

Regulus Therapeutics Inc.
Form 3
October 12, 2012

FORM 3 UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

OMB APPROVAL

OMB Number: 3235-0104
Expires: January 31, 2005
Estimated average burden hours per response... 0.5

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,
Section 17(a) of the Public Utility Holding Company Act of 1935 or Section
30(h) of the Investment Company Act of 1940

(Print or Type Responses)

| | | | | |
|---|---------|--------------------------------------|--|--|
| 1. Name and Address of Reporting Person * | | 2. Date of Event Requiring Statement | 3. Issuer Name and Ticker or Trading Symbol | |
| Â ASTRAZENECA PLC | | (Month/Day/Year) | Regulus Therapeutics Inc. [RGLS] | |
| (Last) | (First) | (Middle) | 10/10/2012 | |
| 2 KINGDOM STREET | | | 4. Relationship of Reporting Person(s) to Issuer | 5. If Amendment, Date Original Filed(Month/Day/Year) |
| (Street) | | | (Check all applicable) | |
| LONDON,Â X0Â W2 6BD | | | <input type="checkbox"/> Director | <input checked="" type="checkbox"/> 10% Owner |
| (City) | (State) | (Zip) | <input type="checkbox"/> Officer | <input type="checkbox"/> Other |
| | | | (give title below) | (specify below) |
| | | | | 6. Individual or Joint/Group Filing(Check Applicable Line) |
| | | | | <input type="checkbox"/> Form filed by One Reporting Person |
| | | | | <input checked="" type="checkbox"/> Form filed by More than One Reporting Person |

Table I - Non-Derivative Securities Beneficially Owned

| 1. Title of Security (Instr. 4) | 2. Amount of Securities Beneficially Owned (Instr. 4) | 3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5) | 4. Nature of Indirect Beneficial Ownership (Instr. 5) |
|---------------------------------|---|--|---|
| COMMON STOCK | 6,250,000 | I | See footnote <u>(1)</u> |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly. SEC 1473 (7-02)

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 control number.

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

| 1. Title of Derivative Security (Instr. 4) | 2. Date Exercisable and Expiration Date (Month/Day/Year) | 3. Title and Amount of Securities Underlying Derivative Security (Instr. 4) | 4. Conversion or Exercise Price of Derivative Security | 5. Ownership Form of Derivative Security: Direct (D) or Indirect | 6. Nature of Indirect Beneficial Ownership (Instr. 5) |
|--|--|---|--|--|---|
| | Date Exercisable | Expiration Date | Title | Amount or Number of | |

Shares (I)
(Instr. 5)

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|--|---------------|-----------|---------|-------|
| | Director | 10% Owner | Officer | Other |
| ASTRAZENECA PLC 2 KINGDOM STREET LONDON, X0 W2 6BD | ^ | ^ X | ^ | ^ |
| ASTRAZENECA AB 85 SODERTALJE, V7 SE-151 | ^ | ^ X | ^ | ^ |

Signatures

/s/ A C N Kemp, Authorized Signatory 10/12/2012

Signature of Reporting Person Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 5(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).
- (1) The securities are owned directly by AstraZeneca AB, a wholly-owned, indirect subsidiary of AstraZeneca PLC. AstraZeneca is an indirect beneficial owner of the reported securities.

^

Remarks:

Exhibit 24 - Power of Attorney

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, See Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.