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 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of February 2018

Commission File Number: **001-32001**

Aptose Biosciences Inc.
(Translation of registrant's name into English)

5955 Airport Road, Suite 228
Mississauga, ON
L4V 1R9
(Address of principal executive office)

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 [X] 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):__

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):__

On February 7, 2018, the Registrant issued a press release, a copy of which is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

(c) Exhibit 99.1. Press release dated February 7, 2018

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.
(Registrant)

Date: February 7, 2018

/s/ Gregory K. Chow
Gregory K. Chow
Senior Vice President and Chief Financial Officer

EXHIBIT 99.1

Aptose Biosciences Files New Preliminary Base Shelf Prospectus to Replace Expired Base Prospectus

SAN DIEGO and TORONTO, Feb. 07, 2018 (GLOBE NEWSWIRE) -- Aptose Biosciences Inc. ("Aptose" or the "Company") (NASDAQ:APTO) (TSX:APS), a clinical-stage company developing highly differentiated therapeutics that target the underlying mechanisms of cancer, today announced that it has filed and obtained a receipt for a preliminary short form base shelf prospectus (the "Preliminary Shelf Prospectus") with the securities commissions in various provinces in Canada, and a corresponding shelf registration statement on Form F-10 with the U.S. Securities and Exchange Commision (the "SEC") under the U.S./Canada Multijurisdictional Disclosure System (or "MJDS"), to replace the prior shelf registration statement that expired on December 29, 2017.

The Preliminary Shelf Prospectus and corresponding shelf registration statement have not yet become final or effective. Once a receipt for the final base shelf prospectus is obtained and the registration statement becomes effective, it will allow Aptose to offer up to US$100,000,000 of common shares, warrants to purchase common shares, or units comprised of one or more of these securities, during the 25-month period that the Shelf Prospectus is effective. Aptose has no immediate intention to undertake an offering. However, once final, the Shelf Prospectus and registration statement will enable Aptose to potentially access new capital if and when needed. The amount and timing of any future offerings will be based on the Company's financial requirements and market conditions at the time.

The specific terms of any future offering under the Shelf Prospectus and registration statement will be established at the time of such offering. At the time any of the securities covered by the Shelf Prospectus are offered for sale, a prospectus supplement containing specific information about the terms of such offering will be filed with applicable Canadian securities regulatory authorities and the SEC.

The shelf registration statement filed today with the SEC has not yet become effective. No securities may be sold, nor may offers to buy be accepted, prior to the time the registration statement becomes effective. This news release shall not constitute an offer to sell or a solicitation of an offer to buy, nor shall there be any sale of these securities in any jurisdiction in which an offer, solicitation or sale would be unlawful prior to registration or qualifications under the securities laws of any such jurisdiction.

A copy of the Preliminary Shelf Prospectus can be found on SEDAR at www.sedar.com and a copy of the corresponding shelf registration statement can be found on EDGAR at www.sec.gov or may be obtained upon request to Aptose's Investor Relations Department using the contact information set out below.

About Aptose

Aptose Biosciences is a clinical-stage biotechnology company committed to developing personalized therapies addressing unmet medical needs in oncology. Aptose is advancing new therapeutics focused on novel cellular targets on the leading edge of cancer. The company's small molecule cancer therapeutics pipeline includes products designed to provide single agent efficacy and to enhance the efficacy of other anti-cancer therapies and regimens without overlapping toxicities. For further information, please visit www.aptose.com.

Forward Looking Statements

This press release contains forward-looking statements within the meaning of Canadian and U.S. securities laws. Such statements include, but are not limited to, 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 press release. Such factors 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 clinical supplies 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 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:

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