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Aptose Biosicences and CrystalGenomics Announce Issuance of U.S. Patent for CG'806

SAN DIEGO and TORONTO and SEOUL, South Korea, Sept. 12, 2017 (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 the United States Patent and Trademark Office has issued US Patent 9,758,508 entitled "2,3-DIHYDRO-ISOINDOLE-1-ON DERIVATIVE AS BTK KINASE SUPPRESSANT, AND PHARMACEUTICAL COMPOSITION INCLUDING SAME". The patent claims numerous compounds, including the CG'806 compound, pharmaceutical compositions comprising the CG'806 compound, and methods of treating various diseases. The patent is expected to provide protection until the end of 2033.

"This newly issued patent represents a major step in protecting the unique structural properties and potentially broad applications of CG'806," stated Dr. William G. Rice, Chairman, President and Chief Executive Officer of Aptose. "In addition to being developed as an orally bioavailable first-in-class multi-targeted pan-FLT3/BTK inhibitor, it has been shown to impact other relevant oncogenic targets. We look forward to bolstering the patent portfolio through additional findings and applications."

"Following the execution of the License Agreement, our two organizations have become close allies to ensure the expeditious development of CG'806, and we look forward to continuous progress towards the upcoming IND application," stated Joong Myung Cho, Ph.D., Chairman and Chief Executive Officer of CrystalGenomics.

About CG'806
CG'806 is an oral, first-in-class pan-FLT3/pan-BTK multi-kinase inhibitor. This small molecule demonstrates potent inhibition of wild type and mutant forms of FLT3 (including internal tandem duplication, or ITD, and mutations of the receptor tyrosine kinase domain and gatekeeper region), eliminates AML tumors in the absence of toxicity in murine xenograft models, and represents a potential best-in-class therapeutic for patients with FLT3-driven AML. Likewise, CG'806 demonstrates potent, non-covalent inhibition of the wild type and Cys481Ser mutant of the BTK enzyme, as well as other oncogenic kinases operative in B cell malignancies, suggesting CG'806 may be developed for various B cell malignancy patients (including CLL, MCL, DLBCL and others) that are resistant/refractory/intolerant to covalent BTK inhibitors. CG'806 is currently in pre-clinical development in partnership with CrystalGenomics.

About the License Agreement
As previously announced on June 8, 2016, Aptose and CrystalGenomics, Inc. entered into

an exclusive global option and license agreement focused on the development of CG026806 (CG'806). Aptose is currently undertaking Investigational New Drug (IND) enabling studies and expects to exercise its option to develop and commercialize CG'806 under the agreement and initiate a phase 1 clinical trial by mid 2018. The potential option exercise would occur prior to submission of an IND application in the U.S and, upon exercise, Aptose would have to pay US $2.0 million in cash or in a combination of cash and common shares. Upon exercise of the option, Aptose would own global rights to develop and commercialize the program outside of Korea and China.

About CrystalGenomics

CrystalGenomics, Inc. is a commercial stage biopharmaceutical company focused in the structure-based drug discovery and development of novel therapeutics in unmet medical need areas of inflammation, oncology, and infectious disease. In addition to several drug programs in the R&D pipeline, the company has a drug on the market for osteoarthritis and has recently added commercial manufacturing, sales and marketing capabilities through acquisitions. For more information, please visit: www.cgxinc.com or www.crystalgenomics.com. CrystalGenomics, Inc. is listed on KOSDAQ (083790).

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, including, but not limited to, statements regarding our intentions or current expectations concerning, among other things, the strength and breadth of our patent portfolio, the adequacy of our intellectual property rights or the anti-tumor activity of CG'806, the clinical potential and favorable properties of CG'806, the clinical trials for CG'806 and their expected timing, and the potential exercise of the option to acquire rights to develop and commercialize 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", 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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