UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1 to FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

	APTOSE BIOSCI		
(Exac	ct Name of Registrant A	s Specified In Its Char	rter)
Canada	28	336	98-1136802
(State or other jurisdiction of incorporation or organization)	(Primary Stand Classification ((I.R.S. Employer Identification Number)
(Address, including zip code, and tele	251 Consumers Ro Toronto, Ontario, C (647) 479- ephone number, includi	anada M2J 4R3 -9828	rant's principal executive offices)
(Name, address, including zi	Aptose Biosciene Unit 120, 12770 Hi San Diego, Calif (858) 926- in code. and telephone r	gh Bluff Drive Fornia 92130 -2730	code, of agent for service)
	COPIES		
Daniel M. Miller Dorsey & Whitney LLP Suite 1070, 1095 West Pender Street Vancouver, British Columbia Canada V6E 2M6			Fletcher Payne Chief Financial Officer Aptose Biosciences Inc. 251 Consumers Road, Suite 1105 Toronto, Ontario Canada M2J 4R3 (647) 479-9828
	ime after the effective		
(Approximate	e date of commenceme	nt of proposed sale to	o the public)
If any of the securities being registered on this Form are to be offer following box. \boxtimes	red on a delayed or con	tinuous basis pursuant	to Rule 415 under the Securities Act of 1933, please check the
If this Form is used to register additional securities for an offeri registration statement number of the earlier effective registration statement.			ities Act, check the following box and list the Securities Act
If this Form is a post-effective amendment filed pursuant to Rule number of the earlier effective registration statement for the same o		rities Act, check the f	following box and list the Securities Act registration statement
Indicate by check mark whether the Company is a large accelerate "large accelerated filer," "accelerated filer" and "smaller reporting of			, , , , , , , , , , , , , , , , , , , ,
Large accelerated filer Non-accelerated filer Emerging growth company		ccelerated filer maller reporting compa	any 🖂
If an emerging growth company, indicate by check mark if the Coraccounting standards provided pursuant to Section 7(a)(2)(B) of the		o use the extended tra	nsition period for complying with any new or revised financial
The Company hereby amends this registration statement on su	ich date or date(s) as n	nay be necessary to d	lelay its effective date until the Company shall file a further

amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, or

until the registration statement shall become effective on such date as the Commission acting pursuant to said Section 8(a) may determine.

EXPLANATORY NOTE

This Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-272752) is filed solely to amend Item 16 of Part II thereof and to file certain exhibits thereto. This Amendment No. 1 does not modify any provision of the preliminary prospectus contained in Part I. Accordingly, the preliminary prospectus has been omitted.

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth all expenses to be paid by the Company, other than underwriting discounts and commissions, upon the completion of this offering. All amounts shown are estimates except for the SEC filing fee.

		Approximate Amount	
SEC registration fee	\$	839.27	
Legal fees and expenses		100,000	
Accounting fees and expenses		30,000	
Transfer agent and registrar fees		6,000	
Miscellaneous		13,000	
Total	<u>\$</u>	149,839.27	

Item 14. Indemnification of Directors and Officers.

Under the Canada Business Corporations Act, or the "CBCA", the Company may indemnify its current or former directors or officers or another individual who acts or acted at the Company's request as a director or officer, or an individual acting in a similar capacity, of another entity, against all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by the individual in respect of any civil, criminal, administrative, investigative or other proceeding in which the individual is involved because of his or her association with the Company or another entity, and the individual seeking indemnity shall have a right to such indemnity if such individual was not judged by the court or other competent authority to have committed any fault or omitted to do anything that such individual ought to have done. The CBCA also provides that the Company may advance moneys to such an individual for the costs, charges and expenses of such a proceeding.

The CBCA also provides that the Company may with the approval of a court, indemnify such an individual or advance moneys against all costs, charges and expenses reasonably incurred by the individual in connection with an action by or on behalf of the Company or other entity to procure a judgment in its favour, to which the individual is made a party because of the individual's association with the Company or other entity at the Company's request.

However, indemnification under any of the foregoing circumstances is prohibited under the CBCA unless the individual:

- acted honestly and in good faith with a view to the Company's best interests, or the best interests of the other entity for which the individual acted as director or
 officer or in a similar capacity at the Company's request; and
- · in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, the individual had reasonable grounds for believing that his or her conduct was lawful.

The Company's by-law No. 2 provides that the Company will indemnify its directors or officers, former directors or officers or other individuals who act or have acted at the Company's request as a director or officer, or in a similar capacity, of another entity, and his or her heirs and legal representatives to the extent permitted by the CBCA.

The Company's by-law No. 2 further provides that, except as otherwise required by the CBCA, the Company may from time to time indemnify and save harmless any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Company) by reason of the fact that he or she is or was an employee or agent of the Company, or is or was serving at the request of the Company as an employee, agent of or participant in another entity against expenses (including legal fees), judgments, fines and any amount actually and reasonably incurred by him or her in connection with such action, suit or proceeding if he or she acted honestly and in good faith with a view to the best interests of the Company or, as the case may be, to the best interests of the or she served at the Company's request and, with respect to any criminal or administrative action or proceeding that is enforced by a monetary penalty, had reasonable grounds for believing that his or her conduct was lawful. The termination of any action, suit or proceeding by judgment, order, settlement or conviction will not, of itself, create a presumption that the person did not act honestly and in good faith with a view to the best interests of the Company or other entity and, with respect to any criminal or administrative action or proceeding that is enforced by a monetary penalty, had no reasonable grounds for believing that his or her conduct was lawful.

The Company has entered into indemnity agreements with its directors and certain officers pursuant to which it has agreed to indemnify its officers and directors for:

- (a) all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by them in respect of any civil, criminal or administrative action or proceeding to which they are made a party by reason of being or having been a director and/or officer of the Company, if (i) they acted honestly and in good faith with a view to the best interests of the Company, and (ii) in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, they had reasonable grounds for believing that their conduct was lawful.
- (b) all costs, charges and expenses reasonably incurred by them in connection with any action by or on behalf of the Company to procure a judgment in the Company's favour to which they are made a party by reason of being or having been a director and/or officer of the Company.
- (c) all costs, charges and expenses reasonably incurred by them in connection with the defense of any civil, criminal or administrative proceeding to which they are made a party by reason of being or having been a director and/or officer of the Company if they have been substantially successful on the merits in their defense of the action or proceeding and they fulfil the conditions set forth in the two foregoing clauses (a)(i) and (a)(ii) above.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the Company pursuant to the foregoing provisions, the Company has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is therefore unenforceable.

Item 15. Recent Sales of Unregistered Securities.

We sold the securities described below within the past three years which were not registered under the Securities Act.

On May 25, 2023, we entered into Purchase Agreement with Keystone, pursuant to which Keystone has committed to purchase from us, at our direction, up to \$25 million Common Shares, subject to the terms and conditions specified in such purchase agreement. Pursuant to the Purchase Agreement, we issued to Lincoln Park 7,547 Initial Commitment Shares concurrently with our execution of the Purchase Agreement as consideration for its irrevocable commitment to purchase the Common Shares thereunder, subject the terms and conditions contained therein. As of the date hereof, other than the Commitment Shares, we have not issued and sold any Common Shares under such the Purchase Agreement. The securities were issued pursuant to an exemption from registration provided for under Section 4(a)(2) of the Securities Act. We relied on this exemption from registration based in part on representations made by the investor.

Item 16. Exhibits and Financial Statement Schedules.

(a) See the Exhibit Index on the page immediately preceding the signature page hereto for a list of exhibits filed as part of this registration statement on Form S-1, which Exhibit Index is incorporated herein by reference.

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(b) No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or the notes thereto.

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
- (i) To include any prospectus required by section 10(a)(3) of the Securities Act;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.; provided, however, that paragraphs (1)(i), (1)(ii) and (1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Securities and Exchange Commission by the Company pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.
- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
 - (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
 - (4) That, for the purpose of determining liability under the Securities Act to any purchaser:
- (A) Each prospectus filed by the Company pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
- (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(6) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to any charter provision, by law or otherwise, the Company has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than payment by the Company of expenses incurred or paid by a director, officer or controlling person of the Company in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Company will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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EXHIBIT INDEX

The following documents are being filed with the Commission as exhibits to this registration statement on Form S-1.

Exhibit Number	Description of Document
3.1	Articles of Incorporation, Arrangement and Amendment (incorporated herein by reference to Exhibit 99.3 to the Company's Current Report on Form 6-K filed with the SEC on June 12, 2015)
3.2	Certificate of Amendment (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on June 5, 2023)
3.3	By-law #2 of the Company (incorporated herein by reference to Exhibit 99.2 to the Company's Current Report on Form 6-K filed with the SEC on June 12, 2015)
4.1	Description of Securities (incorporated by reference to Exhibit 4.1 to the Company's Annual report on Form 10-K filed with the SEC on March 22, 2022)
5.1	Opinion of McCarthy Tétrault LLP (incorporated by referenced to Exhibit 5.1 to the Company's Registration Statement on Form S-1 filed with the SEC on June 16, 2023)
10.1	Indemnification Agreement dated July 10, 2007 between Lorus Therapeutics Inc. and the Company (incorporated herein by reference to Exhibit 99.1 to the Company's Current Report on Form 6-K filed with the SEC on September 4, 2007)
10.2+	Amended and Restated Executive Employment Agreement between the Company and Dr. William G. Rice dated August 19, 2014 (incorporated herein by reference to Exhibit 4.9A to the Company's Annual Report on Form 20-F filed with the SEC on March 4, 2015)
10.3+	Share Option Plan as amended May 5, 2015 (incorporated herein by reference to Exhibit 99.2 to the Company's Current Report on Form 6-K filed with the SEC on June 12, 2015)
10.4+	Stock Incentive Plan as adopted May 5, 2015 (incorporated herein by reference to Exhibit 99.1 to the Company's Current Report on Form 6-K filed with the SEC on June 12, 2015)
10.5+	Form of Executive Employment Agreement, dated December 4, 2019, between the Company and Dr. Rafael Bejar (incorporated herein by reference to Exhibit 10.7 to the Company's Annual Report filed on Form 10-K filed with the SEC on March 10, 2020)
10.6	License agreement dated June 13, 2018 by and between the Company and CrystalGenomics, Inc. (incorporated herein by reference to Exhibit 1.1 to the Company's Current Report on Form 6-K filed with the SEC filed on June 22, 2018)
10.7	Option and License Agreement between the Company and CrystalGenomics, Inc. dated March 21, 2016 (incorporated herein by reference on Form 10-KA/3 filed with the SEC on April 22, 2019)
10.8	Amendment to Option and License Agreement between the Company and CrystalGenomics, Inc., dated April 26, 2016 (incorporated herein by reference to Exhibit 99.2 to the Company's Current Report on Form 6-K filed with the SEC on June 8, 2016)

10.10	Third Associate Online and Linear Associate the Comment of Control Committee Land May 10, 2017 (in control by Comment of Control Contr
10.10	Third Amendment to Option and License Agreement between the Company and CrystalGenomics, Inc., dated May 19, 2016 (incorporated herein by reference to Exhibit 99.4 to the Company's Current Report on Form 6-K filed with the SEC on June 8, 2016)
10.11	Fourth Amendment to Option and License Agreement between the Company and CrystalGenomics, Inc., dated June 1, 2016 (incorporated herein by reference to Exhibit 99.5 to the Company's Current Report on Form 6-K filed with the SEC on June 8, 2016)
10.12	License Agreement dated as of March 6, 2018 by and between the Company and Ohm Oncology Inc. (incorporated herein by reference to Exhibit 99.2 on Form 6-K filed with the SEC filed on March 8, 2018)
10.13+	Aptose Biosciences Inc. 2021 Employee Stock Purchase Plan (incorporated by reference to the Definitive Proxy statement on Schedule 14A filed with the SEC on April 1, 2021)
10.14+	Aptose Biosciences Inc. 2021 Employee Stock Incentive Plan (incorporated by reference to the Definitive Proxy statement on Schedule 14A filed with the SEC on April 1, 2021)
10.15	Exclusive License Agreement, dated November 4, 2021, by and between Hanmi Pharmaceutical Co. Ltd. and Aptose Biosciences Inc. (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report filed on Form 8-K on November 4, 2021)
10.16	Employment Agreement dated June 3, 2019 between Aptose Biosciences Inc. and Philippe Ledru (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report filed on Form 8-K on April 11, 2022)
10.17	Employment Agreement, dated June 27, 2022, between Aptose Biosciences Inc. and Fletcher Payne (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report filed on Form 8-K on June 28, 2022)
10.18	Equity Distribution Agreement, dated December 9, 2022, among Aptose Biosciences Inc. and JonesTrading Institutional Services LLC (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report filed on Form 8-K on December 12, 2022)
10.19	Common Share Purchase Agreement, dated May 25, 2023, between Aptose Biosciences Inc. and Keystone Capital Partners, LLC (incorporated by reference herein to Exhibit 10.1 to the Company's Current Report filed on Form 8-K on May 26, 2023)
10.20	Registration Rights Agreement, dated May 25, 2023, between Aptose Biosciences Inc. and Keystone Capital Partners, LLC (incorporated by reference herein to Exhibit 10.2 to the Company's Current Report filed on Form 8-K on May 26, 2023)
21.1	List of Subsidiaries (incorporated herein by reference to Exhibit 21.1 to the Company's Current Report filed on Form 10-K on March 24, 2023)
23.1	Consent of Independent Registered Public Accounting Firm (KPMG) (incorporated by referenced to Exhibit 23.1 to the Company's Registration Statement on Form S-1 filed with the SEC on June 16, 2023)
23.2	Consent of McCarthy Tétrault LLP (included in Exhibit 5.1)
24.1	Powers of Attorney (incorporated by referenced to Exhibit 24.1 to the Company's Registration Statement on Form S-1 filed with the SEC on June 16, 2023)
107	Filing Fees (incorporated by referenced to Exhibit 107 to the Company's Registration Statement on Form S-1 filed with the SEC on June 16, 2023)

⁺ Indicates management contract or compensatory plan.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Company certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-1 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Toronto, Ontario, Canada on June 28, 2023.

Aptose Biosciences Inc.

By: /s/ William G. Rice

William G. Rice

President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

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Name Positions Date

\[
\frac{\s/\ \text{William G. Rice}}{\text{William G. Rice}} \quad \text{President, Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)} \quad \text{June 28, 2023} \]

Senior Vice President and Chief Financial Officer (Principal Financial and Accounting

June 28, 2023

* Denis Burger	Director	June 28, 2023
* Carol Ashe	Director	June 28, 2023
* Dr. Erich M. Platzer	Director	June 28, 2023
* Dr. Bernd R. Seizenger	Director	June 28, 2023
* Dr. Mark Vincent	Director	June 28, 2023
* Warren Whitehead	Director	June 28, 2023

*By: <u>/s/ William G. Rice</u> William G. Rice Attorney-in-Fact

AUTHORIZED REPRESENTATIVE

Pursuant to the requirements of Section 6(a) of the Securities Act of 1933, the undersigned has signed this registration statement, solely in the capacity of the duly authorized representative of Aptose Biosciences Inc. in the United States, on this 28th day of June, 2023.

APTOSE BIOSCIENCES U.S. INC.

By: /s/ William G. Rice

Name: William G. Rice

Title: President and Chief Executive Officer