

## SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. 1)\*

**Aptose Biosciences Inc.**

(Name of Issuer)

**Common Shares**

(Title of Class of Securities)

**03835T101**

(CUSIP Number)

**December 31, 2015**

(Date of Event which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

Rule 13d-1(b)

Rule 13d-1(c)

Rule 13d-1(d)

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, *see* the Notes).

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1 Names of Reporting Persons.  
I.R.S. Identification Nos. of above persons (entities only)

Cormorant Global Healthcare Master Fund, LP

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2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

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3 SEC Use Only

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4 Citizenship or Place of Organization.

Cayman Islands

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5 Sole Voting Power

0 shares

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6 Shared Voting Power

Number of Shares 1,081,867 shares

Beneficially Owned by Each Refer to Item 4 below.

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7 Sole Dispositive Power

Reporting Person With 0 shares

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8 Shared Dispositive Power

1,081,867 shares

Refer to Item 4 below.

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9 Aggregate Amount Beneficially Owned by Each Reporting Person

1,081,867 shares

Refer to Item 4 below.

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10 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)  N/A

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11 Percent of Class Represented by Amount in Row (9)\*

9.3%

Refer to Item 4 below.

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12 Type of Reporting Person (See Instructions)

PN (Partnership)

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1 Names of Reporting Persons.  
I.R.S. Identification Nos. of above persons (entities only)  
  
Cormorant Global Healthcare GP, LLC

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2 Check the Appropriate Box if a Member of a Group (See Instructions)  
(a)   
(b)

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3 SEC Use Only

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4 Citizenship or Place of Organization.  
  
Delaware

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5 Sole Voting Power  
  
0 shares

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6 Shared Voting Power  
Number of Shares 1,081,867 shares  
Beneficially Owned by Each Reporting Person With  
7 Sole Dispositive Power  
0 shares  
8 Shared Dispositive Power  
1,081,867 shares  
Refer to Item 4 below.

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9 Aggregate Amount Beneficially Owned by Each Reporting Person  
  
1,081,867 shares  
  
Refer to Item 4 below.

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10 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)  JN/A

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11 Percent of Class Represented by Amount in Row (9)\*  
  
9.3%  
  
Refer to Item 4 below.

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12 Type of Reporting Person (See Instructions)  
  
OO (Limited Liability Company)

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1 Names of Reporting Persons.  
I.R.S. Identification Nos. of above persons (entities only)  
  
Cormorant Asset Management, LLC

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2 Check the Appropriate Box if a Member of a Group (See Instructions)  
(a)   
(b)

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3 SEC Use Only

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4 Citizenship or Place of Organization.  
  
Delaware

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5 Sole Voting Power  
  
0 shares

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6 Shared Voting Power

Number of Shares 1,081,867 shares

Beneficially Owned by Each Reporting Person With Refer to Item 4 below.

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7 Sole Dispositive Power

0 shares

8 Shared Dispositive Power

1,081,867 shares

Refer to Item 4 below.

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9 Aggregate Amount Beneficially Owned by Each Reporting Person  
  
1,081,867 shares  
  
Refer to Item 4 below.

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10 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)  N/A

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11 Percent of Class Represented by Amount in Row (9)\*  
  
9.3%  
  
Refer to Item 4 below.

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12 Type of Reporting Person (See Instructions)  
  
OO (Limited Liability Company)

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1 Names of Reporting Persons.  
I.R.S. Identification Nos. of above persons (entities only)

Bihua Chen

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2 Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

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3 SEC Use Only

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4 Citizenship or Place of Organization.

United States

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5 Sole Voting Power

0 shares

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6 Shared Voting Power

Number of Shares 1,081,867 shares

Beneficially Owned by Each Reporting Person With Refer to Item 4 below.

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7 Sole Dispositive Power

0 shares

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8 Shared Dispositive Power

1,081,867 shares

Refer to Item 4 below.

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9 Aggregate Amount Beneficially Owned by Each Reporting Person

1,081,867 shares

Refer to Item 4 below.

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10 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)  N/A

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11 Percent of Class Represented by Amount in Row (9)\*

9.3%

Refer to Item 4 below.

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12 Type of Reporting Person (See Instructions)

IN (Individual)

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**Item 1.**

- (a) Name of Issuer  
Aptose Biosciences Inc.
- (b) Address of Issuer's Principal Executive Offices  
2 Meridian Road  
Toronto, Ontario M9W 4Z7

**Item 2.**

- (a) Name of Person Filing  
Cormorant Global Healthcare Master Fund, LP  
Cormorant Global Healthcare GP, LLC  
Cormorant Asset Management, LLC  
Bihua Chen
  - (b) Address of Principal Business Office or, if none, Residence  
200 Clarendon Street, 52nd Floor  
Boston, MA 02116
  - (c) Citizenship  
Cormorant Global Healthcare Master Fund, LP - Cayman Islands  
Cormorant Global Healthcare GP, LLC - Delaware  
Cormorant Asset Management, LLC - Delaware  
Bihua Chen - United States
  - (d) Title of Class of Securities  
Common Shares
  - (e) CUSIP Number  
03835T101
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**Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:**

- (a)  Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
- (b)  Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c)  Insurance Company as defined in Section 3(a)(19) of the Act
- (d)  Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8).
- (e)  An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f)  An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g)  A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);
- (h)  A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i)  A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j)  A non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J);
- (k)  Group, in accordance with §240.13d-1(b)(1)(ii)(K).

**Item 4. Ownership\*\*\***

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) Amount Beneficially Owned\*\*\*
  - Cormorant Global Healthcare Master Fund, LP - 1,081,867 shares
  - Cormorant Global Healthcare GP, LLC - 1,081,867 shares
  - Cormorant Asset Management, LLC - 1,081,867 shares
  - Bihua Chen - 1,081,867 shares
- (b) Percent of Class
  - Cormorant Global Healthcare Master Fund, LP - 9.3%
  - Cormorant Global Healthcare GP, LLC - 9.3%
  - Cormorant Asset Management, LLC - 9.3%
  - Bihua Chen - 9.3%
- (c) Number of shares as to which such person has:
  - (i) sole power to vote or to direct the vote
    - Cormorant Global Healthcare Master Fund, LP - 0 shares
    - Cormorant Global Healthcare GP, LLC - 0 shares
    - Cormorant Asset Management, LLC - 0 shares
    - Bihua Chen - 0 shares
  - (ii) shared power to vote or to direct the vote
    - Cormorant Global Healthcare Master Fund, LP - 1,081,867 shares
    - Cormorant Global Healthcare GP, LLC - 1,081,867 shares
    - Cormorant Asset Management, LLC - 1,081,867 shares
    - Bihua Chen - 1,081,867 shares
  - (iii) sole power to dispose or to direct the disposition of
    - Cormorant Global Healthcare Master Fund, LP - 0 shares
    - Cormorant Global Healthcare GP, LLC - 0 shares
    - Cormorant Asset Management, LLC - 0 shares
    - Bihua Chen - 0 shares
  - (iv) shared power to dispose or to direct the disposition of
    - Cormorant Global Healthcare Master Fund, LP - 1,081,867 shares
    - Cormorant Global Healthcare GP, LLC - 1,081,867 shares
    - Cormorant Asset Management, LLC - 1,081,867 shares
    - Bihua Chen - 1,081,867 shares

\*\*\* Shares reported herein are held by Cormorant Global Healthcare Master Fund, LP for which Cormorant Global Healthcare GP, LLC serves as the general partner and Cormorant Asset Management, LLC serves as the investment manager. Bihua Chen serves as the managing member of Cormorant Global Healthcare GP, LLC and Cormorant Asset Management, LLC. Each of the Reporting Persons disclaims beneficial ownership of the shares reported herein except to the extent of its or his pecuniary interest therein. Percentage calculations herein are based upon there being 11,652,069 issued and outstanding Common Shares of the Issuer as of January 27, 2015.

**Item 5. Ownership of Five Percent or Less of a Class**

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following [ ].

**Item 6. Ownership of More than Five Percent on Behalf of Another Person**

Not applicable.

**Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company**

Not applicable.

**Item 8. Identification and Classification of Members of the Group**

Not applicable.

**Item 9. Notice of Dissolution of Group**

Not applicable.

**Item 10. Certification**

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

**Exhibits**                      **Exhibit**

1                      Joint Filing Agreement by and among the Reporting Persons, incorporated by reference to Exhibit 1 to the Schedule 13G filed by the Reporting Persons with the Securities and Exchange Commission on April 14, 2014.

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**SIGNATURE**

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this Statement is true, complete and correct.

February 16, 2016

CORMORANT GLOBAL HEALTHCARE MASTER FUND, LP  
By: Cormorant Global Healthcare GP, LLC  
its General Partner

By: /s/ Bihua Chen  
Bihua Chen, Managing Member

CORMORANT GLOBAL HEALTHCARE GP, LLC

By: /s/ Bihua Chen  
Bihua Chen, Managing Member

CORMORANT ASSET MANAGEMENT, LLC

By: /s/ Bihua Chen  
Bihua Chen, Managing Member

/s/ Bihua Chen  
Bihua Chen