proposal No. 5 - Passing a resolution, the full text of which is set forth in the Proxy Statement, approving one or more adjournments of the Meeting, if necessary or appropriate, if a quorum is present, to permit further solicitation of proxies if there are not sufficient votes at the time of the Meeting to approve Proposal No. 4; and
7. transacting such other business as may be properly brought before the Meeting.

As of the date of this Proxy Statement, the Board is not aware of any such other business.

How does the Board recommend that I vote?

Our Board recommends that each Shareholder vote "**FOR**" each of Proposals No. 1 through No. 5.

What votes may I cast with regard to each proposals

You can choose to vote "For", "Against" or "Abstain", for Proposals No. 1 through No. 5. The Shares represented by the form of proxy will be voted 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 form of proxy and do not tell us how you want to vote your Shares, your Shares will be voted in accordance with Board recommendations for each proposal by the management representatives named in the form of proxy.

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 Proxy Statement, management of the Corporation knows of no such amendments, variations or other matters.

What vote is required in order to approve each proposal?

- **Proposal No. 1:** Pursuant to the *Canada Business Corporations Act* ("CBCA"), there is a statutory voting requirement for uncontested directors elections whereby Shareholders are allowed to vote "for" or "against" (as opposed to "for" and "withhold") nominees for the Board. If a nominee does not receive a majority of the votes cast for their election, the nominee will not be elected and the Board position will remain open or, if in the case of incumbent directors, such director may continue in office until the earlier of (i) the 90th day after the election, or (ii) the day on which his or her successor is appointed or elected. Abstentions and broker non-votes will not be included in the total votes cast and will not affect the results.

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- Proposal No. 2: The appointment of KPMG LLP as our independent registered public accounting firm requires a majority of the votes cast at the Meeting, and votes cast only include those votes cast “For” or “Against” the proposal.
- Proposal No. 3: The approval of the advisory (non-binding) resolution on the compensation of the Corporation’s named executive officers requires a majority of the votes cast at the Meeting, and votes cast only include those votes cast “For” or “Against” the proposal. Abstentions and broker non-votes will not be included in the total votes cast and will not affect the results.
- Proposal No. 4: The approval of the Nasdaq 20% Issuance Proposal requires a majority of the votes cast at the Meeting, excluding the voting power underlying the securities acquired by Hanmi Pharmaceuticals Co., Ltd. (“Hanmi”) in the Hanmi Investment (as defined below), is necessary to approve the Nasdaq 20% Issuance Proposal in accordance with Nasdaq Marketplace Rule 5635(e)(4). Broker non-votes will not affect whether this proposal is approved, but abstentions will have the same effect as a vote against the proposal.
- Proposal No. 5: The approval of one or more adjournments of the Meeting requires a majority of the votes cast at the Meeting, and votes cast only include those votes cast “For” or “Against” the proposal. Abstentions and broker non-votes will not be included in the total votes cast and will not affect the results.

What impact does an “Abstain” vote have?

If you select “Abstain,” your vote will have no effect on the votes cast for the purposes of approving each proposal.

What is the effect if I do not cast my vote?

If, as a registered Shareholder, you do not cast your vote at the Meeting or by proxy, no votes will be cast on your behalf on any of the proposals.

If you are a U.S. beneficial Shareholder with an intermediary, you must instruct your U.S. intermediary how to vote your shares. If, as a U.S. non-registered or beneficial Shareholder, you do not instruct your intermediary on how to vote on any of the proposals at the Meeting, we believe that the intermediary has discretionary authority to vote your shares on Proposal No. 2, but the intermediary does not have discretionary authority to vote your shares on Proposal No. 1, No. 3, No. 4 and No. 5 or any unusual item, so a “broker non-vote” will be recorded with respect to such item. Broker non-votes will be treated as not entitled to vote on any such matter and will not be counted as having been voted in respect of any such matter. Shares represented by such broker “non-votes” will, however, be counted in determining whether there is a quorum for the Meeting.

How do I change my vote?

A registered Shareholder who has given a proxy may revoke that proxy and change a vote 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 at our registered office located at 251 Consumers Road, Suite 1105, Toronto, Ontario, Canada, M2J 4R3 at any time before 5:00 p.m. (Eastern time) on June 14, 2024, or on the last business day before any adjournment of the Meeting at which the proxy is to be used;
- (c) using your 15-digit control number and voting online at the Meeting; or
- (d) 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 proxy 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 on a waiver of the right to receive materials and to vote that is not received by such intermediary or the Corporation, at least seven days prior to the Meeting.

What does it mean if I receive more than one set of proxy materials?

This means that you own Shares that are registered under different accounts. For example, you may own some Shares directly as a registered Shareholder and other Shares as a non-registered beneficial Shareholder through an intermediary, or you may own Shares through more than one such organization. In these situations, you will receive multiple sets of proxy materials. It is necessary for you to complete and return all forms of proxy and VIFs in order to vote all of the Shares you own. Please make sure you return each form of proxy or VIF in the accompanying return envelope. You may also vote by Internet, telephone, facsimile or email, as applicable, by following the instructions on your proxy materials.

Who is soliciting the proxies, how will proxies be solicited and who will pay the cost of the proxy solicitation?

Aptose is soliciting proxies to be used at the Meeting. The solicitation of proxies will be primarily by mail, but Aptose's directors, officers and regular employees may also solicit proxies personally or by telephone. Aptose will bear all costs of the solicitation, including the printing, handling and mailing of the Meeting materials. Aptose has arranged for intermediaries to forward the Meeting materials to non-registered or beneficial Shareholders of record, and Aptose may reimburse the intermediaries for their reasonable fees and disbursements in that regard.

In addition, we have engaged Morrow Sodali LLC to help us solicit proxies from Shareholders for a fee of \$12,500, plus customary solicitation charges, as well as reimbursement of out-of-pocket expenses.

How can I make a Shareholder proposal for the 2025 Annual General Meeting of Shareholders?

For a proposal to be valid, it must comply with the requirements if the CBCA, as well as those of the *Securities Exchange Act of 1934* (United States) (the "Exchange Act").

In order for a Shareholder proposal to be eligible for inclusion in the Proxy Statement under the Exchange Act, the Shareholder must submit the proposal in accordance with Rule 14a-8, by no later than January 1, 2025, and the Shareholder must follow the procedures of Rule 14a-8 including having continuously held at least US\$2,000 in market value of the Shares entitled to be voted on the proposal at the Meeting, for at least three years; at least US\$15,000 in market value of the Shares entitled to vote on the proposal for at least two years; at least US\$25,000 in market value of the Shares entitled to vote on the proposal for at least one year by the date the Shareholder submits the proposal. The Shareholder must continue to hold those Shares through the date of the Meeting. A shareholder proposal submitted pursuant to the rules of the SEC under the Exchange Act must be received at our principal executive office at 251 Consumers Road, Suite 1105, Toronto, ON M2J 4R3 by January 1, 2025 and must comply with the requirements of Rule 14a-8 of the Exchange Act.

Shareholders who do not wish to use the mechanism provided by the Exchange Act may submit proposals to be considered at the 2025 annual general meeting of Shareholders under the provisions of the CBCA. In order for a Shareholder proposal to be eligible under the CBCA, it must be in writing, accompanied by the requisite declarations and signed by the submitter and qualified Shareholders who at the time of signing are the registered or beneficial owners of Shares that, in the aggregate: (a) constitute at least 1% of our issued Shares that have the right to vote at general meetings; or (b) have a fair market value in excess of C\$2,000. For the submitter or a qualified Shareholder to be eligible to sign the proposal, that Shareholder must have been the registered or beneficial owner of our Shares that carry the right to vote at general meetings for an uninterrupted period of at least six months before the date the proposal is submitted. To be considered for inclusion in the proxy materials for the 2025 annual general meeting of Shareholders, any such Shareholder proposal under the CBCA must be received by Aptose by no later than March 20, 2025.

A Shareholder wishing to nominate an individual to be a director, other than pursuant to a requisition of a meeting made pursuant to the CBCA or a Shareholder proposal made pursuant to the CBCA or Exchange Act provisions described above, is required to comply with Section 3.1 of *By-Law 2015-01 – Advance Notice By-Law of Aptose Biosciences Inc.* (the “Advance Notice Bylaw”).

Shareholders who wish to suggest a candidate for our Board in compliance with Section 3.1 of the Advance Notice Bylaw may submit a written recommendation to our Secretary at 251 Consumers Road, Suite 1105, Toronto, ON M2J 4R3 along with the Shareholder’s name, setting forth, among other things:

- the name, age, and province or state, and country of residence of the proposed nominee;
- the principal occupation, business or employment of the proposed nominee, both at present and within the five years preceding the recommendation;
- the number of securities of each class of voting securities of the Corporation or its subsidiaries which are beneficially owned, or controlled or directed, directly or indirectly, by the proposed nominee as of the record date for the meeting of Shareholders (if such date shall then have been made publicly available and shall have occurred) and as of the date of such notice;
- a description of any agreement, arrangement or understanding (financial, compensation or indemnity related or otherwise) between the nominating Shareholder and the proposed nominee, or any affiliates or associates of, or any person acting jointly or in concert with the nominating Shareholder or the proposed nominee, in connection with the proposed nominee’s election as director; and
- whether the proposed nominee is party to any existing or proposed relationship, agreement, arrangement or understanding with any competitor of the Corporation or its affiliates or any other third party which may give rise to a real or perceived conflict of interest between the interests of the Corporation and the interests of the proposed nominee.

The corporate governance and nominating committee of the Board (the “Corporate Governance and Nominating Committee”) may also request that the Shareholder provide certain additional information.

For the Board to consider a candidate for nomination at the 2025 Annual Meeting, Shareholders should submit the required information to the Secretary by the date not less than 30 days before the 2025 Annual Meeting; provided, however, that if the 2025 annual general meeting of Shareholders is to be held on a date that is fewer than 50 days after the date (the “Notice Date”) on which the first public announcement of the meeting was made, notice by the nominating Shareholder may be given not later than the close of business on the tenth day following the Notice Date. The foregoing is merely a summary of provisions contained in Section 3.1 of the Advance Notice Bylaw, and is not comprehensive and is qualified by the full text of such provisions. The full text of such provisions is set out in Section 3.1 of the Advance Notice Bylaw, a copy of which is filed under the Corporation’s profile at www.sedarplus.ca or www.sec.gov.

These advance notice provisions are in addition to, and separate from, the requirements that a stockholder must meet in order to have a proposal included in the proxy statement under the rules of the SEC and the CBCA. For such Shareholder’s director nominee to be eligible for inclusion in the proxy statement, please refer to the deadlines pursuant to the Exchange Act and the CBCA set out above.

To comply with the universal proxy rules set forth in Rule 14a-19 of the Exchange Act, shareholders who intend to solicit proxies in support of director nominees other than the Corporation’s nominees must provide notice to the Corporate Secretary that sets forth the information required by Rule 14a-19(b) under the Exchange Act, which shall be postmarked or transmitted electronically to the Corporation at the Corporation’s principal executive offices no later than April 19, 2025.

What if amendments are made to the proposals or if other matters are brought before the Meeting?

With respect to any amendments or variations in any of the proposals shown in the Proxy Statement, or any other matters which may properly come before the Meeting, the Shares will be voted by the appointed proxyholder as he or she in their sole discretion sees fit.

As of the date of this Proxy Statement, the Board is not aware of any such amendments, variations or other matters to come before the Meeting. However, if any such changes that are not currently known to the Board should properly come before the Meeting, the Shares represented by your proxyholders will be voted in accordance with the best judgment of the proxyholders.

Who will tabulate the votes?

We currently expect that Computershare will tabulate the votes, and the secretary of the Meeting will be our inspector of elections for the Meeting.

When will voting results be disclosed?

Preliminary voting results will be announced at the Meeting. Final voting results will be filed with the Canadian provincial securities regulatory authorities on SEDAR+ at www.sedarplus.ca promptly following the Meeting, and will also be published in a Current Report on Form 8-K filed with the SEC on EDGAR at www.sec.gov within four business days of the Meeting.

Whom do I contact if I have questions regarding the Meeting?

If you have any questions or require assistance in voting your Shares, please call Mr. Fletcher Payne, Senior Vice President, Chief Financial Officer, Chief Business Officer and Corporate Secretary, at 858-926-2730.

Who may adjourn the Meeting?

The Meeting may be adjourned to any other time and any other place by the Shareholders who attend the Meeting or who are represented at the Meeting and entitled to vote even when such Shareholders do not constitute a quorum.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Proxy Statement contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Exchange Act, and are subject to the safe harbor created by those sections. This Proxy Statement also contains “forward-looking information” within the meaning of applicable Canadian securities laws. We refer to such forward-looking statements and forward-looking information collectively as “forward-looking statements”. We have identified some of these forward-looking statements with words like “believe,” “may,” “could,” “would,” “might,” “possible,” “potential,” “will,” “should,” “expect,” “intend,” “plan,” “predict,” “anticipate,” “estimate,” “contemplate” and “continue”, the negative of these words, other words and terms of similar meaning and the use of future dates. Forward-looking statements involve risks and uncertainties. These uncertainties include factors that affect all businesses as well as matters specific to us.

Forward-looking statements by their nature address matters that are, to different degrees, uncertain. Uncertainties and risks may cause our actual results to be materially different than those expressed in or implied by our forward-looking statements. For us, particular uncertainties and risks include those described in our filings with the Securities and Exchange Commission (the “SEC”), including our most recent Annual Report on Form 10-K for the year ended December 31, 2023. A copy of this document can be found by accessing the SEC’s EDGAR filing database at www.sec.gov and on SEDAR+ at www.sedarplus.ca; however we will promptly provide a copy of this document to any Shareholder of the Corporation free of charge upon request. All forward-looking statements in this Proxy Statement speak only as of the date of this Proxy Statement and are based on our current beliefs and expectations. We undertake no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except as otherwise required by law.

VOTING SECURITIES AND PRINCIPAL HOLDERS OF VOTING SECURITIES

As of the record date, May 10, 2024, 16,309,393 Shares are issued and outstanding. Each holder of Shares of record at the close of business on May 10, 2024 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.

**SHARE OWNERSHIP OF CERTAIN BENEFICIAL OWNERS,
MANAGEMENT AND DIRECTORS**

The table below sets forth information known to us regarding the beneficial ownership of our Shares as of April 29, 2024 for:

- each person the Corporation believes beneficially holds more than 5% of our outstanding Shares based solely on our review of SEC filings;
- each of our directors and nominees for directors;
- each of the named executive officers named in the Summary Compensation Table (we collectively refer to these persons as our “Named Executive Officers” or “NEOs”); and
- all of our directors and executive officers as a group.

The number of Shares beneficially owned by a person includes shares subject to options held by that person that are currently exercisable or that become exercisable within 60 days of April 29, 2024. Percentage calculations assume, for each person and group, that all Shares that may be acquired by such person or group pursuant to options currently exercisable or that become exercisable within 60 days of April 29, 2024 are outstanding for the purpose of computing the percentage of Shares owned by such person or group. However, such unissued Shares described above are not deemed to be outstanding for calculating the percentage of Shares owned by any other person.

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Except as otherwise indicated, the persons in the table below have sole voting and investment power with respect to all Shares shown as beneficially owned by them, subject to community property laws where applicable and subject to the information contained in the notes to the table.

Name of Beneficial Owner	Amount and Nature of Beneficial Ownership ⁽¹⁾	Percent of Class
Named Executive Officers and Directors		
Carol G. Ashe	22,764	*
Dr. Rafael Bejar	123,053	*
Dr. Denis Burger	34,427	*
Philippe Ledru	40,033	*
Fletcher Payne	47,332	*
Dr. Erich Platzter	64,161	*
Dr. William G. Rice	326,379	2.0%
Dr. Bernd R. Seizinger	21,999	*
Mark D. Vincent	32,994	*
Warren Whitehead	30,662	*
All Executive Officers and Directors as a Group (10 persons)	743,804	4.6%
Beneficial Owners of More Than 5%		
Hanmi Pharmaceuticals Co., Ltd. ⁽²⁾⁽³⁾	2,989,415	19.99%
*Does not exceed one percent of Shares outstanding		
(1) Includes for the persons listed below the following Shares subject to options held by such persons that are currently exercisable or become exercisable within 60 days of April 29, 2024: Ms. Carol G. Ashe: 21,163; Dr. Rafael Bejar: 115,720; Dr. Denis Burger: 32,983; Mr. Philippe Ledru: 33,333; Mr. Fletcher Payne: 40,000; Dr. Erich Platzter: 30,495; Dr. William G. Rice: 292,163; Dr. Bernd R. Seizinger: 4,999; Dr. Mark Vincent: 32,561; and Mr. Warren Whitehead: 29,662.		
(2) Based on information contained in a schedule 13D/A filed with the SEC on April 26, 2024 by Hanmi. Hanmi also owns common share purchase warrants which, when exercised, will increase the number of Shares beneficially owned by Hanmi.		
(3) Hanmi's ownership gives effect to the 19.99% ownership blocker (the "Blocker") restriction contained on certain of its securities. Hanmi currently holds warrants that if we did not give effect to the Blocker their ownership interest in the Corporation would be 28.6%.		

RECEIPT OF FINANCIAL STATEMENTS

At the Meeting, Shareholders will receive and consider the financial statements of the Corporation for the fiscal year ended December 31, 2023 and the auditor's report thereon, but no vote by the Shareholders with respect thereto is required or proposed to be taken.

PROPOSAL NO. 1—ELECTION OF DIRECTORS

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 Board is authorized to determine the actual number of directors to be elected from time to time. The Corporation currently has seven directors, all of whom are being proposed for nomination at the Meeting. 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.

The CBCA provides for a statutory voting requirement for uncontested directors elections whereby shareholders are allowed to vote “for” or “against” (as opposed to “for” and “withhold”) nominees for the Board. The required vote to elect a nominee to the Board is the majority of the votes cast for their election. If a nominee does not receive a majority of the votes cast for their election, the nominee will not be elected and the Board position will remain open or, if in the case of incumbent directors, such director may continue in office until the earlier of (i) the 90th day after the election, or (ii) the day on which his or her successor is appointed or elected.

The following incumbent directors of the Corporation are nominated for election at the Meeting.

Director	Experience and Qualifications
Carol G. Ashe ⁽²⁾⁽³⁾ Pennsylvania, United States Director Since August 2018	<p>Ms. Ashe, age 66, has been the Chief Business Officer at the New York Genome Center, an independent, non-profit academic research institution focused on genomic science, and its application to novel biomedical discoveries to advance the understanding of the genetic basis of neurodegenerative disease, neuropsychiatric disease, and cancer, since 2014. Previously, she served as Vice President of Corporate Development for Endo’s branded, generic and platform drug delivery pharmaceutical business units from 2011 to 2013; a Partner at SR One, the corporate venture capital fund of GlaxoSmithKline (“GSK”), from 2008 to 2010; and head of GSK’s US Corporate Legal Group supporting US-based mergers, acquisitions, and equity investments from 2007 to 2008. Prior to that, Ms. Ashe led GSK’s Global Business Development Transactions Legal Team supporting both the pharmaceutical and consumer healthcare business units from 1995 to 2007. In 2020, Ms. Ashe joined the Board of Elicio Therapeutics*, a clinical-stage biotechnology company developing a pipeline of novel immunotherapies, as an independent director and she is a member of the Audit Committee, Nominating and Corporate Governance Committee and Chair of the Compensation Committee. Ms. Ashe received her BS degree in Biology from Pennsylvania State University, her law degree from Villanova University School of Law and is a registered patent attorney.</p> <p>Ms. Ashe makes valuable contributions to the Board based on over 25 years of experience in the pharmaceutical and biotechnology industry in business development and as legal counsel for business development transactions and patent matters.</p>

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Director	Experience and Qualifications
Dr. Denis Burger ⁽¹⁾⁽²⁾⁽³⁾⁽⁵⁾ Oregon, United States Director Since 2007	<p>Dr. Burger, age 80, currently is the managing member of Paradigm Ventures LLC, a healthcare consulting and funding firm based in Portland, Oregon, and has been since 1986. Previously, he co-founded Trinity Biotech, PLC, a diagnostic biotechnology company based in Dublin, Ireland, where he was Chairman from 1992 to 1995 and served on its board of directors until 2020 and chaired its Audit Committee from 1996 to 2016. Dr. Burger served as the Chairman, Chief Executive Officer and a Director of AVI Biopharma Inc., an Oregon-based biotechnology company, from 1996 to 2007. He was a co-founder and Chairman of Epitope Inc. from 1981 to 1990. Dr. Burger was Vice Chairman and Chief Scientific Officer of CytoDyn Inc. from 2014 to 2018. Dr. Burger has served as President of Yamhill Valley Vineyards since 1983. In addition, Dr. Burger previously held a professorship in the Department of Microbiology and Immunology and Surgery (Surgical Oncology) at the Oregon Health Sciences University in Portland. Dr. Burger received his M.Sc. and Ph.D. in Microbiology and Immunology from the University of Arizona.</p> <p>Dr. Burger served on the board of directors of Epitope Inc (1986-1990)*, Trinity Biotech, PLC. (1992 to 2020)*, CytoDyn Inc. (2014 to 2018)* and AVI BioPharma Inc (1996-2007)*. Dr. Burger has served on the Board of Aptose since 2007 and was Chair of the Audit Committee of Aptose from 2008 to 2015.</p> <p>Dr. Burger makes valuable contributions to the Board based on his Ph.D. in microbiology and immunology, and his more than 25 years of experience in the biotechnology industry as a senior executive and as a corporate director.</p>
Dr. Erich Platzer ⁽²⁾⁽⁴⁾ Basel, Switzerland Director Since 2014	<p>Dr. Platzer, age 73, served as a board-certified physician in internal medicine, hematology and medical oncology between 1979 and 1991. In 2001, Dr. Platzer co-founded HBM Healthcare Investments (formerly HBM BioVentures), a global leader in healthcare investing and served as their investment advisor until 2015. Previously, he served as the business director of oncology, as well as the global strategic marketing and therapeutic area head of oncology at Roche, Basel. He also served in various other leadership roles at Roche and was responsible for various strategic corporate partnerships. 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 of the University of Erlangen, where he also received his “Dr. med. habil.” (M.D., Ph.D.).</p> <p>Dr. Platzer has served as a pharmaceutical industry expert on the board of directors of multiple biotech companies in both the U.S. and Europe. Currently he serves as chairman of Vivoryon Therapeutics NV, as well as a director of Panavance Therapeutics Inc. and of MedTech Innovation Partners, MTIP, a Swiss VC firm focusing on MedTech and eHealth. He has also served as the president of Swiss business angel group StartAngelsNetwork and remains a board member of this organization.</p> <p>Dr. Platzer makes valuable contributions to the Board based on over twenty-five years’ experience in the biotechnology industry as a physician in hematology and medical oncology, as a corporate executive, and as a corporate director.</p>

Director	Experience and Qualifications
Dr. Bernd R. Seizinger ⁽¹⁾⁽⁴⁾ New Jersey, United States Director Since 2022	<p data-bbox="435 184 1422 237">Dr. Seizinger, age 67, is an accomplished senior executive leader with more than 25 years of industry experience in both U.S. and European biotechnology and pharmaceutical companies and multiple financial advisory positions.</p> <p data-bbox="435 264 1422 457">His current positions include: Chairman of the board of directors, Oxford BioTherapeutics (U.K. private company, since 2016); Co-founder, executive chairman of the board and acting CEO, CryptoMedix (U.S. private company, since 2015) and he is currently a member of the board of directors of the following publicly traded biotech companies: Aprea Therapeutics Inc. (U.S.; NASDAQ; since 2014)*; Oncolytics Biotech Inc. (Canada/U.S.; NASDAQ and TSX; since 2015)*; BioInvent International AB (Sweden; NASDAQ Stockholm; since 2018); Nykode Therapeutics ASA (Norway; Oslo Stock Exchange; since 2014). In addition, he is currently serving on the advisory board of biotech venture capital fund Pureos (Switzerland; since 2019) and is senior advisor to biotech venture fund Hadean (Sweden & Norway; since 2018).</p> <p data-bbox="435 485 1422 583">He previously served as VP for oncology drug discovery and VP for corporate and academic alliances at Bristol-Myers Squibb (U.S.). Subsequently, he served as executive vice president and CSO of U.S. biotech company Genome Therapeutics, followed by 12 years as CEO and President of German/U.S. biopharmaceutical company GPC Biotech (listed on Frankfurt Stock Exchange and NASDAQ).</p> <p data-bbox="435 611 1422 684">Prior to his corporate appointments, Dr. Seizinger held senior faculty positions at Harvard Medical School and Massachusetts General Hospital and was a Visiting Professor at Princeton University during his tenure at Bristol-Myers Squibb.</p> <p data-bbox="435 711 1422 764">Dr. Seizinger received his M.D. from Ludwig-Maximilians-Universität Munich, and his Ph.D. from Max-Planck-Institute of Psychiatry/Neurobiology in Munich.</p> <p data-bbox="435 791 1422 844">Dr. Seizinger makes valuable contributions to the Board based on his insight and vast global biopharmaceutical experience.</p>

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Director	Experience and Qualifications
Dr. William G. Rice ⁽⁴⁾ California, United States Director Since 2013	<p>Dr. Rice, age 65, serves as the President, Chief Executive Officer, Chairman of the Board, and member of the Research and Development Committee ("R&D Committee") of Aptose and joined the company in 2013. Prior to joining Aptose, Dr. Rice served as the President, Chief Executive Officer, and Chairman of the Board of Directors of Cylene Pharmaceuticals, Inc., a private biotechnology company from 2003 to 2013. Prior to Cylene, Dr. Rice was the founder, President, Chief Executive Officer and Director of Achillion Pharmaceuticals, Inc. from 1998 to 2003. Dr. Rice also served at the National Cancer Institute-Frederick National Laboratory for Cancer Research (FNLCR) as Senior Scientist and Head of the Drug Mechanism Laboratory from 1992 to 1998, prior to which he served as a faculty member in the division of Pediatric Hematology and Oncology at the Emory University School of Medicine from 1989 to 1992. Dr. Rice performed his post-doctoral fellowship in the Department of Medicine, Division of Hematology and Oncology at the University of Michigan Medical Center from 1986 to 1989, prior to which he received his Ph.D. from the Emory University Department of Biochemistry in 1986.</p> <p>Dr. Rice continues to serve as the Chairman of the Board of Directors of Cylene and was previously a member of the Board of Directors of Oncolytics Biotech Inc. (2015 to 2021)*.</p> <p>Dr. Rice makes valuable contributions to the Board of Directors based on his Ph.D. in Biochemistry, his extensive involvement in preclinical and clinical studies, his proven record of financings and licensing deals, and his more than 25 years of experience in the biotechnology industry as a senior executive and as a corporate director.</p>
Dr. Mark D. Vincent ^{(3) (4)} Ontario, Canada Director Since 2007	<p>Dr. Vincent, age 71, has been a Professor of Oncology at the University of Western Ontario since 2008 and a staff medical oncologist at the London Regional Cancer Program since 1990. Dr. Vincent has also served as the co-founder and Chief Executive Officer of Sarissa, Inc., a private company actively involved in the development of compounds which potentiate existing, approved targeted drugs including agents approved in leukemia, since 2000. Dr. Vincent holds multiple patents on the potentiation of cancer chemotherapy by the manipulation of drug resistance genes, sits on the advisory boards and speakers panels of several major pharmaceutical companies, and is a frequent international lecturer on the positioning of new drugs in the complex evolving management of lung and gastro-intestinal cancer. Dr. Vincent completed his oncology training at the Royal Marsden Hospital in London, England, with a major focus on leukemia/lymphoma.</p> <p>Dr. Vincent makes valuable contributions to the Board based on over 25 years of experience as a medical oncologist.</p>

Director	Experience and Qualifications
Warren Whitehead ⁽¹⁾ Ontario, Canada Director Since 2011	<p>Mr. Whitehead, age 71, serves as the Head of Corporate Strategy, previously Chief Financial Officer of Satellos Bioscience Inc. (“Satellos”), a TSX-listed regenerative medicine company aimed at developing therapeutics for degenerative muscle diseases, since August 2021. He previously served as the Chief Financial Officer of ProMIS Neurosciences Inc. (formerly Amorfix Life Sciences Ltd.), a TSX-listed company targeting detection and effective treatment of Alzheimer’s disease and amyotrophic lateral sclerosis, from 2013 to 2015, after which he concentrated on his role on corporate boards until he joined Satellos in 2021. From 2006 to 2008, he was the Chief Financial Officer of Arius Research Inc., a TSX-listed company developing anti-cancer antibodies, where he provided financial guidance and leadership during the acquisition of Arius by Roche in 2008. He was also the former Chief Financial Officer of Labopharm Inc. from 2000 to 2006, where he completed a series of public equity financings, including a cross-border Nasdaq offering. Other positions include Chief Financial Officer of Resolution Pharmaceuticals Inc., and a position in finance and business development at Glaxo Canada (now GlaxoSmithKline). Mr. Whitehead holds an MBA, and BComm from the University of Windsor and a BA from the University of Western Ontario.</p> <p>Mr. Whitehead was the former Chairman and board member of Plantform Corporation until 2019 and a former Board Member of Telesta Therapeutics (TSX), which was acquired by Prometic Life Sciences in 2016.</p> <p>Mr. Whitehead makes valuable contributions to the Board based on his financial expertise as a Chartered Professional Accountant (CPA) who has held chief financial officer roles at publicly traded pharmaceutical and biotechnology firms.</p>

1. Member of the Audit Committee.
 2. Member of the Compensation Committee.
 3. Member of the Corporate Governance and Nominating Committee.
 4. Member of the R&D Committee.
 5. Lead Director of the Corporation.
- * SEC reporting issuer

Other than as described below, no proposed director is, to the knowledge of the Corporation as at the date of the Proxy Statement, or has been, within 10 years before the date of this Proxy Statement, 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.

Dr. Seizinger was a non-executive independent director of Opsona Therapeutics Ltd., a private company formed under the laws of Ireland, which filed for a creditors' voluntary liquidation under applicable Irish law in December 2018.

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.

There are no family relationships among any of the director nominees, directors and/or any of Aptose's executive officers. In addition, no nominee has an arrangement or understanding with another person under which he or she was or is to be selected as a director or nominee.

Board Recommendation

The Board recommends a vote FOR the election of all nominees for directors named in this Proxy Statement.

CORPORATE GOVERNANCE

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:

- a Board elected annually by a majority voting, with an established written mandate;
- an audit committee ("Audit Committee"), compensation committee ("Compensation Committee") and Corporate Governance and Nominating Committee each composed entirely of independent directors;
- an independent Lead Director who presides over all independent sessions of the Board;
- annual assessments of the Board, each committee and individual directors;
- established a written Disclosure and Insider Trading Policy; and
- established a written Code of Ethics.

Each of the committee charters and the Code of Ethics can be found on the Corporation's website at <https://ir.aptose.com/corporate-governance>.

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 A.

Composition and Independence of the Board

The Corporation's Board is currently composed of seven directors, a majority (six) of whom meet the independence standards under the listing standards of Nasdaq, the rules and regulations of the SEC, and National Instrument 52-110 – *Audit Committees* ("NI 52-110"). Each year the Board reviews the composition of the Board and assesses whether a Board member is "independent".

Director	Independence
Carol Ashe	Yes
Denis Burger	Yes
Erich Platzer	Yes
William G. Rice	No
Bernd R. Seizinger	Yes
Mark Vincent	Yes
Warren Whitehead	Yes

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.

Directors Skills and Experience Matrix

The following table provides summary information about the skills of the directors of the Corporation.

	Carol Ashe	Denis Burger	Erich Platzer	William G. Rice	Bernd R. Seizinger	Mark Vincent	Warren Whitehead
Governance/Public Company Board Experience	✓	✓	✓	✓	✓	✓	✓
Senior Leadership Experience	✓	✓	✓	✓	✓	✓	✓
Financial and Accounting	✓	✓	✓	✓	✓		✓
Industry Experience	✓	✓	✓	✓	✓	✓	✓
Global Business Experience	✓	✓	✓	✓	✓		
Business Development and M&A Experience	✓			✓			✓
Legal	✓						
Medicine & Science		✓	✓	✓	✓	✓	

Involvement of Directors with other Reporting Issuers

The following table outlines other reporting issuers where our directors serve on the Board:

Director	Reporting Issuer
Carol G. Ashe	Elicio Therapeutics, Inc.
Erich Platzer	Vivoryon Therapeutics NV
Bernd R. Seizinger	Aprea Therapeutics, Inc. Oncolytics Biotech Inc. Nykode Therapeutics ASA BioInvent International AB

Board Leadership

The Corporation has a chair (the “Chair”) who is currently also the President and Chief Executive Officer of the Corporation, Dr. William G. Rice. As the Chair is an executive officer of the Corporation, the Corporation also has a 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 Chair and the Lead Director together provide leadership to the Board in discharging its mandate and also assist the Board in discharging its stewardship functions, which include (i) satisfying themselves as to the integrity of the senior officers of the Corporation and that the 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 must satisfy itself as to the integrity of the Chief Executive Officer and that the Chief Executive Officer creates a culture of integrity throughout the organization. The Lead Director also provides advice, counsel and mentorship to the Chief Executive Officer.

Board Oversight of Risk

With regard to risk management, the Board ensures that the business of the Corporation is conducted in compliance with applicable laws and regulations and according to the highest ethical standards; will 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 will adopt a disclosure policy.

The Board as a whole has responsibility for risk oversight, with more in-depth reviews of certain areas of risk being conducted by the relevant Board committees that report on their deliberations to the full Board. The Board and its committees fulfill their oversight responsibilities with the support of management, whose reporting processes are designed to provide information to the Board about the identification, assessment and management of critical risks and management’s risk mitigation strategies. Areas of risk evaluated include regulatory, operational, financial (accounting, liquidity and tax), legal, cybersecurity compensation, competitive, health, safety and reputational risks.

The Audit Committee, Corporate Governance and Nominating Committee and Compensation Committee oversee risks associated with their respective principal areas of focus. The Audit Committee's role includes a particular focus on the qualitative aspects of financial reporting to stockholders, on our processes for the management of business and financial risk, our financial reporting obligations and for compliance with significant applicable legal, ethical and regulatory requirements. The Audit Committee, along with management, is also responsible for developing and participating in a process for review of important financial and operating topics that present potential significant risk to the Corporation. The Compensation Committee is responsible for overseeing risks and exposures associated with our compensation programs and arrangements, including our executive and director compensation programs and arrangements, and management succession planning. The Corporate Governance and Nominating Committee oversees risks relating to our corporate governance matters and policies and director succession planning.

We recognize that a fundamental part of risk management is understanding not only the risks a company faces and what steps management is taking to manage those risks, but also understanding what level of risk is appropriate for that company. Through their involvement in setting our business strategy, the Board can assess management's appetite for risk and also determine what constitutes an appropriate level of risk for the Corporation.

We believe our current Board leadership structure is appropriate and helps ensure proper risk oversight for the Corporation. The full Board conducts general risk oversight in connection with its role in reviewing our key long-term and short-term business strategies and monitoring on an ongoing basis the implementation of our key business strategies, while our standing Board committees conduct more specific risk oversight related to their responsibilities. The Chair ensures that there is sufficient time on the Board agenda for risk management discussions.

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.

It is the Corporate Governance and Nominating Committee's policy to consider director candidates recommended by our Shareholders in accordance with the provisions set forth in our Advance Notice By-Law, which may be accessed on our website at www.aptose.com in the Investors section. Candidates recommended by the Corporation's Shareholders will be considered by the Corporate Governance and Nominating Committee and, as stated in the Corporate Governance and Nominating Committee Charter, such candidates shall be evaluated in the same manner as all other director candidates. During 2023, we received no recommendations of director candidates from our Shareholders.

For additional details, please see above under “Questions About the Annual and Special Meeting and Voting Your Shares —How can I make a Shareholder proposal for the 2024 Annual and Special Meeting of Shareholders?”

Diversity

The Corporate Governance and Nominating Committee takes diversity, including diversity of experience, perspective and education, as well as individuals from other designated groups such as women, Aboriginal people, persons with disabilities and members of visible minorities (collectively, the “Designated Groups”), 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 or other members of the Designated Groups 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 diversity, including 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 values diversity of experience, perspective, education and race, and considers the representation of women and other members of the Designated Groups, as part of its overall annual evaluation of director nominees for election or re-election as well as candidates for management positions.

In addition, in searches for new directors or officers, the Corporate Governance and Nominating Committee will consider the level of representation of women and other members of the Designated Groups 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 representation of women and other members of the Designated Groups on the Board and in management positions and, where appropriate, recruiting qualified candidates who are members of the Designated Groups 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.

The Board has not adopted targets regarding the representation of women and other members of Designated Groups 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 or race, 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. We are actively seeking additional candidates to join our Board and we strongly prioritize diverse candidates.

Currently, one out of seven (14%) members of the Board and one out of eight (13%) of the officers are women. One officer identifies as being of “Hispanic, Latinx or Spanish origin” and one as being of “Asian” origin, and one director identifies as being part of the LGBTQ+ group, otherwise no members of the Board or officers of the Corporation who self-identify as being part of any of the Designated Groups.

Board Diversity Matrix

The table below provides certain highlights of the composition of our Board members as of December 31, 2023. Each of the categories listed in the table below has the meaning as it is used in Nasdaq Rule 5605(f).

Total Number of Directors	7			
	Female	Male	Non-Binary	Did Not Disclose Gender
Part I: Gender Identity				
Directors	1	6	-	-
Part II: Demographic Background				
African American or Black	-	-	-	-
Alaskan Native or Native American	-	-	-	-
Asian	-	-	-	-
Hispanic or Latinx	-	-	-	-
Native Hawaiian or Pacific Islander	-	-	-	-
White	1	6	-	-
Two or More Races or Ethnicities	-	-	-	-
LGBTQ+	1			
Did Not Disclose Demographic Background	-			

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.

Position Descriptions

The Board has developed written position descriptions, which are reviewed annually, for the Chairman and the chairs of each of the committees. 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).

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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.

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.

Meeting Attendance

As stated in the Board Mandate, all directors are expected to attend each meeting in person, by phone or by video conference depending on the format of the meeting, to the extent practicable. The Board of Directors held seven meetings during 2023, the Audit Committee met four times, the Corporate Governance and Nominating Committee met four times, the Compensation Committee met four times and the R&D Committee met once.

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The following table illustrates the attendance record of each director for all Board and committee meetings held for the year ended December 31, 2023.

Director	Meetings Attended				
	Audit Committee	Corporate Governance and Nominating Committee	Compensation Committee	R&D Committee	Board
Carol G. Ashe	-	4 of 4	4 of 4	-	7 of 7
Denis Burger	4 of 4	4 of 4	4 of 4	-	7 of 7
Erich Platzer	-	-	3 of 4	1 of 1	7 of 7
William G. Rice	4 of 4 ⁽¹⁾	4 of 4 ⁽¹⁾	-	1 of 1	7 of 7
Bernd R. Seizinger	4 of 4	-	-	1 of 1	6 of 7
Mark Vincent	-	4 of 4	-	1 of 1	7 of 7
Warren Whitehead	4 of 4	-	-	-	7 of 7

(1) Although not a member of the Audit Committee and Corporate Governance and Nominating Committee, Dr. Rice participated in all meetings of such committees for the year ended December 31, 2023 on invitation as a member of management.

All director nominees are expected to attend the Meeting. William G. Rice, Denis Burger, Carol G. Ashe, Erich Platzer, Bernd Seizinger, Mark Vincent and Warren Whitehead attended last year's Annual and Special Meeting of Shareholders.

Executive Sessions

The independent directors meet regularly without the presence of the non-independent directors and members of management. During the year ended December 31, 2023, independent directors met six times without the presence of the management non-independent director as part of meetings of the Board, and members of the Audit Committee and Corporate Governance and Nominating Committee each met four times without the presence of management as part of meetings of their committees. All meetings of the Compensation Committee in 2023 were held without the presence of management (including the non-independent director).

Ethical Business Conduct

We have adopted a code of ethics for directors, officers (including our principal executive officer, principal financial officer and principal accounting officer) and employees, known as the Code of Business Conduct and Ethics. The Code of Business Conduct and Ethics is available on our website at <http://www.aptose.com> under the Corporate Governance section of our Investors page. We will promptly disclose on our website (i) the nature of any amendment to the policy that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (ii) the nature of any waiver, including an implicit waiver, from a provision of the policy that is granted to one of these specified individuals that is required to be disclosed pursuant to SEC rules and regulations, the name of such person who is granted the waiver and the date of the waiver.

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 by accessing the SEC's EDGAR filing database at www.sec.gov, on SEDAR+ at www.sedarplus.ca and on our website at 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, in addition to providing guidelines on employee trading in the Corporation’s securities.

The Board has not granted any waiver of the Code in favor 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.

Shareholder Communications with the Board

Shareholders may communicate with the Board or any one particular director by sending correspondence, addressed to Mr. Fletcher Payne, Senior Vice President, Chief Financial Officer, Chief Business Officer and Corporate Secretary, 12770 High Bluff Drive, San Diego, California, 92130, with an instruction to forward the communication to the Board or one or more particular directors. He will forward promptly all such shareholder communications to the Board, or the one or more particular directors, after ascertaining whether the communications are appropriate to the duties and responsibilities of the Board.

Board Committees

The Corporation has a standing Audit Committee, a Corporate Governance and Nominating Committee and a Compensation Committee, each of which are composed entirely of independent directors. In 2023, the Corporation established the R&D Committee. Each current member of the R&D Committee, except for Dr. Rice, qualifies as “independent” under the listing standards of Nasdaq, the rules and regulations of the SEC and NI 52-110.

Audit Committee

Membership. The current members of the Audit Committee are Denis Burger, Bernd R. Seizinger and Warren Whitehead. Mr. Whitehead is the Chair of the Audit Committee. The Board has determined that all members of the Audit Committee qualify as financial experts under the listing standards of Nasdaq.

In addition, each current member of the Audit Committee qualifies as “independent” for purposes of membership on audit committees under the listing standards of Nasdaq, the rules and regulations of the SEC and NI 52-110.

Meetings. The Audit Committee met four times during the period from January 1, 2023 until December 31, 2023.

Committee Mandate. Among its responsibilities, the Audit Committee:

- serves as an independent and objective party to monitor the integrity of our financial reporting process and systems of internal controls regarding finance, accounting, and legal compliance, including the review of our consolidated financial statements, MD&A and annual and interim results;
- identifies and monitors the management of the principal risks that could impact our financial reporting;
- monitors the independence and performance of our independent auditors, including the pre-approval of all audit fees and all permitted non-audit services in accordance with federal securities laws and the rules and regulations of the SEC;
- provides an avenue of communication among the independent auditors, management, and the Board; and
- encourages continuous improvement of, and foster adherence to, our policies, procedures and practices at all levels.

The Audit Committee is also responsible for implementing and overseeing our whistle-blowing procedures and reviewing the Corporation's plans to mitigate cybersecurity risks and respond to data breaches.

Corporate Governance and Nominating Committee

Membership. The current members of the Corporate Governance and Nominating Committee are Mark Vincent, Carol Ashe and Denis Burger. Dr. Vincent is the Chair of the Corporate Governance and Nominating Committee. Each current member of the Committee qualifies as "independent" under the listing standards of Nasdaq, the rules and regulations of the SEC and NI 52-110.

Meetings. The Corporate Governance and Nominating Committee met four times during the period from January 1, 2023 until December 31, 2023. In addition, governance matters were discussed and considered at the Board level.

Committee Mandate. Among its responsibilities, the Corporate Governance and Nominating Committee:

- identifies qualified individuals to become Board members, consistent with criteria approved by the Board;
- determines the composition of the Board and its committees;
- selects the director nominees for the next annual meeting of shareholders;
- monitors a process to assess Board, committee and management effectiveness;

- aids and monitors management succession planning; and
- develops, recommends to the Board, implements and monitors policies and processes related to the Corporation's corporate governance guidelines

Compensation Committee

Membership. The Compensation Committee is currently comprised of Carol Ashe, Denis Burger and Erich Platzter. Dr. Burger is the Chair of the Compensation Committee. Each current member of the Compensation Committee qualifies as "independent" for purposes of membership on compensation committees under the listing standards of Nasdaq, the rules and regulations of the SEC and NI 52-110, and as a "non-employee director" within the meaning of Rule 16b-3 under the Exchange Act.

Meetings. The Compensation Committee met four times during the period from January 1, 2023 until December 31, 2023. In addition, compensation matters were discussed and considered at the Board level.

Committee Mandate. Among its responsibilities, the Compensation Committee:

- reviews and makes 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;
- evaluates the performance of the Chief Executive Officer and other senior executive officers;
- makes recommendations to the Board with respect to the compensation policies for the non-employee directors;
- 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.

As part of its process to make recommendations to the Board with respect of the compensation for the non-employee directors and other employees of the Corporation, the Compensation Committee consults with the President and Chief Executive Officer and other officers of the Corporation to obtain recommendations as it deems necessary.

Further information pertaining the compensation of directors and officers and the role and policies of the Compensation Committee can be found in this Proxy Statement under the heading "Executive Compensation".

R&D Committee

Membership. The current members of the R&D Committee are Erich Platzter, William Rice, Bernd R. Seizinger and Mark Vincent. Dr. Seizinger is the Chair of the R&D Committee. Each current member of the R&D Committee, except for Dr. Rice, qualifies as "independent" under the listing standards of Nasdaq, the rules and regulations of the SEC and NI 52-110.

Meetings. The R&D Committee met once during the period from January 1, 2023 until December 31, 2023.

Committee Mandate. The R&D Committee's responsibilities include:

- serving in an advisory role and interacts with both management and external advisors to develop insights and recommendations regarding the Corporation's approach to product development and technical innovation;
- assisting management in the identification, evaluation and oversight of appropriate technology and product development investments;
- overseeing the innovation strategy of the Corporation, including periodic reviews of the Corporation's research and development portfolio and its overall competitiveness, the science and technology underlying major research and development initiatives, the competitive environment and disruptive technology impacts;
- providing feedback and input regarding the Corporation's development of innovative business models, strategies and tactics; and
- assisting the Board with the interpretation of scientific and clinical development data.

PROPOSAL NO. 2—APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board, on the Audit Committee's advice, recommends the appointment of KPMG LLP, as the independent registered public accounting firm of the Corporation for the fiscal year ending December 31, 2024.

We are asking Shareholders to approve the appointment of KPMG for the fiscal year ending December 31, 2024. If Shareholders do not approve the appointment of KPMG LLP, the Audit Committee will reconsider its selection, but it retains sole responsibility for appointing and terminating our independent registered public accounting firm.

Representatives of KPMG LLP will be present at the Meeting.

Board Recommendation

The Board unanimously recommends a vote FOR the appointment of KPMG LLP as the independent registered public accounting firm of the Corporation for the fiscal year ending on December 31, 2024.

Audit, Audit-Related, Tax and Other Fees

The tables below present fees for professional services rendered by KPMG LLP for the fiscal years ended December 31, 2023 and 2022, respectively.

	Aggregate Amount Billed ⁽³⁾	
	2023	2022
Audit Fees ⁽¹⁾	\$ 467,098	\$ 390,265
Tax Fees ⁽²⁾	30,129	33,098
Total	\$ 497,227	\$ 423,363

- (1) Audit fees consisted of the audit of our annual financial statements for the fiscal years ended December 31, 2023 and 2022, respectively, and interim reviews. In addition, audit fees consist of the aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit or review of the issuer's financials and include the provision of comfort letters and consents and the review of documents filed with regulatory authorities.
- (2) Tax fees include fees billed for assistance in the preparation of corporate tax returns and related filings and general tax advisory services.
- (3) All fees by KPMG are invoiced and paid in Canadian dollars. Fees for 2023 have been translated to US dollars at the Bank of Canada average annual exchange rate of 0.7410 and 2022 have been translated to US dollars at the Bank of Canada average annual exchange rate of 0.7685.

Pre-Approval Policies and Procedures

The Audit Committee has adopted procedures pursuant to which all audit, audit-related and tax services, and all permissible non-audit services provided by our independent registered public accounting firm must be pre-approved by the Audit Committee. All services rendered by KPMG LLP during our fiscal year 2023 were permissible under applicable laws and regulations and were all approved in advance by the Audit Committee in accordance with the rules adopted by the SEC in order to implement requirements of the Sarbanes-Oxley Act of 2002.

Audit Committee Report

This report is furnished by the Audit Committee of the Board with respect to our financial statements for the year ended December 31, 2023.

One of the purposes of the Audit Committee is to oversee our accounting and financial reporting processes and the audit of our annual financial statements. Our management is responsible for the preparation and presentation of complete and accurate financial statements. Our independent registered public accounting firm, KPMG LLP, is responsible for performing an independent audit of our financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States) and for issuing a report on their audit.

In performing its oversight role, the Audit Committee has reviewed and discussed our audited financial statements for the year ended December 31, 2023 with our management. Management represented to the Audit Committee that our financial statements were prepared in accordance with generally accepted accounting principles. The Audit Committee has discussed with KPMG LLP, our independent registered public accounting firm, the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board and the Securities Exchange Commission. The Audit Committee has received the written disclosures and the letter from KPMG LLP required by the applicable requirements of the Public Company Accounting Oversight Board regarding communications with audit committees concerning independence. The Audit Committee has discussed with KPMG LLP its independence and concluded that the independent registered public accounting firm is independent from our company.

Based on the review and discussions of the Audit Committee described above, the Audit Committee recommended to the Board that our audited financial statements for the year ended December 31, 2023 be included in our Annual Report on Form 10-K for the year ended December 31, 2023 for filing with the Securities and Exchange Commission.

Audit Committee

Warren Whitehead, Chair

Denis Burger

Bernd R. Seizinger

PROPOSAL NO. 3—ADVISORY (NON-BINDING) VOTE ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

As required by Section 14A of the Exchange Act, the Corporation is seeking a vote on an advisory basis to approve the compensation of the Named Executive Officers (as defined below), as disclosed in this Proxy Statement. Because this vote is advisory, the results will not be binding on the Corporation or the Board. However, this proposal, commonly known as a “say-on-pay” proposal, gives Shareholders the opportunity to endorse or not endorse the Corporation’s executive compensation programs and the results will be taken into consideration when future decisions regarding executive compensation are made. The Corporation provides its Shareholders with the opportunity to cast an annual advisory vote on executive compensation (commonly known as a ‘Say on Pay Proposal’).

As described under “Executive Compensation” below, the Corporation believes that its executive compensation programs are designed to:

- attract and retain qualified, motivated and achievement-oriented individuals by offering compensation that is competitive in the industry and marketplace, especially given the current challenging market conditions for recruiting and retaining talent;
- 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.

The Corporation, the Board and the Compensation Committee believe that the executive compensation of its Named Executive Officers is reasonable and appropriate, justified by the Corporation’s performance and conducive for long-term value creation. The Corporation’s view is that the compensation of its executives must be competitive, weighted and fair. For this reason, the Compensation Committee retained Radford (an Aon Consulting Company) in 2018, 2020, 2022 and 2023, to provide independent advice regarding executive compensation to the Compensation Committee. Radford concluded, in 2023, that the executive compensation program was positioned at the market’s 50th percentile in the aggregate (50th to 75th percentile for the long-term incentives pre-commercial portion of the compensation package, with the potential for actual compensation being higher or lower based on performance)

The Corporation urges Shareholders to read the section entitled “Executive Compensation” and the related narrative and tabular compensation disclosure included in this Proxy Statement. The section entitled “Executive Compensation” provides detailed information regarding the Corporation’s executive compensation program, as well as the compensation of the Named Executive Officers.

At the Meeting, Shareholders will be asked to consider and, if deemed appropriate, to approve, an advisory (non-binding) resolution in the form set out below (the “Say-on-Pay Resolution”), subject to such amendments, variations or additions as may be approved at the Meeting. In order to be passed, the advisory (non-binding) Say-on-Pay Resolution must be passed by a majority of the votes cast by Shareholders present virtually or by proxy at the Meeting.

The text of the advisory (non-binding) Say-on-Pay Resolution to be submitted to Shareholders at the Meeting is set forth below:

BE IT RESOLVED THAT the compensation paid to the Corporation's named executive officers, as disclosed pursuant to Item 402 of Regulation S-K, including the compensation tables and related narrative discussion contained in the proxy statement dated May 14, 2024, is approved on an advisory basis.

Board Recommendation

The Board believes the passing of the Say-on-Pay Resolution is in the best interest of the Corporation and unanimously recommends a vote FOR the passing of the Say-on-Pay Resolution.

PROPOSAL NO. 4—APPROVAL OF NASDAQ 20% ISSUANCE PROPOSAL

Our Board is seeking the approval of our shareholders of the potential issuance of Shares to the holders of the Warrants (as defined below) in excess of 19.99% of our outstanding Shares as calculated using the number of Shares that were issued and outstanding following the closing of the Offering (as defined below) pursuant to the Nasdaq Listing Rules.

Background and Description of the Proposal

On January 25, 2024, we entered into an Underwriting Agreement (the “Underwriting Agreement”) with Newbridge Securities Corporation, pursuant to which we agreed to issue and sell 4,912,280 Shares and 4,912,280 warrants to acquire common shares (the “Warrants”) at a combined public offering price of \$1.71 per Share and Warrant (the “Offering”). The Offering closed on January 30, 2024.

On January 25, 2024, we also entered into a subscription agreement (the “Subscription Agreement”) with Hanmi, pursuant to which we agreed to sell and issue to Hanmi and Hanmi agreed to purchase \$4.0 million of our Shares and warrants to purchase common shares (the “Hanmi Investment”). The Shares and warrants were sold in combination, with one Share and 1.1111106 warrant comprising each combined security set purchased by Hanmi. Each whole Hanmi warrant is exercisable for one Share at an exercise price of \$1.71 per Share. In connection with the transaction, Hanmi received 2,105,263 Shares and 2,339,181 warrants (the “Hanmi Warrants”). The purchase price for each combined set of one Share and 1.1111106 warrants was \$1.90. The warrants acquired by Hanmi pursuant to the Hanmi Investment may not be exercised if Hanmi’s beneficial ownership of our Shares would exceed 19.99% immediately following such exercise. However, the Hanmi Warrants did not include a provision that prohibited the exercise of the warrants if the Shares to be issued in connection with such exercise, combined with the Shares issued upon closing of the Hanmi Investment, would exceed 19.99% of our outstanding Shares at the time of the closing of the Hanmi Investment (the “Nasdaq 19.99% Cap”).

As a result, we and Hanmi subsequently agreed to amend the warrants issued in the Hanmi Investment (the “Amended Warrants”) to prohibit the exercise of the warrants in excess of the Nasdaq 19.99% Cap, unless shareholder approval is first obtained to exceed the Nasdaq 19.99% Cap. Copies of the Amended Warrant were filed with the SEC on April 26, 2024.

The information set forth in this Proposal No. 4 is qualified in its entirety by reference to the full text of the Warrants, Amended Warrants, Underwriting Agreement, and Subscription Agreement, which have been filed as exhibits to the Corporation’s Current Report on Form 8-K filed on January 30, 2024 and April 26, 2024.

Nasdaq Rule 5635

Our Shares are listed on Nasdaq, and as a result, we are subject to the Nasdaq Listing Rules, including Nasdaq Listing Rule 5635. Below is an overview of the relevant provisions of Nasdaq Listing Rule 5635 as they relate to the Hanmi Investment, Amended Warrant, and the Nasdaq 20% Issuance Proposal. The overview does not purport to be complete and is qualified in its entirety by the full text of Nasdaq Rule 5635, which is available on the Nasdaq’s Listing Center website at <https://listingcenter.nasdaq.com/rulebook/nasdaq/rules>.

Nasdaq Rule 5635(d)

Nasdaq Rule 5635(d) requires us to obtain shareholder approval prior to the issuance of securities in connection with a transaction, other than a public offering, involving the sale, issuance or potential issuance by us of more than 19.99% of our outstanding Shares (or securities convertible into or exercisable for Shares) at a price less than the lower of (i) the official closing price (as reflected on Nasdaq.com) immediately preceding the signing of the binding agreement, or (ii) the average official closing price of the Shares (as reflected on Nasdaq.com) for the five trading days immediately preceding the signing of the binding agreement (the “Nasdaq 20% Rule”).

Nasdaq has concluded that the issuance of securities pursuant to the Hanmi Investment did not comply with the Nasdaq 20% Rule, because such issuance did not meet the minimum closing price requirements thereof. Therefore, under the Nasdaq 20% Rule, in no event may we issue or sell to Hanmi, upon the exercise of the warrants issued in connection with the Hanmi Investment, a number of our Shares that, when combined with the Shares issued in the Hanmi Investment, would result in the issuance of more Shares than permitted under the Nasdaq 19.99% Cap unless we obtain shareholder approval to issue Shares in excess of the Nasdaq 19.99% cap. In any event, the Amended Warrants provide that unless we first obtain shareholder approval, we may not issue or sell any of our Shares if such issuance or sale would exceed the Nasdaq 19.99% Cap.

Nasdaq Rule 5635(b)

Nasdaq Listing Rule 5635(b) requires shareholder approval prior to an issuance of securities that will result in a “change of control” of a listed company, which for Nasdaq purposes is generally deemed to occur when, as a result of an issuance, an investor or a group of investors acquires, or has the right to acquire, 20% or more of the outstanding equity or voting power of the company and such ownership or voting power would be the company’s largest ownership position. If the Amended Warrants vest, Hanmi would become the beneficial owner of 28.6% of our outstanding Shares. Further, in the event we issue additional Shares in a financing transaction or otherwise to a person or entity other than Hanmi or its affiliates or Hanmi transfers or sells its Shares to a non-affiliate, and the Amended Warrants subsequently vest, the number of warrant shares subject to the Amended Warrants will increase. As a result, our issuance of Shares pursuant to the Amended Warrants, if exercised, could potentially be deemed to result in a “change of control” for purposes of Nasdaq Listing Rule 5635(b).

Accordingly, we are seeking shareholder approval pursuant to Nasdaq Listing Rule 5635(b) and Rule 5635(d) to permit the issuance of 2,339,181 warrant shares underlying the Amended Warrants in excess of the maximum limits permitted under Nasdaq Rule 5635(b) and Rule 5635(d).

Consequences if Shareholder Approval is Not Obtained

If our shareholders do not approve this proposal, we will not be able to issue to Hanmi the number of Shares to which Hanmi would otherwise be entitled upon full exercise of the Amended Warrants, which could require us, in lieu of delivering those Shares, to pay substantial cash amounts to Hanmi.

Description of Proposal

We are seeking shareholder approval as required by Nasdaq Rule 5635 (as described above) to enable us to issue a number of Shares in connection with the Hanmi Investment and Amended Warrants, that exceeds 20% of our outstanding Shares as of the closing date of the Hanmi Investment. The Shares that could be issued pursuant to the Amended Warrants consist of 2,339,181 additional Shares issuable upon the exercise of the Amended Warrants.

Vote Required

The affirmative vote of the Holders of a majority of votes cast on the proposal, which includes those present in person or represented by proxy and entitled to vote on the matter and excludes the voting power underlying the securities acquired by Hanmi in the Hanmi Investment, is necessary to approve the Nasdaq 20% Issuance Proposal in accordance with Nasdaq Marketplace Rule 5635(e)(4). Broker non-votes will not affect whether this proposal is approved, but abstentions will have the same effect as a vote against the proposal.

Anticipated and Potential Effects of this Proposal

The issuance of the Shares which are the subject of the Nasdaq 20% Issuance Proposal will result in an increase in the number of our Shares outstanding. This will result in a decrease to the respective ownership and voting percentage interests of our other shareholders. Our market value and our future earnings per Share, if any, may be reduced.

If Hanmi exercises the Amended Warrants in full to purchase the warrant shares, it would result in Hanmi beneficially owning 28.6% of our outstanding Shares following the exercise. Such ownership would represent the largest ownership position in our Corporation. As a result, Hanmi could be able to exert significant influence over matters requiring approval by our shareholders, including the election of directors and mergers, acquisitions or other extraordinary transactions. Hanmi may have interests that differ from ours or yours, and it may vote or otherwise act in ways with which you disagree and that may be adverse to your interests. In addition, the concentration of ownership in a single Holder may have the effect of delaying, preventing or deterring another change of control of our Corporation, which could deprive our shareholders of an opportunity to receive a premium for their Shares as part of a sale of our Corporation, or conversely, could facilitate a change of control at a time or under circumstances when you and other shareholders may prefer not to sell. Further, the concentration of ownership could adversely affect the prevailing market price for our Shares.

For your consideration of the Nasdaq 20% Issuance Proposal, the above description of the material terms of the Hanmi Investment is set forth in this Proxy Statement to provide you with basic information concerning the Hanmi Investment. However, the description above is not a substitute for reviewing the full text of the referenced documents, which were attached as exhibits to our Current Report on Form 8-K filed with the SEC on January 30, 2024 and April 26, 2024.

Board Recommendation

The Board unanimously recommends that the Corporation's shareholders vote FOR the Nasdaq 20% Issuance Proposal (Proposal No. 4), and thereby the issuance of Shares issuable pursuant to the Hanmi Investment, including all of the warrant shares issuable upon exercise of the Amended Warrants.

PROPOSAL NO. 5—APPROVAL TO ADJOURN THE MEETING, IF NECESSARY, TO SOLICIT ADDITIONAL PROXIES

At the Meeting, Shareholders will be asked to authorize the Corporation to adjourn the Meeting to another time and place, if necessary or advisable, to solicit additional proxies in the event there are not sufficient votes to approve the Nasdaq 20% Issuance Proposal described in this Proxy Statement at the Meeting (the “Adjournment Proposal”). If the Shareholders do not approve such proposal, the presiding officer of the Meeting could adjourn the Meeting without a vote on Proposal No. 4 to solicit additional proxies and/or to seek to convince Shareholders to change their votes in favor of such proposal.

If it is necessary or advisable to adjourn the Meeting, no notice of any adjournment of less than 30 days is required to be given if the time and place of the adjourned Meeting, and the means of remote communication, if any, by which Shareholders and proxyholders may be deemed to be present and to vote at such adjourned Meeting, are announced at the Meeting at which adjournment is taken, unless after the adjournment a new record date is fixed for the adjourned Meeting. At the adjourned Meeting, Aptose may transact any business which might have been transacted at the original Meeting.

Approval

In order to be passed, the Adjournment Proposal must be passed by a majority of the votes cast by Shareholders present virtually or by proxy at the Meeting.

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 Adjournment Proposal 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 Adjournment Proposal.

Board Recommendation

The Board unanimously recommends a vote FOR the Adjournment Proposal.

EXECUTIVE COMPENSATION

Information About Our Executive Officers

Our leadership team comprises accomplished industry, financial and clinical research professionals who are dedicated to building a comprehensive anticancer drug pipeline and clinical development programs focused on targeted therapeutics directed against dysregulated oncogenic processes in patients with life-threatening hematologic malignancies. For the year ended December 31, 2023, the leadership team included our Chairman, President and Chief Executive Officer, Dr. William G. Rice, our Senior Vice President, Chief Financial Officer and Chief Business Officer, Fletcher Payne; our Senior Vice President and Chief Medical Officer, Dr. Rafael Bejar and our Senior Vice President and Chief Commercial Officer, Philippe Ledru, who departed the Corporation in 2024.

Fletcher Payne, age 61, joined Aptose as Senior Vice President and Chief Financial Officer (“CFO”) and Corporate Secretary in June 2022. Mr. Payne was appointed Chief Business Officer in November 2023. With a healthcare tenure of more than 25 years, Mr. Payne has held several CFO and senior management positions at biotech companies in addition to finance and accounting roles, and has overseen legal, corporate development and licensing functions. During his career, he has executed a wide array of business transactions totaling more than \$3.7 billion, with healthcare focus in clinical testing, oncology, neurological, and orphan diseases indications. Mr. Payne most recently served as CFO of Syapse, where he completed several financing transactions and oversaw accounting, finance, corporate development, and legal functions. Prior, he served as CFO at Catalyst Bioscience, a publicly traded biotech company. He served in a CFO capacity and senior financial positions at CytomX Therapeutics, Plexxikon Inc., Rinat Neuroscience Corporation, Dynavax Technologies Corporation, and Cell Genesys, among others. Mr. Payne holds a B.S. in Finance from the Haas School of Business, University of California, Berkeley.

Dr. Rafael Bejar, M.D., Ph.D., age 53, joined Aptose as Senior Vice President and Chief Medical Officer in January 2020. Dr. Bejar is an internationally recognized physician scientist with extensive research and clinical experience in the area of hematologic malignancies. Dr. Bejar joined Aptose from UC San Diego (“UCSD”) where he began working in 2012. He continues to serve at UCSD as an Associate Professor of Clinical Medicine, caring for patients and maintaining a research laboratory focused on translational studies of myeloid malignancies and also serves and is an independent consultant as a member of the Independent Data Monitoring Committee for other pharmaceutical companies. At UCSD, he founded the MDS Center of Excellence and led the Hematology Disease Team from 2017 to 2019. There he has directed several clinical studies and served as an advisor for numerous companies including Celgene, Takeda, AbbVie, Astex, Genoptix, Forty Seven, PersImmune, and Daiichi-Sankyo. Outside UCSD, Dr. Bejar sits on the Scientific Advisory Board for the MDS Foundation, is a prior member of the National Comprehensive Cancer Network Guidelines Committee, and has led projects for the International Working Group for MDS. He is frequently invited to speak at national and international meetings and has published articles in a variety of journals including The New England Journal of Medicine, Journal of Clinical Oncology, Leukemia, Blood, and Blood Advances. Dr. Bejar completed his fellowship at the Dana-Farber Cancer Institute and has been board certified in Hematology and Oncology. He completed his internship in Internal Medicine at the University of Chicago followed by his residency at the Brigham and Women’s Hospital in Boston where he later served as Medical Chief Resident and an Instructor in Hematology. He holds an MD degree and Neuroscience PhD from UCSD and a BS in Physics from MIT.

The following discussion covers the compensation arrangements for Dr. Rice, Mr. Payne, Dr. Bejar and Mr. Ledru, prior to his departure in 2024 (each, an “NEO” and, collectively the “Named Executive Officers”).

Compensation 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 equity-based compensation plans, 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, especially given the current challenging market conditions for recruiting and retaining talent;
- 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 our overall objectives.

These objectives are achieved by offering executives and employees a compensation package that is competitive and rewards the achievement of both our short-term and long-term objectives. 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 equity-based compensation plans.

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 2023, the Compensation Committee retained Radford (an Aon Consulting Company), to provide independent advice to the Compensation Committee and to conduct a detailed assessment of the executive compensation program of the Corporation. Radford was retained to identify a peer group of companies as well as perform an assessment of the competitiveness of the Corporation's executive compensation process. Radford did 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.

The Compensation Committee conducted an independent assessment for Radford in accordance with the Compensation Committee's charter and Nasdaq listing standards, considering factors included in the listing standards. The Compensation Committee determined, based on an analysis of these factors, that the work of Radford as the independent compensation consultant did not create any conflict of interest.

Radford concluded, in December 2023, that the executive compensation program was positioned at the market's 50th percentile in the aggregate (50th to 75th percentile for the long-term incentives pre-commercial portion of the compensation package, with the potential for actual compensation being higher or lower based on performance).

Comparator Group

In 2023, the Compensation Committee and the Board, with advice from Radford, its independent compensation consultant, reviewed the compensation of its executive officers against that of its compensation peer group. The comparator group considers direct competitors for talent, especially for industry-specific roles. The comparator group is comprised of 17 publicly traded biopharmaceutical companies with less than 100 employees and market values below \$100 million (as of October 2023). The companies comprising the comparator group are as follows:

Comparator Group Companies	
Atreca, Inc.	Kronos Bio, Inc.
Bolt Biotherapeutics, Inc.	Leap Therapeutics, Inc.
Candel Therapeutics, Inc.	Mustang Bio, Inc.
Cardiff Oncology, Inc.	Syros Pharmaceuticals, Inc.
Curis, Inc.	Rain Oncology, Inc.
Cyteir Therapeutics, Inc.	Vincerox Parma, Inc.
eFFECTOR Therapeutics, Inc	TRACON Pharmaceuticals, Inc.
Harpoon Therapeutics, Inc.	

Pay Positioning

The Corporation endeavors to target total cash compensation (salary and short-term incentive) somewhat above the 50th percentile of the comparator group, and generally provides long-term incentive opportunities in the 50th to 75th percentile of the comparator group. The Compensation Committee believes this approach aligns executive compensation with the long-term interests of Shareholders and with the Corporation's strategy, particularly when relatively few executives are performing multiple executive roles. In 2023, 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 also taking into account experience in the role, scope of the role, performance and retention risk, as further explained below, the Compensation Committee suggested compensation goals for the executives for 2024 and the following years aligned with the target pay positioning set out above.

Although the Compensation Committee considers Radford's recommendations in its review of executive compensation, the Compensation Committee ultimately makes its own decisions about compensation matters. The Compensation Committee realizes that using a peer benchmark such as the one provided by Radford is neither the only means for gathering and validating market data nor the only criteria for establishing executive compensation. In instances where an executive is uniquely critical to our success, the Compensation Committee may provide compensation in excess of the benchmark of the comparator group companies. Upward or downward variations for base salary and long-term incentives may also occur as a result of the individual's experience level, the balance of the individual's different elements of compensation, market factors and other strategic considerations. The Compensation Committee believes that, given the competitiveness of our industry and our company culture, our base compensation, cash incentives and equity programs must remain flexible, reward the achievement of clearly defined corporate goals. In addition, the Compensation Committee believes that such programs must be sufficient to retain our existing executive officers and to hire new executive officers, when necessary, and that unnecessary turnover at the executive level can have expensive consequences from the perspectives of time lost and capital required.

In 2023, achievements that were considered by the Compensation Committee when making compensation recommendations included, (i) for the oral, myeloid kinase inhibitor tucatinib, the completion of dose escalation/dose exploration and the APTIVATE expansion trial to include single agent and drug combination in AML patient population; and (ii) for the oral, dual lymphoid and myeloid kinase inhibitor luteolin, dose escalation and evaluation with respect to third generation drug substance, and the manufacture of sufficient third generation drug substance to support clinical needs. The rigorous cash management and the management of the business relationships with strategic partners were also taken into account. In addition, the exceptional market environment for the hiring and retention of talent was an important factor for the Compensation Committee and the Board when making compensation decisions.

Base Salary

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 our success. 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.

Short-Term Compensation Incentives

Short-term compensation incentives 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 incentive 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 and short-term incentives are reviewed by the Compensation Committee and approved by the Board.

The annual cash incentives for executive officers for the year ended December 31, 2023 ranged from 24% to 41% of base salary. Payment of cash bonuses for the Chief Executive Officer and the Chief Financial Officer was voluntarily deferred until the Corporation meets certain financing goals during 2024, and a portion of the potential cash bonus was paid to the Chief Medical Officer, with any remainder of the bonus deferred until the Corporation meets certain financing goals during 2024.

Cash incentives 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.

Short-Term Compensation Incentives - Performance Metrics

The performance of the Named Executive Officers for the period ended December 31, 2023 was measured with respect to the following objectives:

- 1) Achievement of certain milestones for the clinical development of the tuspetinib and luxetpinib programs;
- 2) Achievement of certain milestones related to finance, financing and accounting; and
- 3) Achievement of certain milestones related to corporate and business development.

Each of the above objectives is weighted at 50%, 30% and 20%, respectively, in relation to assessment of satisfaction of overall corporate objectives and determination of any general corporate bonuses and additional unanticipated accomplishments during 2023 were also considered.

Long-Term Incentive Plans

Long-term compensation incentives at Aptose 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 and of stock-based awards under the 2021 Stock Incentive Plan.

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.

The number of options granted for certain executives of Aptose for the year ended December 31, 2023 was based on achievement of both corporate and executive officer objectives. The Compensation Committee recommends the allocation of options, and options are priced using the closing market price of the Shares on the Toronto Stock Exchange ("TSX") or on Nasdaq, as applicable, on the last trading day prior to the grant. Options to purchase Shares granted under the 2021 Stock Incentive Plan expire ten years from the date of grant and vest over a term recommended by the Compensation Committee and approved by the Board of Directors. During 2023, options granted to Aptose Named Executive Officers vested over four years. The Compensation Committee and the Board consider previous grants of options when considering new grants of options.

Stock and option awards may be subject to accelerated vesting in the event of termination or change of control, see "Termination and Change of Control Benefits."

Other Benefits

In certain cases, the Compensation Committee may recommend inclusion of automobile allowances and the payment of certain professional dues as a component of a competitive remuneration package for executives.

Hedge or Offset Instruments

Pursuant to our Disclosure and Insider Trading Policy, no officer, director or other member of management of the Corporation may engage in short sales, transactions in put or call options, hedging transactions, margin accounts, pledges or other inherently speculative transactions with respect to the Corporation's stock at any time.

Clawback Policy

The Board has adopted an incentive compensation recovery policy (the "Clawback Policy") which provides for the recovery of erroneously awarded incentive compensation in the event that the Corporation is required to prepare an accounting restatement due to material noncompliance of the Corporation with any financial reporting requirements under the federal securities laws.

Employment Agreements

Aptose entered into an employment agreement with Dr. Rice on October 25, 2013 upon his commencement as Chairman, President, and Chief Executive Officer. This agreement was amended and restated on August 19, 2014. Pursuant to the employment agreement, Dr. Rice is entitled to an annual base salary of \$624,000, which amount is reviewed annually by the Board and increased at the Board's discretion, upon the advice of the Compensation Committee. Dr. Rice is also eligible for an annual discretionary bonus of up to 55% of his current base salary. The annual bonus is based on the Corporation's and Dr. Rice's achievement of objectives and milestones to be determined on an annual basis by the Board. Dr. Rice is entitled to receive termination benefits described under "Termination and Change of Control Benefits" below. Dr. Rice also receives employee benefits including, without limitation, participation in our 401(k) plan with a 3% non-elective company contribution, participation in Aptose's group health coverage plan and life insurance plan for US employees, 25 days of paid vacation time annually, and an annual automobile allowance of \$18,000. Dr. Rice is subject to certain non-compete restrictions. Dr. Rice receives no remuneration for his service as Chairman of the Board, director or as a member of the R&D Committee of the Board.

Aptose entered into an employment agreement with Mr. Payne upon his commencement as Chief Financial Officer, effective June 27, 2022. Mr. Payne was promoted to Chief Financial Officer and Chief Business Officer in November 2023. Pursuant to the employment agreement, Mr. Payne is entitled to an annual base salary of \$447,000 which amount is reviewed annually by the Board and increased at the Board's discretion, upon the advice of the Compensation Committee. Mr. Payne is also eligible for an annual discretionary bonus of up to 40% of his current base salary. The annual bonus is based on the Corporation's and Mr. Payne's achievement of objectives and milestones to be determined on an annual basis by the Board. Mr. Payne is entitled to receive termination benefits described under "Termination and Change of Control Benefits" below and receives employee benefits, including, without limitation, participation in any 401(k) plan with a 3% non-elective company contribution, participation in other benefits provided by us to our U.S.-based executive officers and other employees, which consist to date of life insurance and health benefits, and 20 days of paid vacation time annually. Mr. Payne is subject to certain non-compete restrictions.

Aptose entered into an employment agreement with Dr. Bejar upon his commencement as Chief Medical Officer, effective January 1, 2020. Pursuant to the employment agreement, Dr. Bejar is entitled to an annual base salary of \$490,000 which amount is reviewed annually by the Board and increased at the Board's discretion, upon the advice of the Compensation Committee. Dr. Bejar is also eligible for an annual discretionary bonus of up to 40% of his current base salary. The annual bonus is based on the Corporation's and Dr. Bejar's achievement of objectives and milestones to be determined on an annual basis by the Board. Dr. Bejar is entitled to receive termination benefits described under "Termination and Change of Control Benefits" below and receives employee benefits, including, without limitation, participation in any 401(k) plan with a 3% non-elective company contribution, participation in other benefits provided by us to our U.S.-based executive officers and other employees, which consist to date of life insurance and health benefits, and 20 days of paid vacation time annually. Dr. Bejar is subject to certain non-compete restrictions.

Aptose entered into an employment agreement with Mr. Ledru upon his commencement as Chief Commercial Officer, effective April 6, 2022. Pursuant to the employment agreement, Mr. Ledru was entitled to an annual base salary of \$410,000 which amount was reviewed annually by the Board and increased at the Board's discretion, upon the advice of the Compensation Committee. Mr. Ledru was also eligible for an annual discretionary bonus of up to 40% of his current base salary. The annual bonus is based on the Corporation's and Mr. Ledru's achievement of objectives and milestones to be determined on an annual basis by the Board. Mr. Ledru was entitled to receive termination benefits described under "Termination and Change of Control Benefits," below and received employee benefits, including, without limitation, participation in any 401(k) plan with a 3% non-elective company contribution, participation in other benefits provided by us to our U.S. based executive officers and other employees, which consist to date of life insurance and health benefits, and 20 days of paid vacation time annually. Mr. Ledru was subject to certain non-compete restrictions. Mr. Ledru departed from the Corporation in 2024.

Summary Compensation Table

The following table details the compensation information for the fiscal years ended December 31, 2022 and December 31, 2023 of the Corporation for the Named Executive Officers. All amounts presented in the following tables are as recorded in US dollars.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock awards ⁽¹⁾ (\$)	Option awards ⁽²⁾ (\$)	All other compensation ⁽³⁾ (\$)	Total compensation (\$)
Dr. William G. Rice <i>Chairman, President and Chief Executive Officer</i>	2023	623,077	-	99,000	174,691	27,900	924,668
	2022	599,289	294,360	-	942,890	27,150	1,863,689
Fletcher Payne <i>Senior Vice President, Chief Financial Officer and Chief Business Officer</i>	2023	448,131	-	65,993	87,345	9,900	611,369
	2022	223,269	125,000	-	564,961	9,150	922,380
Dr. Rafael Bejar <i>Senior Vice President and Chief Medical Officer</i>	2023	488,846	98,000	65,993	87,345	9,900	750,084
	2022	459,231	200,000	-	532,691	9,150	1,201,072
Philippe Ledru <i>Senior Vice President and Chief Commercial Officer⁽⁴⁾</i>	2023	425,769	-	65,993	87,345	9,900	589,007
	2022	299,615	226,417	-	502,307	9,150	1,037,489

- (1) The dollar amounts in this column reflect the aggregate grant date fair value of all stock awards granted during the indicated fiscal year. These amounts have been calculated in accordance with ASC 718, excluding the effect of estimated forfeitures. Assumptions used in the calculation of these amounts are included in note 13 to our audited consolidated financial statements included in the Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2023 (the "10-K"). These amounts do not necessarily correspond to the actual value recognized or that may be recognized by the NEOs. Stock awards are subject to the executives' continued employment with the Corporation. On January 19, 2023, the following RSUs were granted to NEOs: 26,667 RSUs to Dr. Rice, 6,667 RSUs to Mr. Payne, 6,667 RSUs to Dr. Bejar and 6,667 RSUs to Mr. Ledru. Such RSUs vested immediately and had a grant date value of \$9.90 per Share. All stock awards issued to Dr. Rice, Mr. Payne, Dr. Bejar and Mr. Ledru may be subject to accelerated vesting following termination of employment. See "Termination and Change of Control Benefits" below.
- (2) The dollar amounts in this column reflect the aggregate grant date fair value of all share option awards granted during the indicated fiscal year. These amounts have been calculated in accordance with ASC 718, using the Black-Scholes option-pricing model and excluding the effect of estimated forfeitures. Assumptions used in the calculation of these amounts are included in note 12 to our audited consolidated financial statements included in the Corporation's 10-K. These amounts do not necessarily correspond to the actual value recognized or that may be recognized by the NEOs. During the year ended December 31, 2023 the following share options were granted to NEOs: 10,000 share options for Dr. Rice and 13,333 share options for Dr. Bejar at an exercise price of \$9.90 per share; 13,333 share options for Mr. Payne at an exercise price of \$9.90 per share; and 13,333 share options for Mr. Ledru at an exercise price of \$9.90 per share. All options granted will vest over four years.
- Share options are subject to the executives' continued employment with the Corporation and have a maximum term of 10 years. All share option grants issued to Dr. Rice, Mr. Payne, Dr. Bejar and Mr. Ledru may be subject to accelerated vesting following termination of employment. See "Termination and Change of Control Benefits" below.
- (3) The dollar amounts in this column reflect the Corporation's contributions to the executives' accounts in our 401(k) plan and car allowances. The contributions to our executives' accounts in our 401(k) plan were as follows: for 2022: \$9,150 for each of Dr. Rice, Mr. Payne, Mr. Ledru and Dr. Bejar. Car allowances were as follows: for 2022: \$18,000 to Dr. Rice, and for 2023: \$18,000 to Dr. Rice.
- (4) Mr. Ledru departed from the Corporation in 2024.

Outstanding Equity Awards at Fiscal Year-End

Name and Principal Position	Option-based Awards				Share-based awards	
	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price (\$)	Option expiration date	Number shares or units of stock that have not vested (#)	Market value of shares or units of stock that have not vested (\$)
Dr. William G. Rice <i>Chairman, President and Chief Executive Officer</i>	3,333	Nil	15.45	6-Jun-27	Nil	Nil
	6,666	Nil	17.21 ⁽¹⁾	28-Mar-27		
	23,332	23,334 ⁽²⁾	20.10	17-Jan-32		
	26,666	Nil	28.65	2-Jan-29		
	20,000	Nil	42.00	19-Jan-28		
	4,000	Nil	43.26 ⁽¹⁾	30-Mar-26		
	26,666	Nil	46.05	22-Jan-28		
	26,408	Nil	64.55 ⁽¹⁾	15-Jun-24		
	15,244	7,622 ⁽³⁾	65.55	4-Jan-31		
	9,333	Nil	67.95 ⁽¹⁾⁽⁴⁾	9-Apr-24		
	352	Nil	78.82 ⁽¹⁾⁽⁴⁾	28-Jan-24		
	8,000	Nil	78.82 ⁽¹⁾	9-Jun-25		
	111,111	22,222 ⁽⁵⁾	103.65	30-Jan-30		
	Nil	40,000 ⁽⁶⁾	12.15	5-Jul-32		
	Nil	26,666 ⁽⁷⁾	9.90	18-Jan-33		
Fletcher Payne <i>Senior Vice President, Chief Financial Officer and Chief Business Officer</i>	33,333	33,333 ⁽⁸⁾	12.72	26-Jun-32	Nil	Nil
	Nil	13,333 ⁽⁷⁾	9.90	18-Jan-33		
Dr. Rafael Bejar <i>Senior Vice President and Chief Medical Officer</i>	22,222	4,444 ⁽⁹⁾	85.05	1-Jan-30	Nil	Nil
	11,111	2,222 ⁽⁵⁾	103.65	30-Jan-30		
	15,244	7,622 ⁽³⁾	65.55	4-Jan-31		
	23,333	Nil	35.25	18-Aug-31		
	20,000	20,000 ⁽²⁾	20.10	17-Jan-32		
Philippe Ledru <i>Senior Vice President and Chief Commercial Officer⁽¹¹⁾</i>	Nil	13,333 ⁽⁷⁾	9.90	18-Jan-33	Nil	Nil
	19,999	20,001 ⁽¹⁰⁾	18.75	12-Apr-32		

1. Converted from the Canadian exercise price at the rate of 0.7913 Canadian dollars per U.S. dollar.

2. Unexercisable options vest as follows: 33.33% vested on January 17, 2024, 33.33% vest on January 17, 2025, and 33.33% vest on January 17, 2026.

3. Unexercisable options vest as follows: 50% vested on January 4, 2024, and 50% vest on January 4, 2025.

4. Options expiring before the date of the Meeting.

5. Unexercisable options vested on January 30, 2024.

6. Unexercisable options vest upon reaching certain performance triggers as determined by the Board.

7. Unexercisable options vest as follows: 50% vested on January 19, 2024. 16.67% vest on January 19, 2025, 16.67% vest on January 19, 2026 and 16.67% vest on January 19, 2027.

8. Unexercisable options vest as follows: 33.33% vest on June 26, 2024, 33.33% vest on June 26, 2025, and 33.33% vest on June 26, 2026.

9. Unexercisable options vested on January 1, 2024.

10. Unexercisable options vest as follows: 33.33% vested on April 12, 2024, 33.33% vest on April 12, 2025, and 33.33% vest on April 12, 2026.

11. Mr. Ledru departed from the Corporation in 2024.

Retirement Benefits

The Corporation maintains a 401(k) plan in which eligible employees of the Corporation may choose to participate, including the Named Executive Officers. The Corporation makes non-elective contributions of 3% of compensation for all eligible employees, subject to the maximum allowed by the Internal Revenue Code Section 401(k).

Termination and Change of Control Benefits

The employment agreements of Dr. Rice, Mr. Payne, Dr. Bejar and Mr. Ledru, prior to his departure, provide that if their employment is terminated by the Corporation other than for “cause”, or if the Named Executive Officer resigns for “good reason” each of Dr. Rice, Mr. Payne, Dr. Bejar and Mr. Ledru 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, 2023 annual base salary represented \$624,000, Mr. Payne’s annual base salary represented \$447,000, Dr. Bejar’s base salary represented \$490,000 and Mr. Ledru’s base salary represented \$410,000), 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, Mr. Payne, Dr. Bejar and Mr. Ledru provide that certain payments related to health benefits will continue to be made for a period of 12 months following termination of their employment.

The employment agreements of Dr. Rice, Mr. Payne, Dr. Bejar and Mr. Ledru 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” (defined as the consummation of any of the following: (a) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions to which the Corporation is a party, (b) a sale, lease or other conveyance of all or substantially all of the assets of the Corporation, or (c) liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary), each of Dr. Rice, Mr. Payne, Dr. Bejar and Mr. Ledru 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.

The employment agreements of Dr. Rice, Mr. Payne, Dr. Bejar and Mr. Ledru provide that in the event of their termination, other than for cause, the vesting and exercisability of all then outstanding unvested share options, RSUs or other equity awards then held by such NEO become immediately vested and exercisable and shall remain exercisable as set forth in the applicable award documents.

Pay versus Performance

As required by Section 953(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act, and Item 402(4) of Regulation S-K, we are providing the following information about the relationship of the annual total compensation of our NEOs and our performance.

Pay versus Performance Table						
Year	Summary Compensation Table total for CEO	CEO Compensation Actually Paid ⁽¹⁾	Average Summary Compensation Table total for other NEOs ⁽²⁾	Average Compensation Actually Paid to other NEOs ⁽¹⁾⁽²⁾	Value of initial fixed \$100 investment based on TSR	Net loss (\$ Thousands)
(a)	(b)	(c)	(d)	(e)	(f)	(g)
2022	\$1,863,689	\$5,219,075	\$1,053,647	\$1,642,392	\$38	\$(41,823)
2023	\$924,668	\$3,666,103	\$650,154	\$1,418,649	\$11	\$(51,207)

- (1) To calculate the compensation actually paid, the following amounts were added to Summary Compensation Table total compensation.

Year	Fair Value of covered year Unvested Equity Awards	Fair Value of covered year Vested Equity Awards	Change in Fair value of covered year Unvested Equity Awards	Change in Fair Value of covered year Vested Awards	Amounts reported in the Summary Compensation Table for equity awards	Equity Value Included in Compensation Actually Paid
	(a)	(b)	(c)	(d)	(e)	(f) = (a) + (b) + (c) + (d) – (e)
2022	\$3,172,676	\$1,707,132	\$(553,710)	\$(27,822)	\$942,890	\$3,355,386
2023	\$1,765,374	\$1,465,542	\$(291,609)	\$(23,181)	\$174,691	\$2,741,435

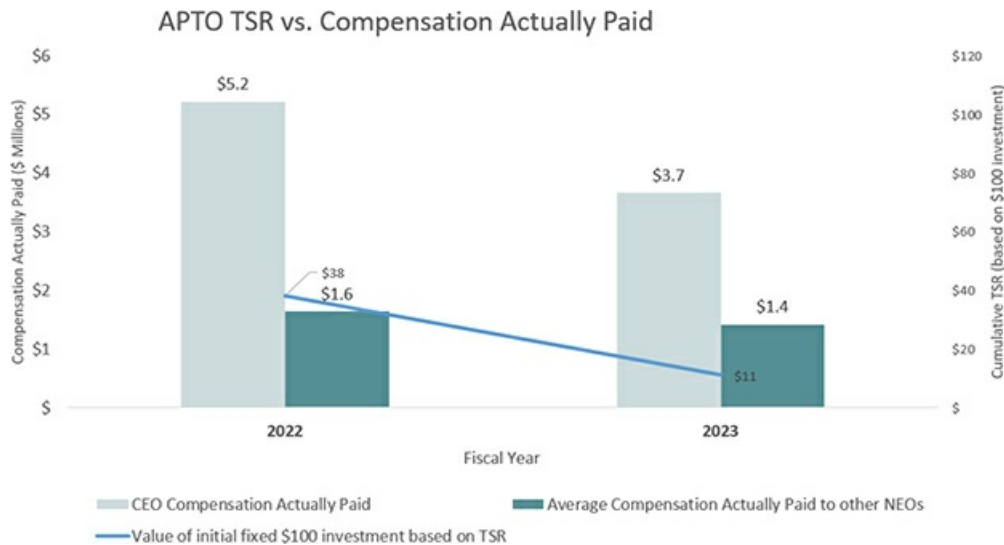
- (2) The other NEOs reflected in columns (d) and (e) represent the following individual for 2023 and 2022: Dr. Rafael Bejar, Mr. Fletcher Payne and Mr. Philippe Ledru.

Narrative

The relationship between compensation actually paid and the pay of our NEOs is described below:

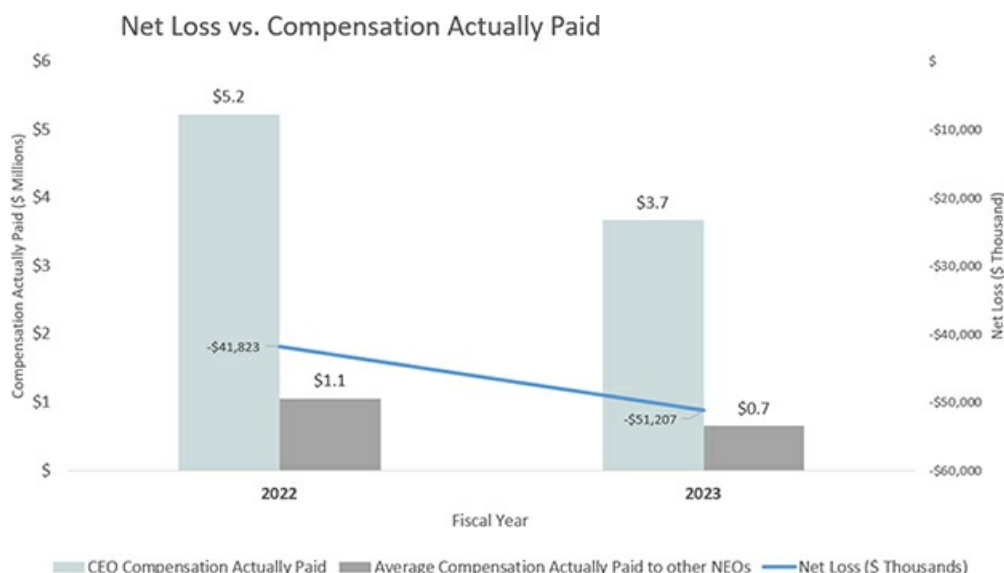
- Relationship Between Compensation Paid to the CEO and Average Other Named Officers and the Corporation's Cumulative TSR** - In both 2023 and 2022, the compensation paid to the CEO and other NEOs was also lower than the Summary Compensation Total due largely to the decrease in our TSR. This is due primarily to the Corporation's use of long-term equity incentive awards, which are tied directly to our stock price in addition to our financial performance. The actual dollar value of previously issued equity securities depends on the market price of the Shares at the time of exercise. As the market price of the Shares is currently lower than the exercise price of outstanding options, realizable value from such equity-based compensation is currently \$0.

The chart below shows the relationship between the compensation actually paid to the CEO and the average compensation actually paid to our other NEOs, on one hand, and the Corporation's cumulative TSR (total shareholder return, based on an initial investment of \$100 on December 31, 2021) over the two most recently completed financial years.



- Relationship Between Compensation Paid to the CEO and Average Other Named Officers and the Corporation's Net Loss** - Key factors affecting compensation actually paid to the CEO and our other NEOs were largely driven by the impact of an equity incentive plan payout that was lower than the prior year, as well as the equity award related adjustments, as a result of volatility in the valuation of outstanding units due to year-over-year changes in the market stock price of our Shares, and to a lesser extent by variability in annual salary, bonus and equity incentive awards. As a result, such changes are not directly related to the changes in our net loss. The actual dollar value of previously issued equity securities depends on the market price of the Shares at the time of exercise. As the market price of the Shares is currently lower than the exercise price of outstanding options, realizable value from such equity-based compensation is currently \$0.

The chart below shows the relationship between the compensation actually paid to the CEO and the average compensation actually paid to our other NEOs, on one hand, and the Corporation's net loss over the two most recently completed financial years.



DIRECTOR COMPENSATION

Overview

The Compensation Committee makes recommendations regarding compensation payable to our non-employee directors to the entire Board, which then makes final decisions regarding such compensation.

Dr. Rice receives no remuneration for his service as Chairman of the Board and director or as a member of the R&D Committee of the Board.

Cash Compensation

Non-employee directors are entitled to an annual fee of \$60,000 with no per meeting fees. The Lead Director is entitled to an additional annual fee of \$40,000. The chair of each committee is entitled to an additional annual fee of \$15,000, with the exception of the chair of the Audit Committee who is entitled to an additional annual fee of \$20,000. Each committee member is entitled to receive an annual fee of \$10,000 per committee, and members of the Audit Committee are entitled to an additional annual fee of \$3,500. All fees are paid in quarterly installments.

Non-employee directors are reimbursed for any out-of-pocket travel expenses incurred in order to attend meetings. Executive directors are not entitled to directors' compensation.

Option Awards

Upon appointment to the Board a non-employee director will be entitled to an initial option grant under the 2021 Stock Incentive Plan and each year thereafter non-employee directors are eligible for an additional grant at the beginning of the fiscal year. The options vest 50% after one year, and 25% for each of the second and third years. If a director resigns, the director will have 90 days from the date of resignation to exercise all vested and unexercised options.

The maximum compensation (cash and equity awards) that may be received by any director during a financial year has been set to \$500,000.

The following table details the compensation earned by each non-employee director for the year ended December 31, 2023:

Name	Fees earned or paid in cash (\$)	Option awards ⁽¹⁾ (2) (\$)	Total (\$)
Carol G. Ashe	80,000 ⁽³⁾	43,669	123,669
Dr. Denis Burger	128,500 ⁽⁵⁾	43,669	172,169
Dr. Mark Vincent	85,000 ⁽⁶⁾	42,682	127,682
Mr. Warren Whitehead	80,000 ⁽⁷⁾	42,682	122,682
Dr. Erich Platzer	80,000 ⁽⁸⁾	43,669	123,669
Dr. Bernd R. Seizinger	88,500 ⁽⁹⁾	43,669	132,169

- (1) The dollar amounts in this column reflect the aggregate grant date fair value of all share option awards granted during the indicated fiscal year. These amounts have been calculated in accordance with ASC 718, using the Black-Scholes option-pricing model and excluding the effect of estimated forfeitures. Assumptions used in the calculation of these amounts will be included in note 12 to our audited consolidated financial statements included in the Corporation's Annual Report on Form 10-K. These amounts do not necessarily correspond to the actual value recognized or that may be recognized by the non-employee director.

During the year ended December 31, 2023, the following share options were granted to Aptose directors: 3,333 share options for Ms. Ashe, 3,333 share options for Dr. Burger, 3,333 share options for Dr. Vincent, 3,333 share options for Mr. Whitehead, 3,333 share options for Dr. Platzer and 3,333 share options for Dr. Seizinger. All options granted will vest over three years.

- (2) The aggregate number of shares subject to outstanding share options held by each of the non-employee directors listed in the table above as of December 31, 2023 was as follows: 25,330 for Ms. Ashe, 37,316 for Dr. Burger, 36,894 for Dr. Vincent, 33,995 for Mr. Whitehead, 34,662 for Dr. Platzer and 9,999 for Dr. Seizinger.
- (3) Ms. Ashe earned this amount for her services as director on the Board and as a member of the Board's Corporate Governance and Nominating Committee and Compensation Committee.

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- (4) Dr. Burger earned this amount for his services as lead director on the Board, as Chair of the Board's Compensation Committee and as a member of the Board's Audit Committee and of the Board's Corporate Governance and Nominating Committee.
- (5) Dr. Vincent earned this amount for his services as director on the Board, as Chair of the Board's Corporate Governance and Nominating Committee and as a member of the R&D Committee.
- (6) Mr. Whitehead earned this amount for his services as director on the Board and as Chair of the Board's Audit Committee.
- (7) Dr. Platzer earned this amount for his services as director on the Board, as a member of the Board's Compensation Committee and as a member of the R&D Committee.
- (8) Dr. Seizinger earned this amount for his services as a director on the Board, as a member of the Board's Audit Committee and as Chair of the Board's R&D Committee.

EQUITY COMPENSATION PLAN INFORMATION

General

As of December 31, 2023, the total number of Shares subject to outstanding awards and available for future issuance by the Corporation under the 2021 Stock Incentive Plan and the Corporation's share option plan (the "Share Option Plan") was 1,566,355. As of December 31, 2023, there were outstanding options to purchase 597,635 Shares issued under the 2021 Stock Incentive Plan and outstanding options to purchase 586,312 Shares issued under the Share Option Plan, which, combined, represented 16.1% of the issued and outstanding Shares of the Corporation as of December 31, 2023 and Nil RSUs issued and outstanding under the 2021 Stock Incentive Plan, representing 0.0% of the issued and outstanding Shares of the Corporation.

2021 Stock Incentive Plan

On April 20, 2021, the Board unanimously approved and adopted, subject to the approval of the Shareholders, the 2021 Stock Incentive Plan. The 2021 Stock Incentive Plan was ratified, confirmed and approved by the Shareholders at the annual and special meeting held on June 1, 2021 and amended to increase the number of shares available thereunder on May 31, 2022 and May 23, 2023.

2021 Stock Incentive Plan Highlights

- *Overall Share Limit.* The total number of Shares reserved under the 2021 Stock Incentive Plan is 691,400, subject to equitable adjustment in the event of any change in capitalization.
- *Outstanding Awards under Incentive Plans.* As of May 10, 2024, there were 1,492,884 shares subject to issuance upon exercise of outstanding options under all of our equity compensation plans, at a weighted average exercise price of \$34.75¹, and a weighted average remaining life of 7.0 years. There were no issued and outstanding Awards other than options.
- *No Liberal Recycling Provisions.* The 2021 Stock Incentive Plan provides that the following Shares shall not be recycled and shall not be made available again for grant under the 2021 Stock Incentive Plan: (i) any Shares which would have been issued upon any exercise of an option but for the fact that the exercise price was paid by a "net exercise" or any Shares tendered in payment of the exercise price of an option; (ii) any Shares withheld by the Corporation or Shares tendered to satisfy tax withholding obligations with respect to an Award; (iii) Shares covered by a stock-settled SAR issued under the 2021 Stock Incentive Plan that are not issued in connection with settlement in Shares upon exercise; or (iv) Shares that are repurchased by the Corporation using option exercise proceeds.
- *No Repricing of "Underwater" Options.* The Corporation will not reprice any previously granted Award for which the fair market value (being the closing price of the Shares, as reported on the Nasdaq or TSX, the "Fair Market Value") is less than the exercise price without Shareholder approval other than as a result of certain customary capitalization adjustments.

¹ Canadian exercise prices have been converted to U.S. dollars based on an exchange rate as of May 10, 2024 of US\$1.00 equals C\$1.3665.

- *No Discount*. All options must have an exercise price equal to or greater than the Fair Market Value of the underlying Shares on the date of grant.
- *Change in Control*. Customary “Change in Control” provisions are triggered by the consummation of certain transactions, and not their approvals by the Board or the Shareholders. In addition, no Award agreement shall contain a definition of change in control that has the effect of accelerating the exercisability of any Award or the lapse of restrictions related to any Award upon only the announcement or Shareholder approval of (rather than consummation of) any reorganization, merger or consolidation of, or sale or other disposition of all or substantially all of the assets of, the Corporation.
- *Awards Subject to Clawback Policy*. Awards under the 2021 Stock Incentive Plan are subject the Clawback Policy, as it may be amended from time to time.
- *No Dividend Equivalents Paid on Unvested Awards*. Under the 2021 Stock Incentive Plan, dividend and dividend equivalent amounts with respect to any Share underlying a restricted stock or RSU award may be accrued but shall not be paid until all conditions or restrictions relating to such Share have been satisfied, waived or lapsed. In addition, the 2021 Stock Incentive Plan prohibits the granting of dividend equivalents on stock options and SARs.
- *Annual Limit on Awards to Directors*. Under the 2021 Stock Incentive Plan, the maximum value of all equity and cash-based compensation granted to a non-employee director cannot exceed \$500,000 in any calendar year (and for this purpose equity value is determined using grant date value under applicable financial accounting rules). The independent, non-employee members of the Board may make exceptions to this limit for a non-executive chair of the Board, provided that he or she may not participate in the decision.

Summary of the 2021 Stock Incentive Plan

The following brief summary of the 2021 Stock Incentive Plan, as proposed to be amended, is not intended to be exhaustive and is qualified in its entirety by the terms of the 2021 Stock Incentive Plan, a copy of which is attached as Appendix B to the Corporation’s proxy statement dated April 18, 2023.

Eligibility

Eligibility under the 2021 Stock Incentive Plan is limited to employees, officers, non-employee directors, consultants, independent contractors or advisors providing services to the Corporation or any entity controlled by the Corporation (an “Affiliate”), or any person to whom an offer of employment or engagement with the Corporation or any Affiliate is extended.

As of May 10, 2024, there were 24 employees, 3 officers, 6 non-employee directors and 4 consultants who are eligible to participate under the 2021 Stock Incentive Plan. The Committee or subcommittee of the Board appointed from time to time by the Board to administer the 2021 Stock Incentive Plan (the “Administrator”), in its sole discretion, will determine which eligible persons will receive Awards under the 2021 Stock Incentive Plan.

New Plan Benefits

Future benefits under the 2021 Stock Incentive Plan, as proposed to be amended, cannot be determined at this time because the grants are at the discretion of the Board and because their value may be dependent upon the satisfaction of vesting conditions and the future price of the Shares. For additional information on the grants and awards made under the 2021 Stock Incentive Plan during the year ended December 31, 2023, see “Summary Compensation Table.”

Shares Available for Awards

Subject to customary capitalization adjustments, as of May 10, 2024, the aggregate number of Shares that may be issued under all Awards under the 2021 Stock Incentive Plan shall equal 916,883 Shares. Any Shares subject to an Award pursuant to the Share Option Plan or the 2021 Stock Incentive Plan that are forfeited, cancelled, exchanged or surrendered or that otherwise terminates or expires without a distribution of Shares shall again be available for grant under the 2021 Stock Incentive Plan. Shares underlying Awards that can only be paid in cash do not count against the overall 2021 Stock Incentive Plan share limit.

The 2021 Stock Incentive Plan provides that the following Shares shall not be recycled and again made available for grant under the 2021 Stock Incentive Plan: (i) any Shares which would have been issued upon any exercise of an option but for the fact that the exercise price was paid by a “net exercise” or any Shares tendered in payment of the exercise price of an option; (ii) any Shares withheld by the Corporation or Shares tendered to satisfy tax withholding obligations with respect to an Award; (iii) Shares covered by a stock-settled SAR issued under the 2021 Stock Incentive Plan that are not issued in connection with settlement in Shares upon exercise; or (iv) Shares that are repurchased by the Corporation using option exercise proceeds. In addition, Shares issued under Awards granted in substitution for awards previously granted by an entity that is acquired by or merged with the Corporation or an Affiliate shall not be counted against the aggregate number of Shares available for Awards under the 2021 Stock Incentive Plan.

In the event that any dividend (other than a regular cash dividend) or other distribution (whether in the form of cash, Shares, other securities or property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase or exchange of Shares or other securities of the Corporation, issuance of warrants or other rights to purchase Shares or other securities of the Corporation order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the 2021 Stock Incentive Plan, then the Administrator shall, in accordance with applicable law and in such manner as it may deem equitable, adjust any or all of (i) the number and type of Shares (or other securities or other property) that thereafter may be made the subject of Awards, and (ii) the number and type of Shares (or other securities or other property) subject to outstanding Awards.

Types of Awards

Options

The 2021 Stock Incentive Plan authorizes awards of options. Subject to the limitations of the 2021 Stock Incentive Plan, the Administrator may grant options for such number of Shares and having such terms as the Administrator designates.

Options shall vest and be exercisable in the timeframe determined by the Administrator, which shall be set forth in the applicable option award agreement. The Administrator fixes the term of each option when granted, but such term may not be greater than 10 years from the date of grant. The exercise price of options is established by the Administrator and shall not be less than 100% of the Fair Market Value of a Share on the date of grant, except in limited circumstances. Payment for the exercise price may be made in cash or its equivalent, payment in unrestricted Shares already owned by the participant or, to the extent permitted under the relevant option award agreement, payment through (i) the sale by a broker acceptable to the Corporation on behalf of the participant of a portion of the Shares subject to the option, or (ii) the withholding of Shares that would otherwise be issuable in connection with the exercise of the options.

Stock Appreciation Rights

The 2021 Stock Incentive Plan authorizes awards of SARs, which confer to the holder a right to receive the excess of (i) the Fair Market Value of one Share on the date of exercise over (ii) the grant price of the SAR as specified in the relevant award agreement, which price shall not be less than 100% of the Fair Market Value of one Share on the date of grant of the SAR. The terms and conditions of a SAR will be set forth in an applicable award agreement, as determined by the Administrator. The Administrator fixes the term of each SAR when granted, but such term may not be greater than 10 years from the date of grant.

Restricted Stock

The 2021 Stock Incentive Plan authorizes awards of Restricted Stock, which will confer to the holder Shares subject to such restrictions as the Administrator may impose in an award agreement.

Restricted Stock shall be issued at the time such Awards are granted and will be held by the Corporation or a nominee until they are no longer subject to restrictions.

The 2021 Stock Incentive Plan authorizes the Administrator to pay dividends to holders of Restricted Stock.

RSUs

The 2021 Stock Incentive Plan authorizes awards of RSUs, which will confer to the holder a right to receive Shares (or a cash payment equal to the Fair Market Value of such Shares) at some future date, subject to such restrictions as the Administrator may impose in an Award agreement.

For RSUs, no Shares shall be issued at the time such Awards are granted. Upon the satisfaction, waiver, or lapse of restrictions relating to RSUs, Shares (or a cash payment equal to the Fair Market Value of such Shares) shall be issued and delivered to the holder of such RSUs.

The 2021 Stock Incentive Plan authorizes the Administrator to grant Dividend Equivalents to RSU holders (generally as additional RSUs), under which the participant shall be entitled to receive payments equivalent to and in lieu of the amount of cash dividends otherwise paid by the Corporation to holders of Shares. RSU Dividend Equivalents may be accrued but not paid out to a participant until all conditions or restrictions relating to such RSUs have been satisfied, waived or lapsed.

Limitations on Non-Employee Director Awards

The sum of the grant date fair value of equity-based Awards and the amount of any cash-based compensation granted to a non-employee director during any calendar year shall not exceed \$500,000, subject to certain exceptions for compensation granted to a non-executive chair of the Board, in limited circumstances.

Transfer of Awards

No Award (other than fully vested and unrestricted Shares issued pursuant to any Award) and no right under any such Award shall be transferrable other than by will or by the laws of descent and distribution. In addition, no Award (other than fully vested and unrestricted Shares issued pursuant to any Award) and no right under any such Award may be pledged, alienated, attached or otherwise encumbered, and any purported pledge, alienation, attachment or encumbrance thereof shall be void and unenforceable against the Corporation or any Affiliate.

Amendment and Termination

The Board may from time to time amend, suspend or terminate the 2021 Stock Incentive Plan or any Award agreement, and the Administrator may amend the terms of any previously granted Award, provided that no amendment to the terms of any previously granted Award may (except as expressly provided in the 2021 Stock Incentive Plan), materially and adversely alter or impair the terms or conditions of the Award previously granted without the participant's consent. Any amendment to the 2021 Stock Incentive Plan, an Award agreement or to the terms of any Award previously granted is subject to compliance with all applicable laws, rules, regulations and policies of any applicable laws, rules, regulations and policies of any applicable governmental entity or stock exchange.

Prior approval of the Shareholders shall be required to make any amendment to the 2021 Stock Incentive Plan or an Award that would (i) require Shareholder approval under the rules of the TSX, the rules or regulations of the SEC, or any other securities exchange that is applicable to the Corporation; (ii) increase the number of Shares authorized under the 2021 Stock Incentive Plan; (iii) permit repricing of Options or SARs, which is currently prohibited; (iv) permit the award of Options or SARs at a price less than 100% of the Fair Market Value of a Share on the date of grant; (v) increase the maximum term permitted for options and for SARs; or (vi) increase the maximum number of Shares or dollar value of Awards which can be granted to a participant in a calendar year.

Change in Control

Effective upon the consummation (or immediately prior to the consummation) of any reorganization, merger, consolidation, split-up, spin-off, combination, plan of arrangement, take-over bid or tender offer, repurchase or exchange of Shares or other securities of the Corporation or any other similar corporate transaction or event involving the Corporation (each, a "Change in Control Event"), the Administrator may, in its sole discretion, provide for (i) the termination of any Award, whether or not vested, in exchange for an amount of cash and/or other property; (ii) the replacement of any Award with other rights or property selected by the Administrator in its sole discretion; (iii) the Award to be assumed by, or substituted for a similar Award from, the successor or survivor of the Corporation, or a parent or subsidiary thereof, with appropriate adjustments; (iv) the vesting or exercisability of Awards notwithstanding anything to the contrary in the applicable Award Agreement; or (v) the determination of a future date after which Awards cannot vest, be exercised or become available, which may be the effective date of the Change in Control Event.

Clawback Provisions

All awards under the 2021 Stock Incentive Plan are subject to forfeiture or other penalties pursuant to the Clawback Policy.

Withholdings

All awards under the 2021 Stock Incentive Plan are subject to applicable deductions at source and tax reporting.

Share Option Plan

The Corporation currently maintains its existing Share Option Plan. However, following the approval of the 2021 Stock Incentive Plan by the shareholders at the June 1, 2021 annual shareholder meeting, no further grants were permitted to be made under the Share Option Plan, though existing grants under the Share Option Plan continue in effect in accordance with their terms.

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. Further to the approval of the 2021 Stock Incentive Plan by Shareholders, the Share Option Plan no longer makes new option grants available under the Share Option Plan upon the exercise of options previously granted. A copy of the Share Option Plan was filed on June 12, 2015 and is available on SEDAR+ at www.sedarplus.ca.

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, 2023.

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.

Employee Share Purchase Plan

On April 20, 2021, the Board unanimously approved and adopted, subject to the approval of the Shareholders, the Corporation's 2021 employee stock purchase plan (the "ESPP"), a copy of which is attached as Appendix C to the Corporation's proxy statement dated April 20, 2021. After being approved by the Shareholders at the annual and special meeting held on June 1, 2021, the ESPP became effective on July 2, 2021.

ESPP Highlights

The ESPP :

- reserves 113,333 Shares. As of May10, 2024, the closing price of a Share on Nasdaq was \$1.23;
- permits a participant to contribute up to 15% of his or her eligible compensation each pay period through payroll deductions;
- establishes offering periods (usually two 6-month offering periods);
- permits participants to purchase Shares at a purchase price equal to 85% of the lesser of (i) the Fair Market Value of the Shares on the first trading day of an offering period (the "Offering Date"), and (ii) the Fair Market Value of the Shares on the last trading day of any offering period (or purchase period, if applicable) (the "Exercise Date"); and
- limits the value of Shares that a participant may purchase in a calendar year to \$25,000 and limits the number of Shares that may be purchased by a participant under the ESPP to less than 5% of the outstanding Shares or 10,000 Shares per offering period.

ESPP Benefits

Participation in the ESPP is voluntary and each eligible employee will have the discretion to determine whether and to what extent to participate in and contribute to the ESPP. Accordingly, the benefits and amounts that will be received or allocated to officers and other employees under the ESPP are not determinable at this time.

Summary of Material Provisions of the ESPP

The following brief summary of the ESPP is not intended to be exhaustive and is qualified in its entirety by the terms of the ESPP, a copy of which is attached as Appendix C to the Corporation's proxy statement dated April 20, 2021.

Plan Administration

The ESPP is administrated by the Compensation Committee, or by the Board acting in place of the Compensation Committee. Subject to the terms of the ESPP, the Compensation Committee has the authority to, among other matters determine the terms and conditions of offerings under the ESPP, determine the eligibility of participants, and construe, interpret and apply the terms of the ESPP.

Shares Reserved for Issuance

Subject to customary capitalization adjustments, the maximum number of Shares reserved for issuance from treasury under the ESPP is 113,333.

Eligibility

Any individual who is a common law employee of the Corporation and any of its subsidiaries designated by the Compensation Committee for at least 20 hours per week on any given Offering Date will be eligible to participate in the ESPP.

The Compensation Committee may, in its discretion, exclude the following categories of employees from participation: (i) employees who have not completed at least two years of service since their last hire date; (ii) employees who customarily work not more than 20 hours per week or five months per calendar year; or (iii) certain highly-compensated employees.

As of May 10, 2024, there are approximately 27 employees which are eligible to participate under the ESPP.

Offering Periods

The ESPP is currently expected to be administered through consecutive six-month periods referred to as “Offering Periods”. The Offering Periods will be determined by the Compensation Committee, provided that no Offering Period may extend for a period longer than 27 months.

On the Offering Date, each eligible employee who has properly enrolled in that Offering Period will be granted an option to purchase Shares to be funded by payroll deductions, based on the participant’s elected contribution rate. Unless a participant has properly withdrawn from the Offering Period, each option granted under the ESPP will automatically be exercised on the Exercise Date. The purchase price will be equal to 85% of the lesser of the Fair Market Value of the Shares on (i) the Offering Date; and (ii) the Exercise Date.

Contribution and Purchase Limitations

Unless otherwise determined by the Compensation Committee in accordance with the terms of the ESPP, no participant may (i) elect a contribution rate of more than 15% of his or her compensation for the purchase of Shares under the ESPP in any one payroll period; (ii) purchase more than 10,000 Shares under the ESPP on any one Exercise Date; or (iii) purchase Shares that have a Fair Market Value of more than \$25,000, determined as of the Offering Date, in any calendar year.

Certain Corporate Transactions

If the number of outstanding Shares is changed by a dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Corporation, or other change in the corporate structure of the Corporation affecting the Shares occur, the Compensation Committee, in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the ESPP will, in such manner as it may deem equitable, adjust the number and class of shares which may be delivered under the ESPP, the purchase price and the number of Shares covered by each option under the ESPP which has not yet been exercised, and the contribution and purchase limitations.

Amendments and Termination

The Compensation Committee may generally amend, suspend, or terminate the ESPP at any time without Shareholder approval.

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During the year ended December 31, 2023, Named Executive Officers, as a group, did not purchase any Shares pursuant to the ESPP. Employees purchased an aggregate of 5,891 Shares pursuant to the ESPP during the same period.

Equity Compensation Plan Information

The following table sets forth certain details as at the end of the year ended December 31, 2023 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 (a)	Weighted- average exercise price of outstanding options (b)	Number of Shares remaining available for future issuance under the equity compensation plans (Excluding Shares reflected in Column (a))(1)
Equity compensation plans approved by security holders	1,183,947	\$ 44.78	382,408
Equity compensation plans not approved by security holders	-	-	-
Total	1,183,947	\$ 44.78	382,408

1. Includes share option awards, RSUs, and Dividend Equivalents that may be awarded under our 2021 Stock Incentive Plan and Share Option Plan as at December 31, 2023.

Annual Burn Rate

The following table provides the annual burn rate associated with the 2021 Stock Incentive Plan and the Share Option Plan for each of the Corporation's three most recent fiscal years:

Equity Compensation Plan	Fiscal year	Number of securities granted under the plan ⁽¹⁾⁽²⁾	Weighted average number of securities outstanding ⁽¹⁾⁽³⁾	Annual burn rate ⁽⁴⁾
2021 Stock Incentive Plan	2023	254,953	6,754,628	3.77%
	2022	439,667	6,151,100	7.15%
	2021	100,200	5,939,080	1.69%
Share Option Plan	2023	-	-	-
	2022	-	-	-
	2021	210,383	5,939,080	3.54%

(1) The numbers have been reduced in the table above in accordance with the 15:1 reverse split effected May 24, 2023.

(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 repurchased or issued during the period, and 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.

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, 2023, 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 RELATED PERSONS IN TRANSACTIONS

For the last two completed fiscal years, no director, proposed director, executive officer, or immediate family member of a director, proposed director or executive officer nor, to the knowledge of our directors or executive officers, after having made reasonable inquiry, any person or company who beneficially owns, directly or indirectly, Shares carrying more than 5% of the voting rights attached to all Shares outstanding at the date hereof, or any immediate family member thereof, had any material interest, direct or indirect, in any transaction or proposed transaction of the Corporation which involves an amount exceeding the lesser of \$120,000 or one percent of the average of the Corporation's total assets at year-end for the last two completed fiscal years.

DELINQUENT SECTION 16(A) REPORTS

Section 16(a) of the Exchange Act requires our directors and executive officers and all persons who beneficially own more than 10 percent of our outstanding Shares to file with the SEC initial reports of changes in ownership of our Shares. To our knowledge, based on a review of the copies of such reports and amendments to such reports furnished to us with respect to the year ended December 31, 2023, and based on written representations by our directors and executive officers, all required Section 16(a) reports under the Exchange Act for our directors, executive officers, and beneficial owners of greater than 10 percent of our Shares were filed on a timely basis during the year ended December 31, 2023.

HOUSEHOLDING OF ANNUAL PROXY MATERIALS

Some banks, brokers and other nominee record holders may be participating in the practice of “householding” proxy statements and annual reports. This means that only one copy of our Notice of Internet Availability of Proxy Materials, proxy materials or annual report to Shareholders may have been sent to multiple Shareholders in each household unless otherwise instructed by such Shareholders. We will deliver promptly a separate copy of these documents to any Shareholder upon written or oral request to our Senior Vice President, Chief Financial Officer, Chief Business Officer and Corporate Secretary at Aptose Biosciences Inc., Suite 120, 12770 High Bluff Drive, San Diego, California, telephone: 858-926-2730. Any Shareholder who wants to receive separate copies of our Notice of Internet Availability of Proxy Materials, proxy materials or annual report to Shareholders in the future, or any Shareholders who is receiving multiple copies and would like to receive only one copy per household, should contact the Shareholder’s bank, broker, or other nominee record holder, or the Shareholder may contact us at the above address and phone number.

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, 2023 or from January 1, 2024 to the date hereof.

DIRECTORS AND OFFICERS’ LIABILITY

We purchase and maintain liability insurance for the benefit of directors and officers to cover liability incurred by such person in such capacities. The policy provides for coverage in the amount of \$30,000,000. The annual premium payable by the Corporation for directors’ and officers’ liability insurance for the year ended December 31, 2023 was approximately \$864,000.

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.

ADDITIONAL INFORMATION

Additional information relating to us, including our most current Annual Report on Form 10-K (together with documents incorporated therein by reference), our consolidated financial statements for the year ended December 31, 2023, the report of the independent registered public accounting firm thereon, and management’s discussion and analysis of our financial condition and results of operations for the year ended December 31, 2023 can be found by accessing the SEC’s EDGAR filing database at www.sec.gov and on SEDAR+ at www.sedarplus.ca. Copies of those documents are available upon written request to the Senior Vice President, Chief Financial Officer, Chief Business Officer and Corporate Secretary at Aptose Biosciences Inc., Suite 120, 12770 High Bluff Drive, San Diego, California, free of charge to our securityholders. Our financial information is provided in our consolidated financial statements for the year ended December 31, 2023 and management’s discussion and analysis of our financial condition and results of operations for the year ended December 31, 2023.

DIRECTORS' APPROVAL

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

(signed) William G. Rice, Ph.D.
Chairman, President and Chief Executive Officer
May 14, 2024

APPENDIX A

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 benchmarks, 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**”), applicable United States securities laws, the rules and regulations of the applicable stock exchanges (including, without limitation, Nasdaq Listing Rule 5605(a)(2)) and any other laws applicable to the Corporation. The Board shall affirmatively determine the independence of each director. 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. The Corporation will have, or explain why it does not have, at least two directors of the Board who are Diverse, including (i) at least one Diverse director who self-identifies as Female; and (ii) at least one Diverse director who self-identifies as an Underrepresented Minority or LGBTQ+. Capitalized but undefined terms used in this paragraph have the meanings given to them in Nasdaq Listing Rule 5605(f).
3. 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

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- (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;

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- (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.



8th Floor, 100 University Avenue
Toronto, Ontario M5J 2Y1
www.computershare.com

Security Class

Holder Account Number

Fold

Form of Proxy - Annual and Special Meeting to be held on June 18, 2024

This Form of Proxy is solicited by and on behalf of Management.

Notes to proxy

1. Every holder has the right to appoint some other person or company of their choice, who need not be a holder, to attend and act on their behalf at the meeting or any adjournment or postponement thereof. If you wish to appoint a person or company other than the Management Nominees whose names are printed herein, please insert the name of your chosen proxyholder in the space provided (see reverse).
2. If the securities are registered in the name of more than one owner (for example, joint ownership, trustees, executors, etc.), then all those registered should sign this proxy. If you are voting on behalf of a corporation or another individual you may be required to provide documentation evidencing your power to sign this proxy with signing capacity stated.
3. This proxy should be signed in the exact manner as the name(s) appear(s) on the proxy.
4. If a date is not inserted in the space provided on the reverse of this proxy, it will be deemed to bear the date on which it was mailed to the holder by Management.
5. The securities represented by this proxy will be voted as directed by the holder, however, if such a direction is not made in respect of any matter, and the proxy appoints the Management Nominees listed on the reverse, this proxy will be voted as recommended by Management.
6. The securities represented by this proxy will be voted in favour, or withheld from voting, or voted against each of the matters described herein, as applicable, in accordance with the instructions of the holder, on any ballot that may be called for. If you have specified a choice with respect to any matter to be acted on, the securities will be voted accordingly.
7. This proxy confers discretionary authority in respect of amendments or variations to matters identified in the Notice of Meeting and Management Information Circular or other matters that may properly come before the meeting or any adjournment or postponement thereof, unless prohibited by law.
8. This proxy should be read in conjunction with the accompanying documentation provided by Management.

Fold

Proxies submitted must be received by 5:00 pm, Eastern Daylight Time, on June 14, 2024.

VOTE USING THE TELEPHONE OR INTERNET 24 HOURS A DAY 7 DAYS A WEEK!



To Vote Using the Telephone

- Call the number listed BELOW from a touch tone telephone.
1-866-732-VOTE (8683) Toll Free



To Vote Using the Internet

- Go to the following web site:
www.investorvote.com
- Smartphone?
Scan the QR code to vote now.



To Receive Documents Electronically

- You can enroll to receive future securityholder communications electronically by visiting www.investorcentre.com.



To Virtually Attend the Meeting

- You can attend the meeting virtually by visiting the URL provided on the back of this document.

If you vote by telephone or the Internet, DO NOT mail back this proxy.

Voting by mail may be the only method for securities held in the name of a corporation or securities being voted on behalf of another individual.

Voting by mail or by Internet are the only methods by which a holder may appoint a person as proxyholder other than the Management Nominees named on the reverse of this proxy. Instead of mailing this proxy, you may choose one of the two voting methods outlined above to vote this proxy.

To vote by telephone or the Internet, you will need to provide your CONTROL NUMBER listed below.

CONTROL NUMBER



Appointment of Proxyholder

I/We being holder(s) of securities of Aptose Biosciences Inc. (the "Corporation") hereby appoint: William G. Rice, or failing this person, Denis Burger (the "Management Nominees")

OR

Print the name of the person you are appointing if this person is someone other than the Management Nominees listed herein.

Note: If completing the appointment box above YOU MUST go to <http://www.computershare.com/aptose> and provide Computershare with the name and email address of the person you are appointing. Computershare will use this information ONLY to provide the appointee with a user name to gain entry to the online meeting.

as my/our proxyholder with full power of substitution and to attend, act and to vote for and on behalf of the holder in accordance with the following direction (or if no directions have been given, as the proxyholder sees fit) and on all other matters that may properly come before the Annual and Special Meeting of shareholders of the Corporation to be held on June 18, 2024 at 8:00 am, Eastern Daylight Time, by live webcast accessible directly online at <https://web.lumiagm.com/413029776> (the "Meeting") and at any adjournment or postponement thereof.

VOTING RECOMMENDATIONS ARE INDICATED BY HIGHLIGHTED TEXT OVER THE BOXES.

1. Election of Directors

	For	Against		For	Against		For	Against	Fold
01. Carol Ashe	<input type="checkbox"/>	<input type="checkbox"/>	02. Dr. Denis Burger	<input type="checkbox"/>	<input type="checkbox"/>	03. Dr. Eric Platzer	<input type="checkbox"/>	<input type="checkbox"/>	
04. Dr. William G. Rice	<input type="checkbox"/>	<input type="checkbox"/>	05. Dr. Mark D. Vincent	<input type="checkbox"/>	<input type="checkbox"/>	06. Warren Whitehead	<input type="checkbox"/>	<input type="checkbox"/>	
07. Dr. Bernd R. Seizinger	<input type="checkbox"/>	<input type="checkbox"/>							

2. Appointment of Auditors

Appointment of KPMG, LLP as the independent accounting firm for the Corporation.

For	Against	Abstain
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Say-on-Pay

Advisory (non-binding) resolution on the compensation of the Corporation's named executive officers.

For	Against	Abstain
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Approval of Nasdaq 20% Issuance Proposal

Approving the potential issuance of common shares of the Corporation (the "Shares") to the holders of certain warrants in excess of 19.99% of the outstanding Shares pursuant to the Nasdaq Listing Rules.

For	Against	Abstain
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Multiple Adjournments

Approving one or more adjournments of the Meeting, if necessary or appropriate, if a quorum is present, to permit further solicitation of proxies if there are not sufficient votes at the time of the Meeting to approve Proposal No. 4.

For	Against	Abstain
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Signature of Proxyholder

Signature(s)

Date

I/We authorize you to act in accordance with my/our instructions set out above. I/We hereby revoke any proxy previously given with respect to the Meeting. If no voting instructions are indicated above, and the proxy appoints the Management Nominees, this Proxy will be voted as recommended by Management.

DD / MM / YY

Interim Financial Statements - Mark this box if you would like to receive Interim Financial Statements and accompanying Management's Discussion and Analysis by mail.

☐

Annual Financial Statements - Mark this box if you would NOT like to receive the Annual Financial Statements and accompanying Management's Discussion and Analysis by mail.

☐

If you are not mailing back your proxy, you may register online to receive the above financial report(s) by mail at www.computershare.com/maillinglist.



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