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 August 2017

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 [X]

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 August 1, 2017, 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 August 1, 2017

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: August 1, 2017

Aptose To Release Second Quarter Ended June 30, 2017 Financial Results and Hold Conference Call on August 8, 2017

SAN DIEGO and TORONTO, Aug. 01, 2017 (GLOBE NEWSWIRE) -- Aptose Biosciences Inc. (Aptose) (NASDAQ:APTO) (TSX:APS), a clinical-stage company developing highly differentiated therapeutics that target the underlying mechanisms of cancer, will release its financial results for the quarter ended June 30, 2017, on Tuesday, August 8, 2017 after the close of the market. The company intends to host a conference call the same day at 5:00 p.m. ET to discuss the financial results.

Participants can access the conference call by dialing (844) 882-7834 (North American toll free number) and (574) 990-9707 (International) and using passcode 58912011. The conference call can also be accessed here and will be available through a link on the Investor Relations section of Aptose's website at ir.aptose.com. Please log onto the webcast at least 10 minutes prior to the start of the call to ensure time for any software downloads that may be required. An archived version of the webcast along with a transcript will be available on the company's website for 30 days. An audio replay of the webcast will be available approximately two hours after the conclusion of the call for 7 days by dialing (855) 859-2056, using the passcode 58912011.

The press release, the financial statements and the management's discussion and analysis for the quarter ended June 30, 2017 will be available on SEDAR at www.sedar.com and EDGAR at www.sec.gov/edgar.shtml

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 anticancer therapies and regimens without overlapping toxicities. For further information, please visit www.aptose.com.

For further information, please contact:

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