

Form 51-102F3
Material Change Report

Item 1 Name and Address of Company

Aptose Biosciences Inc. (“**Aptose**” or the “**Company**”)
5955 Airport Road, Suite 228
Mississauga, ON
L4V 1R9

Item 2 Date of Material Change

October 27, 2017

Item 3 News Release

A news release reporting the material change was issued by Aptose on October 30, 2017 in Canada and in the United States.

Item 4 Summary of Material Change

On October 30, 2017, Aptose announced that it has entered into a Common Shares Purchase Agreement dated as of October 27, 2017 (the “**Agreement**”) of up to US \$15.5 million with Aspire Capital Fund, LLC (“**Aspire Capital**”). Under the terms of the Agreement, Aspire Capital has made an initial investment via purchase of US \$500,000 of APTO common shares at US \$1.40 per common share. In addition, Aspire Capital has committed to purchase up to an additional US \$15.0 million of common shares of Aptose, at Aptose’s request from time to time during a 30-month period beginning on the effective date of a registration statement related to the transaction and at prices based on the market price at the time of each sale. Under the terms of the Agreement, Aptose will control the timing and amount of the further sale of common shares of Aptose to Aspire Capital.

Item 5 Full Description of Material Change

On October 30, 2017, Aptose announced that it has entered into the Agreement with Aspire Capital. Under the terms of the Agreement, Aspire Capital has made an initial investment via purchase of US \$500,000 of APTO common shares at US \$1.40 per common share. In addition, Aspire Capital has committed to purchase up to an additional US \$15.0 million of common shares of Aptose, at Aptose’s request from time to time during a 30-month period beginning on the effective date of a registration statement related to the transaction and at prices based on the market price at the time of each sale. There are no warrants, derivatives, or other share classes associated with this Agreement. Under the terms of the Agreement, Aptose will control the timing and amount of the further sale of common shares of Aptose to Aspire Capital.

There are no limitations on use of proceeds, financial covenants or restrictions on future financings and there are no rights of first refusal, participation rights, penalties or liquidated

damages in the Agreement. Aptose maintains the right to terminate the Agreement at any time, at its discretion, without any additional cost or penalty.

As consideration for Aspire Capital's obligation under the Agreement, Aptose issued 321,429 common shares to Aspire Capital as a commitment fee. Aptose also entered into a Registration Rights Agreement (the "**Rights Agreement**") with Aspire Capital in connection with its entry into the Agreement that requires Aptose to file a registration agreement regarding the shares sold to Aspire Capital.

Forward Looking Statements

This material change report contains forward-looking statements within the meaning of Canadian and U.S. securities laws, including, but not limited to, statements regarding the intentions or current expectations of Aptose concerning, among other things, the Agreement and the financing available thereunder and 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 the Company's 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 the Company are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements described in this material change report. Such factors could include, among others: the Company's 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 the clinical trials of the Company; the Company's ability to find and enter into agreements with potential partners; the Company's ability to attract and retain key personnel; changing market and economic conditions; inability of new manufacturers to produce acceptable batches of cGMP in sufficient quantities; unexpected manufacturing defects; and other risks detailed from time-to-time in the Company's 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 the Company's 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 report and Aptose does not intend, and does not assume any obligation, to update these forward-looking statements, except as required by law. The Company 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.

Item 6 Reliance on subsection 7.1(2) of National Instrument 51-102

Not Applicable.

Item 7 Omitted Information

Not Applicable.

Item 8 Executive Officer

For further information please contact:
Aptose Biosciences Inc.
Gregory K. Chow
647-479-9828

Item 9 Date of Report

October 30, 2017