| FORM 4 | 4 |
|--------|---|
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| Check this box if no  |
|-----------------------|
| longer subject to     |
| Section 16. Form 4 or |
| Form 5 obligations    |
| may continue. See     |
| Instruction 1(b).     |

#### UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

OMB APPROVAL OMB Number: 3235-0287 Estimated average burden hours per response... 0.5

### STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| (Print or Type Responses)<br>1. Name and Address of Reporting P | erson <sup>*</sup>                                   | 2. Issuer Name a   | and Ticker         | or T      | rading Svi  | nbol             |   | 5. Relationship of Reporting Perso   | on(s) to Issue                                      | r                       |
|---|--|--|--------------------|-----------|---|------------------|---|--|---|-------------------------|
| Chow Gregory K.   | Aptose Bioscie                                       |  |                    | 0.        |   |                  | (Check all applicable)<br>Director 10% Owner  |  |   |                         |
| (Last) (First)<br>C/O APTOSE BIOSCIENCE<br>CONSUMERS ROAD, SUIT | 3. Date of Earliest 03/13/2019                       | t Transactio   | on (N              | 1onth/Day | /Year)  | [                | X         Officer (give title below)         Other (specify below)           Senior VP & CFO  |  |   |                         |
| (Street)<br>TORONTO, A6 M2J 4R3                                 | 4. If Amendment, Date Original Filed(Month/Day/Year) |  |                    |           |   |                  | 6. Individual or Joint/Group Filing(Check Applicable Line)<br>_X_Form filed by One Reporting Person<br>Form filed by More than One Reporting Person |  |   |                         |
| (City) (State)  | (Zip)  | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned |                    |           |   |                  |   |  |   |                         |
| 1.Title of Security<br>(Instr. 3)                               | Date<br>(Month/Day/Year)                             | 2A. Deemed<br>Execution Date, if<br>any<br>(Month/Day/Year)                      | Code<br>(Instr. 8) |           | 4. Securities Acquired<br>(A) or Disposed of (D)<br>(Instr. 3, 4 and 5) |                  |   | 5. Amount of Securities<br>Beneficially Owned Following<br>Reported Transaction(s) | Ownership of In<br>Form: Ben                        | Beneficial              |
|   |  |  | Code               | V         | Amount  | (A)<br>or<br>(D) | Price   | (Instr. 3 and 4)   | Direct (D) O<br>or Indirect (I<br>(I)<br>(Instr. 4) | Ownership<br>(Instr. 4) |
| Common Shares   | 03/13/2019   |  | Р                  |           | 10,000  | А                | \$<br>1.7394<br>(1)   | 122,014  | D   |                         |
| Common Shares   | 03/13/2019   |  | Р                  |           | 5,000   | А                | \$<br>1.7856<br>(2)   | 127,014  | D   |                         |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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#### Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned

| (e.g., puts, calls, warrants, options, convertible securities) |             |                  |                    |            |                         |            |     |                  |               |            |        |             |                |             |             |
|--|-------------|------------------|--------------------|------------|-------------------------|------------|-----|------------------|---------------|------------|--------|-------------|----------------|-------------|-------------|
| 1. Title of  | 2.          | 3. Transaction   | 3A. Deemed         | 4.         | 4                       | 5.         |     | 6. Date Exer     | cisable       | 7. Tit     | le and | 8. Price of | 9. Number of   | 10.         | 11. Nature  |
| Derivative   | Conversion  | Date             | Execution Date, if | Transactio | n l                     | Number     |     | and Expiration   | on Date       | Amount of  |        | Derivative  | Derivative     | Ownership   | of Indirect |
| Security   | or Exercise | (Month/Day/Year) | any                | Code       |                         |            |     | (Month/Day/Year) |               | Underlying |        | Security    | Securities     | Form of     | Beneficial  |
| (Instr. 3)   | Price of    |                  | (Month/Day/Year)   | (Instr. 8) | I                       | Derivative |     |                  |               | Securities |        | (Instr. 5)  | Beneficially   | Derivative  | Ownership   |
|  | Derivative  |                  |                    |            |                         | Securities |     |                  | (Instr. 3 and |            | Owned  | Security:   | (Instr. 4)     |             |             |
|  | Security    |                  |                    |            | 1                       | Acqui      | red |                  |               | 4)         |        |             | 0              | Direct (D)  |             |
|  |             |                  |                    |            |                         | (A) or     |     |                  |               |            |        |             | 1              | or Indirect |             |
|  |             |                  |                    |            | Disposed                |            |     |                  |               |            |        |             | Transaction(s) | < / <       |             |
|  |             |                  |                    |            | of (D)                  |            |     |                  |               |            |        | (Instr. 4)  | (Instr. 4)     |             |             |
|  |             |                  |                    |            | (Instr. 3,<br>4, and 5) |            |     |                  |               |            |        |             |                |             |             |
|  |             |                  |                    |            |                         |            | .5) |                  |               |            |        |             |                |             |             |
|  |             |                  |                    |            |                         |            |     |                  |               |            | Amount |             |                |             |             |
|  |             |                  |                    |            |                         |            |     | Date             | Expiration    |            | or     |             |                |             |             |
|  |             |                  |                    |            |                         |            |     | Exercisable      | *             | Title      | Number |             |                |             |             |
|  |             |                  |                    |            |                         |            |     |                  | Date          |            | of     |             |                |             |             |
|  |             |                  |                    | Code V     | V                       | (A)        | (D) |                  |               |            | Shares |             |                |             |             |

# **Reporting Owners**

|   | Relationships |              |                 |       |  |  |  |
|---|---------------|--------------|-----------------|-------|--|--|--|
| Reporting Owner Name / Address  | Director      | 10%<br>Owner | Officer         | Other |  |  |  |
| Chow Gregory K.<br>C/O APTOSE BIOSCIENCES INC.<br>251 CONSUMERS ROAD, SUITE 1105<br>TORONTO, A6 M2J 4R3 |               |              | Senior VP & CFO |       |  |  |  |

## Signatures

/s/ Janet Clennett, as attorney-in-fact for Gregory K. Chow 03/14/2019

- \* If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$1.735 to \$1.74, inclusive. The reporting (1) person undertakes to provide to Aptose Biosciences Inc., any security holder of Aptose Biosciences Inc. or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the ranges set forth in this footnote.

The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$1.779 to \$1.79, inclusive. The reporting(2) person undertakes to provide to Aptose Biosciences Inc., any security holder of Aptose Biosciences Inc. or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the ranges set forth in this footnote.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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