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

FORM 8-K

CURRENT REPORT

**Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): October 16, 2023

APTOSE BIOSCIENCES INC.

(Exact name of registrant as specified in its charter)

Canada
(State or Other Jurisdiction of Incorporation)

001-32001
(Commission File Number)

98-1136802
(I.R.S. Employer Identification No.)

**251 Consumers Road, Suite 1105
Toronto, Ontario M2J 4R3
Canada**
(Address of Principal Executive Offices) (Zip Code)
(647) 479-9828
(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares, no par value	APTO	Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 7.01. Regulation FD Disclosure.

On October 16, 2023, the Registrant issued a press release, a copy of which is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

In accordance with General Instruction B.2 of Form 8-K, the information in the press release attached as Exhibit 99.1 hereto shall not be deemed to be “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), nor shall such information be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Item 9.01. Financial Statements and Exhibits.

[99.1](#) [Press Release dated October 16, 2023](#)

104 Cover Page Interactive Data File (embedded within the Inline XBRL document)

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 hereunto duly authorized.

Aptose Biosciences Inc.

Date: October 16, 2023

By: /s/ William G. Rice, Ph.D. _____

William G. Rice, Ph.D.

Chairman, President, and Chief Executive Officer

Aptose Clinical and Preclinical Data to be Presented at European School of Haematology (ESH) 6th International Conference

Company to Hold Clinical Update Webcast; Details Forthcoming

SAN DIEGO and TORONTO, Oct. 16, 2023 (GLOBE NEWSWIRE) -- Aptose Biosciences Inc. ("Aptose" or the "Company") (NASDAQ: APTO, TSX: APS), a clinical-stage precision oncology company developing highly differentiated oral kinase inhibitors to treat hematologic malignancies, today announced that two abstracts on tuspetinib, Aptose's Phase 1/2 myeloid kinase inhibitor in development for acute myeloid leukemia (AML), have been accepted for poster presentations at the European School of Haematology (ESH) 6th International Conference: Acute Myeloid Leukemia "Molecular and Translational": Advances in Biology and Treatment, being held October 29-31, 2023, in Estoril, Portugal.

Aptose is planning to hold a clinical update webcast on October 30, 2023, to provide additional up-to-date data on tuspetinib. Details will be forthcoming.

The posters accepted for presentation are listed below and can be viewed beginning October 29, 2023, on site at the ESH poster exhibit hall and online on the Aptose website here.

Poster Presentations

Tuspetinib Myeloid Kinase Inhibitor Safety and Efficacy as Monotherapy and Combined with Venetoclax in Phase 1/2 Trial of Patients with Relapsed or Refractory (R/R) Acute Myeloid Leukemia (AML)

- Abstract Summary: Tuspetinib (TUS) is a potent once daily oral myeloid kinase inhibitor of SYK, mutated and unmutated forms of FLT3, JAK1/2, RSK, mutant forms of KIT, and TAK1-TAB1 kinases that mediate dysregulated cellular proliferation in acute myeloid leukemia (AML). As a single agent, TUS was well-tolerated and highly active across four dose levels among diverse AML genotypes and delivered a 42% CR/CRh across evaluable venetoclax (VEN) naïve patients at the 80mg daily RP2D. In the ongoing APTIVATE clinical study, tuspetinib is being evaluated clinically as monotherapy (TUS) and in combination with venetoclax (TUS/VEN) in a global Phase 1/2 trial of patients with R/R AML. The TUS/VEN doublet also has been well tolerated and has achieved multiple responses to date in patients who previously failed VEN (Prior-VEN failure AML), including Prior-VEN failure patients who also previously failed FLT3 inhibitors, all of whom represent emerging populations of high unmet medical need. Notably, TUS targets VEN resistance mechanisms and appears to re-sensitize Prior-VEN failure patients to VEN.

Tuspetinib Oral Myeloid Kinase Inhibitor Creates Synthetic Lethal Vulnerability to Venetoclax

- Abstract Summary: Tuspetinib (TUS), a once daily oral agent, simultaneously suppresses a limited set of key oncogenic signaling pathways that mediate resistance to acute myeloid leukemia (AML) drugs by potentially inhibiting SYK, mutated and unmutated forms of FLT3, JAK1/2, RSK, mutant forms of KIT, and TAK1-TAB1 kinases. TUS as a single agent produces complete remissions in relapsed/refractory (R/R) AML patients, and the tuspetinib/venetoclax (TUS/VEN) combination doublet achieves multiple responses among very difficult to treat AML subpopulations in the ongoing Phase 1/2 APTIVATE trial. We investigated the effects of TUS on key elements of the phosphokinome and apoptotic proteome in both parental and TUS-resistant AML cells. In parental cells, TUS acutely inhibits key oncogenic signaling pathways and shifts the balance of pro- and anti-apoptotic proteins in favor of apoptosis, suggesting that it may generate vulnerability to VEN. Indeed, acquired TUS resistance generated a synthetic lethal vulnerability to VEN of unusually high magnitude. Concurrent administration of TUS and VEN may eliminate cells that carry this form of TUS resistance at the start of therapy and discourage the emergence of TUS resistance during treatment.

About Aptose

Aptose Biosciences is a clinical-stage biotechnology company committed to developing precision medicines addressing unmet medical needs in oncology, with an initial focus on hematology. 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. The Company has two clinical-stage oral kinase inhibitors under development for hematologic malignancies: tuspetinib (HM43239), an oral, myeloid kinase inhibitor being studied as monotherapy and in combination therapy in the APTIVATE international Phase 1/2 expansion trial in patients with relapsed or refractory acute myeloid leukemia (AML); and luxetpinib (CG-806), an oral, dual lymphoid and myeloid kinase inhibitor in Phase 1 a/b stage development for the treatment of patients with relapsed or refractory hematologic malignancies. For more information, please visit www.apptose.com.

Forward-Looking Statements

This press release may contain forward-looking statements within the meaning of Canadian and U.S. securities laws, including, but not limited to, statements relating to the Company's growth, plans, objectives, expectations and intentions and other statements including words such as "continue", "expect", "intend", "will", "hope", "should", "would", "may", "potential" 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.

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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