

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

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

| OMB APPROVAL | |
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|---|---|---|
| 1. Name and Address of Reporting Person* <u>O'Brien Christopher Flint</u> (Last) (First) (Middle) <u>12780 EL CAMINO REAL</u> (Street) <u>SAN DIEGO CA 92130</u> (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol <u>NEUROCRINE BIOSCIENCES INC [NBIX]</u> | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Chief Medical Officer</u> |
| | 3. Date of Earliest Transaction (Month/Day/Year) <u>01/10/2017</u> | |
| 4. If Amendment, Date of Original Filed (Month/Day/Year) | | |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) | | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|------------------------|---|--|---|
| | | | Code | V | Amount | (A) or (D) | Price | | | |
| Common Stock | 01/10/2017 | | s ⁽¹⁾ | | 1,750 | D | \$43.35 ⁽²⁾ | 31,794 | D | |

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|--|--|--------------------------------------|--|--------------------------------|---|--|-----|---|--|--|---|--|
| | | | | Code | V | (A) | (D) | | | | | |

Explanation of Responses:

1. Sale of 1,750 shares of common stock issued upon vesting of 3,500 restricted stock units on January 10, 2017 to cover payroll and withholding taxes, with the balance of the shares (1,750) maintained by the Reporting Person; the disposition reported in this Form 4 was effected by a broker pursuant to instructions set forth in a Rule 10b5-1 trading plan adopted by the Reporting Person at least 90 days prior to the transaction date in Box 3 above. Additionally, Issuer policy restricts the Reporting Person from amending, canceling, suspending or otherwise modifying any 10b5-1 trading plan subsequent to adoption of the plan.

2. Represents a weighted average sales price per share. These shares were sold in multiple transactions at prices ranging from \$42.50 to \$45.49. The Reporting Person has provided to the issuer, and will provide to any security holder of the issuer or the SEC staff, upon request, information regarding the number of shares sold at each price within the range.

Remarks:

/s/Darin Lippoldt, Attorney-In-Fact 01/12/2017

** Signature of Reporting Person Date

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

* 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).

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

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.