

**FORM 6-K**  
**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

**Report of Foreign Issuer**

**Pursuant to Rule 13a-16 or 15d-16 of  
the Securities Exchange Act of 1934**

For the Month of October, 2014

Commission File Number 1-32001

**Aptose Biosciences Inc.**  
**(formerly Lorus Therapeutics Inc.)**

---

(Translation of registrant's name into English)

**2 Meridian Road, Toronto, Ontario M9W 4Z7**

---

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F

Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): \_\_\_\_

**Note:** Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): \_\_\_\_

**Note:** Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes

No

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b):82-\_\_\_\_\_.

---

---

**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Aptose Biosciences Inc.

Date: October 6, 2014

By: /s/ "Gregory Chow"

Gregory Chow

Senior Vice President and Chief Financial Officer

---

## EXHIBIT INDEX

99.1	Material Change Report
99.2	Certificate of Amendment
99.3	Aptose Biosciences Inc. - First Supplemental Warrant Indenture

**Form 51-102F3**  
**Material Change Report**

**Item 1 Name and Address of Company**

Aptose Biosciences Inc. (“Aptose” or the “Company”)  
2 Meridian Road  
Toronto, ON  
M9W 4Z7

**Item 2 Date of Material Change**

October 1, 2014

**Item 3 News Release**

A news release reporting the material change was issued by Aptose on October 1, 2014 in Canada through CNW Group and is attached hereto as Schedule “A”.

**Item 4 Summary of Material Change**

On October 1, 2014, Aptose announced that it had filed articles of amendment to give effect to the reverse stock split (consolidation) of its common shares (the “Common Shares”) on the basis of one (1) post-consolidation Common Share for each twelve (12) pre-consolidation Common Shares (the “Reverse Stock Split”). The number of Common Shares outstanding as of the time of the announcement was 139,324,451. The number of Common Shares outstanding following the Reverse Stock Split will be of approximately 11,610,402.

**Item 5 Full Description of Material Change**

For more information regarding the material change, please see the news release issued on October 1, 2014 attached hereto as Schedule “A.”

**Item 6 Reliance on subsection 7.1(2) of National Instrument 51-102**

Not Applicable.

**Item 7 Omitted Information**

Not Applicable.

**Item 8 Executive Officer**

For further information please contact:  
Aptose Biosciences Inc.  
Gregory K. Chow  
416-798-1200

**Item 9 Date of Report**

October 6, 2014

## Schedule A

### News Release



### Aptose Biosciences Announces Reverse Stock Split

**SAN DIEGO and TORONTO - October 1, 2014** - Aptose Biosciences Inc. (TSX: APS), a clinical-stage company developing new therapeutics and molecular diagnostics that target the underlying mechanisms of cancer, announces that it has filed articles of amendment to give effect to the reverse stock split (consolidation) of its common shares (the "Common Shares") on the basis of one (1) post-consolidation Common Share for each twelve (12) pre-consolidation Common Shares (the "Reverse Stock Split").

At the annual general and special meeting of the shareholders of the Company held on August 19, 2014, the shareholders of the Company authorized the board of directors to effect a reverse stock split of the Common Shares at a ratio within the range of one (1) post-consolidation Common Share for each five (5) to fifteen (15) pre-consolidation Common Shares. It is expected that the Common Shares will commence trading on the Toronto Stock Exchange on a consolidated basis on or about October 6, 2014. The number of Common Shares currently outstanding is 139,324,451. The number of Common Shares outstanding following the Reverse Stock Split will be of approximately 11,610,402.

The Reverse Stock Split is being implemented as a way to potentially increase the trading price of the common shares as the Company is contemplating a potential listing on the NASDAQ Stock Exchange.

"We are extremely appreciative of the support we have received from our shareholders for transforming Aptose into a preeminent company committed to anticancer drug development," William G. Rice, Ph.D., Aptose's Chairman, President and Chief Executive Officer. "In effecting the reverse split, we are now significantly closer to meeting listing requirements for trading on the NASDAQ market, which would expand our visibility, and provide access to a broader investor base and opportunity for increased shareholder value."

Letters of transmittal with respect to the Reverse Stock Split have been mailed out to all registered shareholders. All registered shareholders of the Company are required to send their certificates representing pre-consolidation Common Shares with a properly executed letter of transmittal to the transfer agent of the Company, Computershare Investor Services Inc., in accordance with the instructions provided in the letter of transmittal. If, as a result of the Reverse Stock Split, a shareholder would be entitled to receive a fractional Common Share, the number of Common Shares to be received by such shareholder will be rounded up or down to the nearest whole Common Share. All other outstanding securities of the Company exchangeable, exercisable or convertible into Common Shares will be adjusted accordingly.

Shareholders who hold their Common Shares through their broker or other intermediary and do not have actual share certificates will not be required to complete and return a letter of transmittal. Any pre-consolidation Common Shares owned by such shareholders will automatically be adjusted as a result of the Reverse Stock Split and no further action is required to be taken by such shareholders.

#### About Aptose

Aptose Biosciences is a clinical-stage biotechnology company committed to discovering and developing personalized therapies that address unmet medical needs in oncology. Aptose is advancing new therapeutics focused on novel cellular targets on the leading edge of cancer research coupled with companion diagnostics to identify the optimal patient population for its products. Aptose's lead anticancer agent APTO-253 is under development for acute myeloid leukemia (AML), myelodysplastic syndromes (MDS) and other hematologic malignancies.

#### Forward Looking Statements

This press release contains forward-looking statements within the meaning of Canadian and U.S. securities laws including regarding a potential listing on the NASDAQ Stock Exchange and the Reverse Stock Split. Such statements include, but are not limited to, statements relating to Aptose's plans, objectives, expectations and intentions and other statements including words such as "continue", "expect", "intend", "will", "should", "would", "may", and other similar expressions. Such statements reflect our current views with respect to future events and are subject to risks and uncertainties and are necessarily based upon a number of estimates and assumptions that, while considered reasonable by us are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause our actual results, performance or achievements to be materially different from any future results, performance or achievements described in this press release. Such expressed or implied forward looking statements could include, among others: our ability to obtain the capital required for research and operations; the inherent risks in early stage drug development including demonstrating efficacy; development time/cost and the regulatory approval process; the progress of our clinical trials; our ability to find and enter into agreements with potential partners; our ability to attract and retain key personnel; changing market conditions; and other risks detailed from time-to-time in our ongoing quarterly filings, annual information forms, annual reports and annual filings with Canadian securities regulators and the United States Securities and Exchange Commission.

Should one or more of these risks or uncertainties materialize, or should the assumptions set out in the section entitled "Risk Factors" in our filings with Canadian securities regulators and the United States Securities and Exchange Commission underlying those forward-looking statements prove incorrect, actual results may vary materially from those described herein. These forward-looking statements are made as of the date of this press release and we do not intend, and do not assume any obligation, to update these forward-looking statements, except as required by law. We cannot assure you that such statements will prove to be accurate as actual results and future events could differ materially from those anticipated in such statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.

For further information, please contact:

**Aptose Biosciences**  
Greg Chow, CFO  
416-798-1200  
gchow@aptose.com

**BCC Partners**

Karen L. Bergman or Susan Pietropaolo

650-575-1509 or 845-638-6290

kbergman@bccpartners.com or spietropaolo@bccpartners.com

**Certificate of Amendment**

*Canada Business Corporations Act*

**Certificat de modification**

*Loi canadienne sur les sociétés par actions*

Aptose Biosciences Inc.

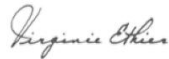
Corporate name / Dénomination sociale

665030-9

Corporation number / Numéro de société

I HEREBY CERTIFY that the articles of the above-named corporation are amended under section 178 of the *Canada Business Corporations Act* as set out in the attached articles of amendment.

JE CERTIFIE que les statuts de la société susmentionnée sont modifiés aux termes de l'article 178 de la *Loi canadienne sur les sociétés par actions*, tel qu'il est indiqué dans les clauses modificatrices ci-jointes.



Virginie Ethier

Director / Directeur

2014-10-01

Date of Amendment (YYYY-MM-DD)  
Date de modification (AAAA-MM-JJ)



- |   |   |
|---|---|
| 1 | Corporate name<br>Dénomination sociale<br><b>Aptose Biosciences Inc.</b>              |
| 2 | Corporation number<br>Numéro de la société<br><b>665030-9</b>                         |
| 3 | The articles are amended as follows<br>Les statuts sont modifiés de la façon suivante |

See attached schedule / Voir l'annexe ci-jointe

- |   |   |
|---|---|
| 4 | Declaration: I certify that I am a director or an officer of the corporation.<br>Déclaration : J'atteste que je suis un administrateur ou un dirigeant de la société. |
|---|---|

Original signed by / Original signé par  
Avanish Vellanki  
Avanish Vellanki  
650-351-6715

Misrepresentation constitutes an offence and, on summary conviction, a person is liable to a fine not exceeding \$5000 or to imprisonment for a term not exceeding six months or both (subsection 230(1) of the CBCA).

Faire une fausse déclaration constitue une infraction et son auteur, sur déclaration de culpabilité par procédure sommaire, est passible d'une amende maximale de 5 000 \$ et d'un emprisonnement maximal de six mois, ou l'une de ces peines (paragraphe 230(1) de la LCSA).

You are providing information required by the CBCA. Note that both the CBCA and the *Privacy Act* allow this information to be disclosed to the public. It will be stored in personal information bank number IC/PPU-049.

Vous fournissez des renseignements exigés par la LCSA. Il est à noter que la LCSA et la *Loi sur les renseignements personnels* permettent que de tels renseignements soient divulgués au public. Ils seront stockés dans la banque de renseignements personnels numéro IC/PPU-049.



**SCHEDULE A OF**  
**ARTICLES OF AMENDMENT OF**  
**APTOSE BIOSCIENCES INC.**  
**(THE "CORPORATION")**

---

The Articles of the Corporation are hereby amended pursuant to Section 173(1)(h) of the *Canada Business Corporations Act* to provide that the issued and outstanding common shares of the Corporation (the "**Common Shares**") be consolidated on the basis of one (1) post-consolidation Common Share for each twelve (12) outstanding pre-consolidation Common Shares without amending the stated capital account for the Common Shares of the Corporation.

No fractional Common Share shall be issued and any fractional Common Share of the Corporation resulting from such consolidation shall be rounded up or down to the nearest whole Common Share without any payment or other compensation being made to any shareholder in respect thereof.

**APTOSE BIOSCIENCES INC. (formerly Lorus Therapeutics Inc.)**

**and**

**COMPUTERSHARE TRUST COMPANY OF CANADA**

**FIRST SUPPLEMENTAL WARRANT INDENTURE**

October 1, 2014

**THIS FIRST SUPPLEMENTAL WARRANT INDENTURE** dated as of October 1, 2014.

**BETWEEN:** **APTOSE BIOSCIENCES INC.** (formerly Lorus Therapeutics Inc.), a company incorporated under the laws of Canada;  
(hereinafter called the "**Company**");

**AND:** **COMPUTERSHARE TRUST COMPANY OF CANADA**, a trust company governed by the laws of Canada;  
(hereinafter called the "**Warrant Agent**").

**WHEREAS:**

- A. The Company and the Warrant Agent entered into a share purchase warrant indenture (the "**Warrant Indenture**") dated August 15, 2011 providing for the issue of up to 10,000,000 Warrants (as defined in the Warrant Indenture) with each whole Warrant exercisable to acquire one common share of the Company at an exercise price of \$0.45 per common share at any time prior to 5:00 p.m. (Toronto time) on the fifth anniversary of the Closing Date (as defined in the Warrant Indenture);
- B. Subsection 7.1(h) of the Warrant Indenture provides for the creation of indentures supplemental to the Warrant Indenture for the purpose of setting forth any adjustments due, *inter alia*, to a share consolidation resulting from the application of the provisions of Article 3 of the Warrant Indenture;
- C. The Company has effected the consolidation of its common shares (the "**Shares**") on a twelve (old) for one (new) basis (the "**Share Consolidation**");
- D. In connection therewith and in accordance with the Warrant Indenture, on the date hereof, the Company proposes to effect the consolidation of the Warrants under the Warrant Indenture on a 12 (old) for one (new) basis (the "**Warrant Consolidation**");
- E. As a result of the Warrant Consolidation, the Supplemental Warrant Indenture shall provide for the issue of up to 833,333 Warrants with each whole Warrant exercisable to acquire one Share at an exercise price of \$5.40 per Share at any time prior to 5:00 p.m. (Toronto time) on the fifth anniversary of the Closing Date;
- F. The foregoing recitals are made as statements of fact by the Company and not by the Warrant Agent;
- G. The Warrant Agent has agreed to enter into this First Supplemental Warrant Indenture and to hold all rights, interests and benefits contained herein for and on behalf of those persons who become holders of Warrants issued pursuant to the Warrant Indenture as modified by this First Supplemental Warrant Indenture from time to time;

**NOW THEREFORE THIS FIRST SUPPLEMENTAL WARRANT INDENTURE WITNESSES** that for good and valuable consideration mutually given and received, the receipt and sufficiency of which are hereby acknowledged, it is hereby agreed and declared as follows:

1. This First Supplemental Warrant Indenture is supplemental to the Warrant Indenture and the Warrant Indenture shall henceforth be read in conjunction with this First Supplemental Warrant Indenture and all the provisions of the Warrant Indenture, except only insofar as the same may be inconsistent with the express provisions hereof, shall apply and have the same effect as if all the provisions of the Warrant Indenture and of this First Supplemental Warrant Indenture were contained in one instrument and the expressions used herein shall have the same meaning as is ascribed to the corresponding expressions in the Warrant Indenture.
2. On and after the date hereof, each reference to the Warrant Indenture, as amended by this First Supplemental Warrant Indenture, “this indenture”, “herein”, “hereby”, and similar references, and each reference to the Warrant Indenture in any other agreement, certificate, document or instrument relating thereto, shall mean and refer to the Warrant Indenture as amended hereby. Except as specifically amended by this First Supplemental Warrant Indenture, all other terms and conditions of the Warrant Indenture shall remain in full force and unchanged.
3. All references to “Lorus Therapeutics Inc.” in the Warrant Indenture are hereby deleted and replaced by “Aptose Biosciences Inc.”.
4. The following definition of “Exercise Price” in section 1.1 of the Warrant Indenture is hereby deleted and replaced as follows:

“1.1 Definitions

“**Exercise Price**” means \$5.40 per Share, as adjusted in accordance with the terms of this Indenture, from time to time;”.

5. The following subsection 2.1.1 of the Warrant Indenture is hereby deleted and replaced as follows:

“2.1.1 The Company hereby creates and authorizes for issuance up to 833,333 Warrants, each Warrant entitling Warranholders to acquire, upon payment of the Exercise Price and subject to adjustment, one Share for each whole Warrant.”
6. The following subsection 2.1.2 of the Warrant Indenture is hereby deleted and replaced as follows:

“2.1.2 Subject to the provisions hereof, the number of Warrants issued under this Indenture are limited in the aggregate to 833,333 and each Warrant entitles the holder thereof to acquire from and after the Date of Issue up to and including the Warrant Expiry Time, upon payment of the Exercise Price, one previously unissued Share, provided that the number of Shares receivable on exercise of a Warrant and the Exercise Price thereof is subject to increase or decrease so as to give effect to the adjustments required by this Indenture.”

7. The Warrant Indenture shall be and continue to be in full force and effect, unamended, except as provided herein, and the Company hereby confirms the Warrant Indenture in all other respects.
8. The form of Warrant Certificate attached as Schedule "A" to the Warrant Indenture shall be replaced by Schedule "A" hereto.
9. The terms of all outstanding Warrants shall be hereby amended to give effect to the amendments described in sections 3, 4, 5 and 6 of this First Supplemental Warrant Indenture.
10. For greater certainty, unless the context otherwise requires, references to "Shares" in the Warrant Indenture shall mean the common shares of the Company after giving effect to the Share Consolidation.
11. This First Supplemental Warrant Indenture shall be governed by and be construed in accordance with the laws of Canada and shall be binding upon the parties hereto and their respective successors and assigns.
12. This First Supplemental Warrant Indenture may be simultaneously executed in several counterparts, each of which when so executed shall be deemed to be an original and such counterparts together shall constitute one and the same instrument and notwithstanding their date of execution shall be deemed to bear the date set out at the top of the first page of this First Supplemental Warrant Indenture.

*(Signature page follows)*

**IN WITNESS WHEREOF** the parties hereto have executed this First Supplemental Warrant Indenture on the date hereof.

**COMPUTERSHARE TRUST COMPANY OF CANADA**

Per: \_\_\_\_\_  
Authorized Signatory

Per: \_\_\_\_\_  
Authorized Signatory

**APTOSE BIOSCIENCES INC.**

Per: \_\_\_\_\_  
Authorized Signatory

**SCHEDULE "A" TO INDENTURE**

Form of Warrant Certificate to be issued to Warranholders

This Certificate, and the Common Share Purchase Warrants evidenced hereby, will be void and of no value unless exercised on or before 5:00 p.m. (Toronto time) on August 15, 2016.

**APTOSE BIOSCIENCES INC.**

NO. \_\_\_\_\_

\_\_\_\_\_ WARRANTS

**COMMON SHARE PURCHASE WARRANTS**

THIS IS TO CERTIFY THAT for value received, the registered holder hereof is entitled for each Warrant represented hereby to purchase one fully paid and non-assessable common share ("**Common Share**") in the capital of Aptose Biosciences Inc. (the "**Company**") at a price per share of Cdn. \$5.40 ("**Exercise Price**"), subject to adjustment as hereinafter referred to.

Such right to purchase may be exercised by the registered holder hereof at any time on the date of issue hereof up to and including 5:00 p.m. (Toronto time) on August 15, 2016, provided that if on any day the 10-day volume weighted average trading price of the Common Shares on the Toronto Stock Exchange (the "**Exchange**") equals or exceeds 200% of the Exercise Price, then upon the Company sending the holders of Warrants written notice of such date and issuing a news release announcing such date, the Warrants shall only be exercisable for a period of 30 days following the date on which such written notice is sent to holders of Warrants. (the "**Warrant Expiry Time**") by surrender of this Warrant Certificate to Computershare Trust Company of Canada (the "**Warrant Agent**") at the principal transfer offices of the Warrant Agent in Toronto, Ontario (indicated in the attached exercise form attached hereto as Appendix "A" together with the subscription form attached hereto as Appendix A duly executed and completed for the number of Common Shares which the holder hereof is entitled to purchase and the purchase price of such Common Shares as herein provided.

This Warrant Certificate and such payment shall be deemed not to have been surrendered and made except upon personal delivery thereof or, if sent by post or other means of transmission, upon actual receipt thereof by the Warrant Agent at the office specified above.

The purchase price of Common Shares subscribed for hereunder shall be paid by certified cheque, money order or bank draft in lawful money of Canada payable to or to the order of the Company at par at the above mentioned office of the Warrant Agent.

Certificates for the Common Shares subscribed for will be mailed to the persons specified in the subscription form at their respective addresses specified therein or, if so specified in such subscription form, delivered to such persons at the office where the applicable Warrant Certificate was surrendered, within five business days after the due surrender of such Warrant Certificate and payment as aforesaid. In the event of a purchase of a number of Common Shares fewer than the number which can be purchased pursuant to this Warrant Certificate, the holder shall be entitled to receive without charge a new Warrant Certificate in respect of the balance of such Warrants.

This Warrant Certificate and other Warrant Certificates are issued under and pursuant to a certain warrant indenture (herein referred to as the "Indenture") dated August 15, 2011 between the Company and the Warrant Agent, to which Indenture and any instruments supplemental thereto reference is hereby made for a description of the terms and conditions upon which such Warrant Certificates are issued and are to be held all to the same effect as if the provisions of the Indenture and all instruments supplemental thereto were herein set forth, to all of which provisions the holder of this Warrant Certificate by acceptance hereof assents. The Company will furnish to the holder of this Warrant Certificate, upon request and without charge, a copy of the Indenture. Capitalized terms not otherwise defined herein have the meaning ascribed to them in the Indenture.

Subject to the Company's right to purchase the Warrants under the Indenture and to any restriction under applicable law or policy of any applicable regulatory body, the Warrants and Warrants Certificates and the rights thereunder shall only be transferable by the registered holder hereof in compliance with the conditions prescribed in the Indenture and the due completion, execution and delivery of a Transfer Form (in the form attached hereto as Appendix B) in accordance with the terms of the Indenture. The transfer of the warrants evidenced hereby may be restricted by applicable securities laws. Holders are advised to consult their legal counsel in this regard.

**THIS WARRANT AND THE SECURITIES DELIVERABLE UPON EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "U.S. SECURITIES ACT"), OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. THIS WARRANT MAY NOT BE EXERCISED IN THE UNITED STATES OR BY OR ON BEHALF OF A PERSON IN THE UNITED STATES OR A U.S. PERSON UNLESS THE WARRANT AND THE UNDERLYING SECURITIES HAVE BEEN REGISTERED UNDER THE U.S. SECURITIES ACT AND THE APPLICABLE SECURITIES LEGISLATION OF ANY SUCH STATE OR AN EXEMPTION FROM SUCH REGISTRATION REQUIREMENTS IS AVAILABLE. "UNITED STATES" AND "U.S. PERSON" ARE AS DEFINED BY REGULATIONS UNDER THE U.S. SECURITIES ACT.**

The holding of this Warrant Certificate shall not constitute the holder hereof a holder of Common Shares nor entitle him to any right of interest in respect thereof.

The Indenture contains provisions making binding upon all holders of Warrants outstanding thereunder resolutions passed at meetings of such holders held in accordance with such provisions by the warrant holders entitled to purchase a specified majority of the Common Shares which may be purchased pursuant to all then outstanding Warrants.

The foregoing is only a summary of the rights and conditions attaching to the Warrants. Warrant holders should refer to the Indenture for the complete text of the rights and conditions of the Warrants. In the event of a conflict between the terms of this Warrant Certificate and the terms of the Indenture, the terms of the Indenture shall prevail.

The holder of this Warrant Certificate may at any time up to and including the Warrant Expiry Time upon the surrender hereof to the Warrant Agent at its principal transfer offices in Toronto, Ontario and payment of any charges provided for in the Indenture, exchange this Warrant Certificate for other Warrant Certificates entitling the holder to subscribe in the aggregate for the same number of Common Shares as is expressed in this Warrant Certificate.



This Warrant Certificate shall not be valid for any purpose whatever unless and until it has been countersigned by the Warrant Agent for the time being under the Indenture.

Nothing contained herein or in the Indenture shall confer any right upon the holder hereof or any other person to subscribe for or purchase any Common Shares of the Company at any time subsequent to the Warrant Expiry Time. After the Warrant Expiry Time this Warrant Certificate and all rights thereunder shall be void and of no value.

Time is of the essence hereof.

**IN WITNESS WHEREOF** this Warrant Certificate has been executed on behalf of Aptose Biosciences Inc. as of the \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

**APTOSE BIOSCIENCES INC.**

By: \_\_\_\_\_

Countersigned

**COMPUTERSHARE TRUST COMPANY OF CANADA**

By: \_\_\_\_\_

Dated: \_\_\_\_\_

**APPENDIX "A" TO WARRANT CERTIFICATE  
EXERCISE FORM**

By Mail:

By Registered Mail, by Hand or by Courier

TO: COMPUTERSHARE TRUST COMPANY OF CANADA

TO: COMPUTERSHARE TRUST COMPANY OF CANADA

100 University Ave  
8<sup>th</sup> Floor  
Toronto, Ontario  
M5J 2Y1

100 University Ave  
8<sup>th</sup> Floor  
Toronto, Ontario  
M5J 2Y1

The undersigned registered holder of the within Warrant Certificate, subject to that certain warrant indenture (the "Indenture") dated as of August 15, 2011 between Aptose Biosciences Inc. and Computershare Trust Company of Canada, as Warrant Agent, hereby:

- (a) *subscribes for \_\_\_\_\_ common shares ("Common Shares") (or such number of Common Shares or other securities or property to which such subscription entitles the undersigned in lieu thereof or in addition thereto under the Indenture) of Aptose Biosciences Inc. at the price per share of Cdn. \$5.40 (or such adjusted price which may be in effect under the provisions of the Indenture) and in payment of the exercise price encloses a certified cheque, money order or bank draft, in any case in lawful money of Canada payable at par in the City of Toronto, Ontario to Aptose Biosciences Inc.; and*
- (b) *delivers herewith the above-mentioned Warrant Certificate entitling the undersigned to subscribe for the above-mentioned number of Common Shares.*

The undersigned hereby directs that the said Common Shares be registered as follows:

Name(s) in full	Address(es) of (including Postal Code)	Number(s) of Common Shares
-----------------	--	----------------------------

The undersigned represents that it understands that the securities issuable upon exercise hereof have not and will not be registered under the United States Securities Act of 1933, as amended (the "**U.S. Securities Act**").

The undersigned represents, warrants and certifies that the undersigned holder at the time of exercise of this Warrant (i) is not in the United States as defined in Regulation S under the U.S. Securities Act ("**Regulation S**"); (ii) is not a U.S. Person as defined in Regulation S; (iii) is not exercising this Warrant on behalf of, or for the account or benefit of, a U.S. Person or a person in the United States; and (iv) did not acquire the Warrants in the United States or for the account or benefit of a U.S. Person or a person in the United States and did not otherwise receive an offer to exercise this Warrant or execute or deliver this Subscription Form in the United States, and has, in all other respects, complied with the terms of Regulation S or any successor rule or regulation.

**Note: Certificates representing Common Shares will not be registered or delivered to an address in the United States.**

DATED this day of \_\_\_\_\_, 20\_\_\_\_\_.

Signature of Warrantholder guaranteed by:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(Signature of Warrantholder)

\_\_\_\_\_  
(Print Name of Warrantholder)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
(Address of Warrantholder in full)

(\*The name of the Warrantholder must correspond with the name upon the face of the certificate in every particular and the Company reserves the right to require reasonable assurance that such signature is genuine and effective.)

**Instructions**

1. The registered holder may exercise its right to receive Common Shares by completing this form and surrendering this form and the Warrant Certificate representing the Warrants being exercised along with a certified cheque, money order or bank draft in lawful money of Canada payable to the order of the Company at par in an amount equal to the exercise price applicable at the time of such surrender in respect of each Common Share which the Warrantholder desires to acquire (being not more than those which the Warrantholder is entitled to acquire pursuant to the Warrants represented by the Warrant Certificate so surrendered) to Computershare Trust Company of Canada, at its principal offices at:

By Mail

Computershare Trust Company of Canada

100 University Ave  
8<sup>th</sup> Floor  
Toronto, Ontario  
M5J 2Y1

By Registered Mail, by Hand or by Courier

Computershare Trust Company of Canada

100 University Ave  
8<sup>th</sup> Floor  
Toronto, Ontario  
M5J 2Y1

2. The certificates will be mailed by registered mail to the address appearing in this Exercise Form.
3. If Common Shares are issued to a person other than the registered Warrantholder, the signature of that person must be signature guaranteed by a Schedule 1 Canadian Chartered Bank or a major trust company or by a medallion signature guarantee from a member of a recognized signature medallion guarantee program and the Transfer Form must be completed.
4. If the Exercise Form is signed by a trustee, executor, administrator, curator, guardian, attorney, officer of a Company or any person acting in a fiduciary or representative capacity, the Warrant Certificate must be accompanied by evidence of authority to sign satisfactory to the Warrant Agent and the Company, acting reasonably.

The Warrants will expire at 5:00 p.m. (Toronto time) on August 15, 2016 and must be exercised before that time, otherwise the same shall expire and be void and of no value.

**APPENDIX "B" TO THE WARRANT CERTIFICATE  
TRANSFER FORM**

FOR value received I/we (the "Transferor") hereby sell, assign, and transfer unto:

\_\_\_\_\_  
(Name of Transferee)

\_\_\_\_\_  
(Address of Transferee)

\_\_\_\_\_  
(Social Insurance Number)

\_\_\_\_\_  
(Quantity & Class)

\_\_\_\_\_  
Warrants of

Aptose Biosciences Inc. (the "Company")

represented by: \_\_\_\_\_

(List Certificate Numbers)

and the undersigned hereby irrevocably constitutes and appoints:

\_\_\_\_\_  
(Leave Blank)

the attorney to transfer the said Warrants on the books of the Company with full power of substitution in the premises.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Signature Guaranteed By:

\_\_\_\_\_  
(Signature of Warrantholder)

\_\_\_\_\_  
(Name of Warrantholder, Please Print)

\_\_\_\_\_  
(Capacity of Authorized Representative)

Instructions:

1. The signature on this assignment must correspond with the name as written upon the face of the certificate, in every particular, without alteration or enlargement, or change whatever.
2. The signature must be guaranteed by a Canadian Schedule 1 chartered bank, a major Trust Company or by a member firm of an acceptable Medallion Signature Guarantee Program (STAMP, SEMP, MSP). The stamp must bear the words "Signature Medallion Guaranteed".
3. In the United States of America, signature guarantees must be done by members of a Medallion Signature Guarantee Program only. Signature guarantees are not accepted from Treasury Branches, Credit Unions or Caisses Populaires unless they are members of an acceptable Medallion Program.

\_\_\_\_\_  
(Signature of Transferee)

\_\_\_\_\_  
Print full name

\_\_\_\_\_  
Date:

**The Warrants and the Common Shares issuable upon exercise of the Warrants shall only be transferable in accordance with applicable laws. The Warrants may only be exercised in the manner required by the Warrant Certificate and the Exercise Form attached thereto.**