UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Form 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 OF THE SECURITIES EXCHANGE ACT OF 1934

For the month of November 2015

Commission File Number: 001-32001

Aptose Biosciences Inc.

(Translation of registrant's name into English)

5955 Airport Road, Suite 228 Mississauga, Ontario L4V 1R9 Canada

(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-FR \pounds Form 40-F \pounds

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) £

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) £

INCORPORATION BY REFERENCE

Exhibit 99.1 to this Report of Foreign Issuer on Form 6-K of Aptose Biosciences Inc. (the "Registrant") is hereby incorporated by reference into the registration statement on Form F-3 of the Registrant (File No. 333-200660) and the prospectus, forming a part thereof.

DOCUMENTS FILED AS PART OF THIS FORM 6-K

See Exhibit Index hereto.

SIGNATURES

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: November 23, 2015

By: "Gregory Chow"
Name: Gregory Chow

Name: Gregory Chow
Title: Senior Vice President and Chief Financial Officer

Form 51-102F3 Material Change Report

Item 1 Name and Address of Company

Aptose Biosciences Inc. ("Aptose" or the "Company") 5955 Airport Road, Suite 228 Mississauga, ON L4V 1R9

Item 2 Date of Material Change

November 20, 2015

Item 3 News Release

A news release reporting the material change was issued by Aptose on November 20, 2015 in Canada and in the United States.

Item 4 Summary of Material Change

On November 20, 2015, Aptose announced that the Food and Drug Administration ("FDA"), following a voluntary suspension of dosing by the Company and discussions with the Company, placed the Phase Ib clinical trial of APTO-253 in patients with hematologic cancers on clinical hold.

Item 5 Full Description of Material Change

On November 20, 2015, Aptose announced that the FDA, following a voluntary suspension of dosing by the Company and discussions with the Company, placed the Phase Ib clinical trial of APTO-253 in patients with hematologic cancers on clinical hold. This hold is intended to ensure patient safety on the trial and to ensure manufacturing and dosing procedures are consistent with the appropriate documented quality standards.

The voluntary suspension of dosing by the Company was initiated as a result of a planned preliminary review, which was accelerated to evaluate manufacturing processes and procedures upon the report of an operational difficulty with an IV infusion pump at a clinical site. The pump experienced back pressure during IV patient dosing at the point of the filter. Further review discovered preliminary concerns regarding the documentation records of the manufacturing procedures of the drug product associated with APTO-253.

A complete safety review of all patient files had been completed prior to initial discovery of the manufacturing documentation irregularities, and there have been no drug-related serious adverse events (SAEs) reported. The observed pharmacokinetic levels in the patients treated were within the expected range.

Key Points:

- An internal review identified potential documentation irregularities and the Company voluntarily and immediately suspended dosing of patients out of an abundance of caution to ensure safety.
- Aptose currently possesses a sufficient supply of API to create fresh batches of drug product for the resumption of clinical dosing upon FDA approval and guidance.
- New contract manufacture organizations have been identified to manufacture fresh batches of cGMP clinical supply upon completion of investigation and in coordination with FDA guidance.
- · Overall effect to the Phase Ib trial timeline is expected to be partially mitigated by initiation of the new trial sites and updated timeline will be reported as soon as determined.

Forward Looking Statements

This material change report contains forward-looking statements within the meaning of Canadian and U.S. securities laws. Such statements include, but are not limited to, statements with respect to matters such as APTO-253 having potential as a promising therapeutic option; the length of delay in the Phase Ib trial timeline and the possible mitigation thereof; the sufficiency of the Company's supply of API; and statements relating to the Company'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 material change report. 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; uncertainty in the length of the clinical hold and the conditions the FDA may impose to lift it; potential loss of API; inability of new manufacturers to produce acceptable batches of cGMP in sufficient quantities; unexpected manufacturing defects; and other risks detailed from time-to-time in our ongoing quarterly filings, annual information forms, annual reports and annual f

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 material change report 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.

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 647-479-9828

Item 9 Date of Report

November 23, 2015