

October 1, 2014



Aptose Biosciences Announces Reverse Stock Split

SAN DIEGO and TORONTO, Oct. 1, 2014 /PRNewswire/ - Aptose Biosciences Inc. (TSX: APS), a clinical-stage company developing new therapeutics and molecular diagnostics that target the underlying mechanisms of cancer, announces that it has filed articles of amendment to give effect to the reverse stock split (consolidation) of its common shares (the "Common Shares") on the basis of one (1) post-consolidation Common Share for each twelve (12) pre-consolidation Common Shares (the "Reverse Stock Split").

At the annual general and special meeting of the shareholders of the Company held on August 19, 2014, the shareholders of the Company authorized the board of directors to effect a reverse stock split of the Common Shares at a ratio within the range of one (1) post-consolidation Common Share for each five (5) to fifteen (15) pre-consolidation Common Shares. It is expected that the Common Shares will commence trading on the Toronto Stock Exchange on a consolidated basis on or about October 6, 2014. The number of Common Shares currently outstanding is 139,324,451. The number of Common Shares outstanding following the Reverse Stock Split will be of approximately 11,610,402.

The Reverse Stock Split is being implemented as a way to potentially increase the trading price of the common shares as the Company is contemplating a potential listing on the NASDAQ Stock Exchange.

"We are extremely appreciative of the support we have received from our shareholders for transforming Aptose into a preeminent company committed to anticancer drug development," William G. Rice, Ph.D., Aptose's Chairman, President and Chief Executive Officer. "In effecting the reverse split, we are now significantly closer to meeting listing requirements for trading on the NASDAQ market, which would expand our visibility, and provide access to a broader investor base and opportunity for increased shareholder value."

Letters of transmittal with respect to the Reverse Stock Split have been mailed out to all registered shareholders. All registered shareholders of the Company are required to send their certificates representing pre-consolidation Common Shares with a properly executed letter of transmittal to the transfer agent of the Company, Computershare Investor Services Inc., in accordance with the instructions provided in the letter of transmittal. If, as a result of the Reverse Stock Split, a shareholder would be entitled to receive a fractional Common Share, the number of Common Shares to be received by such shareholder will be rounded up or down to the nearest whole Common Share. All other outstanding securities of the Company exchangeable, exercisable or convertible into Common Shares will be adjusted accordingly.

Shareholders who hold their Common Shares through their broker or other intermediary and do not have actual share certificates will not be required to complete and return a letter of transmittal. Any pre-consolidation Common Shares owned by such shareholders will

automatically be adjusted as a result of the Reverse Stock Split and no further action is required to be taken by such shareholders.

About Aptose

Aptose Biosciences is a clinical-stage biotechnology company committed to discovering and developing personalized therapies that address unmet medical needs in oncology. Aptose is advancing new therapeutics focused on novel cellular targets on the leading edge of cancer research coupled with companion diagnostics to identify the optimal patient population for its products. Aptose's lead anticancer agent APTO-253 is under development for acute myeloid leukemia (AML), myelodysplastic syndromes (MDS) and other hematologic malignancies.

Forward Looking Statements

This press release contains forward-looking statements within the meaning of Canadian and U.S. securities laws including regarding a potential listing on the NASDAQ Stock Exchange and the Reverse Stock Split. Such statements include, but are not limited to, statements relating to Aptose'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 expressed or implied forward looking statements 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 conditions; 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.

SOURCE Aptose Biosciences Inc.