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 September 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

Exhibits 99.1 and 99.2 to the Report of Foreign Issuer on Form 6-K of Aptose Biosciences Inc. (the "Registrant") containing interim financial statements and management's discussion and analysis for the quarter ended March 31, 2015, furnished to the SEC on May 6, 2015, are each hereby incorporated by reference into the registration statement on Form F-3 of the Registrant (File No. 333-200660) and the prospectus, as supplemented by the prospectus supplement dated April 2, 2015, forming a part thereof.

Exhibits 99.1 and 99.2 to the Report of Foreign Issuer on Form 6-K of the Registrant furnished to the SEC on August 5, 2015, are each 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.

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: September 3, 2015 By: /s/ Gregory Chow

Name: Gregory Chow

Title: Senior Vice President and Chief Financial Officer