October 10, 2019

Aptose to Participate at 5th International Conference on Acute Myeloid Leukemia of the European School of Haematology (ESH)

SAN DIEGO and TORONTO, Oct. 10, 2019 (GLOBE NEWSWIRE) -- Aptose Biosciences Inc. ("Aptose" or the "Company") (NASDAQ: APTO, TSX: APS), a clinical-stage company developing highly differentiated therapeutics targeting the underlying mechanisms of cancer, today announced that William G. Rice, Ph.D., Chairman, President and Chief Executive Officer, and Jotin Marango, M.D., Ph.D., Senior Vice President and Chief Business Officer, will participate at the 5th International Conference on Acute Myeloid Leukemia "Molecular and Translational" Advances in Biology and Treatment, and present preclinical data for CG-806, its oral, first-in-class pan-FLT3/pan-BTK inhibitor, in a poster presentation on October 24th, 2019 in Estoril, Portugal.

"We are gratified by the enthusiasm of the AML community surrounding our mutation-agnostic kinase inhibitor CG-806," said Dr. Rice. "As we approach initiation of a new clinical study of CG-806 in patients with acute myeloid leukemia (AML) and myelodysplastic syndrome (MDS), we wish to highlight at this ESH conference the ability of CG-806 to suppress multiple oncogenic signals, to potently kill a diverse range of AML cells, including those resistant to various FLT3 inhibitors, and to enhance the activity of other anticancer agents. CG-806 is currently in a Phase 1 a/b clinical trial in patients with B-cell malignancies and to date, no drug-related toxicities have been observed."

CG-806 Poster Presentation Details:

CG-806 Pan-FLT3 / Pan-BTK Inhibitor Simultaneously Suppresses Multiple Oncogenic Signaling Pathways to Treat AML
Date & Time: Thursday, October 24th, 2019, 6:40 p.m. - 8:15 p.m. WEST (1:40 p.m. – 3:15 p.m. EDT)
Session Title: Acute myeloid leukemia – Biology & Translational Research
Abstract Number: 16594
Location: Estoril Congress Center, Avenida Amaral, 2765-192, Estoril, Portugal

The poster will be available on the Aptose website at the beginning of the poster session here.

About CG-806
CG-806 is an oral, first-in-class pan-FLT3/pan-BTK multi-cluster kinase inhibitor and is in a Phase 1 clinical trial for the treatment of hematologic malignancies. This small molecule, in-licensed from CrystalGenomics Inc. in Seoul, South Korea, demonstrates potent inhibition of

wild type and all mutant forms of FLT3 (including internal tandem duplication, or ITD, and mutations of the receptor tyrosine kinase domain and gatekeeper region), cures animals of AML in the absence of toxicity in murine xenograft models, and represents a potential best-in-class therapeutic for patients with AML and other myeloid malignancies. Likewise, CG-806 demonstrates potent, non-covalent inhibition of the wild type and Cys481Ser (C481S) mutant forms of the BTK enzyme, as well as other oncogenic kinase pathways operative in B cell malignancies, suggesting CG-806 may be developed for various B cell malignancy patients (including CLL/SLL, FL, MCL, DLBCL and others) that are resistant/refractory/intolerant to covalent or other non-covalent BTK inhibitors. Because CG-806 targets key kinases/pathways operative in malignancies derived from the bone marrow, it is in development for B-cell cancers and AML.

About Aptose

Aptose Biosciences is a clinical-stage biotechnology company committed to developing personalized therapies 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 investigational products for hematologic malignancies: CG-806, an oral, first-in-class pan-FLT3/pan-BTK multi-cluster kinase inhibitor, is in a Phase 1 trial in patients with relapsed or refractory B cell malignancies, including chronic lymphocytic leukemia (CLL), small lymphocytic lymphoma (SLL) and non-Hodgkin lymphoma (NHL), who have failed or are intolerant to standard therapies; APTO-253, the only clinical stage agent that directly targets the MYC oncogene and inhibits its expression, is in a Phase 1b clinical trial for the treatment of patients with relapsed or refractory acute myeloid leukemia (AML) or high risk myelodysplastic syndrome (MDS). 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, including, but not limited to, statements regarding the clinical potential and favorable properties of CG-806, 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”, “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. 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 and economic conditions; inability of new manufacturers to produce acceptable batches of GMP 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.

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