| IRONWOO<br>Form 4<br>January 13,  | D PHARMACEU<br>2014             | JTICALS  | INC                   |   |                        |           |                        |  |  |   |
|---|---------------------------------|--|-----------------------|---|------------------------|-----------|------------------------|--|--|---|
| FORM  | ЛЛ                              |  |                       |   |                        |           |                        |  | OMB AF   | PROVAL  |
|   | UNITED                          | STATES   |                       |   | AND EXC<br>1, D.C. 205 |           | IGE CO                 | OMMISSION  | OMB<br>Number:   | 3235-0287   |
| Check the check | nger                            |  |                       |   |                        |           |                        |  | Expires:   | January 31,<br>2005   |
| subject t<br>Section<br>Form 4  | to <b>SIAIEN</b><br>16.         | STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP<br>SECURITIES |                       |   |                        |           |                        |  |  | 2005<br>Iverage<br>rs per<br>0.5                                  |
| Form 5<br>Filed pursuant to Section 16(a) of the Securities Exchange Act of 19<br>Section 17(a) of the Public Utility Holding Company Act of 1935 or S<br>30(h) of the Investment Company Act of 1940<br>1(b).  |                                 |  |                       |   |                        |           | 935 or Section         |  |  |   |
| (Print or Type  | Responses)                      |  |                       |   |                        |           |                        |  |  |   |
|   | Address of Reporting<br>BRYAN E | Person <u>*</u>  | Symbol                |   | <b>d</b> Ticker or T   | Frading   | 2                      | 5. Relationship of I<br>ssuer  | Reporting Pers   | son(s) to   |
|   | PHARM                           | IRONWOOD<br>PHARMACEUTICALS INC<br>[IRWD]                  |                       |   |                        |           | (Check all applicable) |  |  |   |
| (Last)  |                                 | Middle)  | 3. Date o<br>(Month/I | Earliest Transaction  |                        |           |                        | Officer (give titleOther (specify below)   |  |   |
| C/O VENR<br>AVENUE  | CCK, 3340 HILI                  | LVIEW  | 01/09/2               | 014   |                        |           |                        |  |  |   |
|   | (Street)                        |  |                       | endment, D<br>nth/Day/Yea   | Date Original<br>ar)   |           | A                      | <ol> <li>Individual or Joi</li> <li>Applicable Line)</li> <li>X_ Form filed by O</li> </ol>    |  |   |
| PALO ALT  | ГО, СА 94304                    |  |                       |   |                        |           | Ī                      | Form filed by Me<br>Person   | ore than One Re  | porting   |
| (City)  | (State)                         | (Zip)  | Tab                   | le I - Non-   | Derivative S           | ecurit    | ies Acqui              | ired, Disposed of,   | or Beneficial  | ly Owned  |
| 1.Title of<br>Security<br>(Instr. 3)2. Transaction Date<br>(Month/Day/Year)2A. Deemed<br>Execution Date, if<br>any<br>(Month/Day/Year)  |                                 |  |                       | 3. 4. Securities Acquired (A<br>Transactionor Disposed of (D)<br>Code (Instr. 3, 4 and 5)<br>(Instr. 8) |                        |           |                        | 5. Amount of<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s) | 6.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I)<br>(Instr. 4) | 7. Nature of<br>Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|   |                                 |  |                       | Code V  | Amount                 | or<br>(D) | Price                  | (Instr. 3 and 4)   |  |   |
| Class A<br>Common<br>Stock  | 01/09/2014                      |  |                       | S <u>(1)</u>  | 225,996                | D         | \$ 12.4                | 1,240,167  | Ι  | By Funds <sup>(2)</sup>   |
| Class A<br>Common<br>Stock  | 01/09/2014                      |  |                       | S <u>(1)</u>  | 42,911                 | D         | \$ 12.4                | 235,476  | Ι  | By Funds $(3)$  |
| Class A<br>Common<br>Stock  | 01/10/2014                      |  |                       | S <u>(1)</u>  | 252,127                | D         | \$<br>13.12            | 988,040  | I  | By Funds $(4)$  |

| Class A<br>Common<br>Stock | 01/10/2014 | S <u>(1)</u> | 47,873  | D | \$<br>13.12 | 187,603   | I     | By Funds $(5)$                       |
|----------------------------|------------|--------------|---------|---|-------------|-----------|-------|--------------------------------------|
| Class A<br>Common<br>Stock | 01/13/2014 | S <u>(1)</u> | 213,840 | D | \$<br>12.57 | 774,200   | I     | By Funds $(6)$                       |
| Class A<br>Common<br>Stock | 01/13/2014 | S <u>(1)</u> | 40,603  | D | \$<br>12.57 | 147,000   | Ι     | By Funds $(7)$                       |
| Class A<br>Common<br>Stock |            |              |         |   |             | 24,575    | D (8) |                                      |
| Class A<br>Common<br>Stock |            |              |         |   |             | 1,862,497 | Ι     | By Funds $(9)$                       |
| Class B<br>Common<br>Stock |            |              |         |   |             | 36,290    | Ι     | $\underline{\text{By Funds}}_{(10)}$ |
| Class A<br>Common<br>Stock |            |              |         |   |             | 105       | Ι     | By LLC<br>(11)                       |
| Class B<br>Common<br>Stock |            |              |         |   |             | 1,919,704 | Ι     | $\frac{\mathbf{By Funds}}{(12)}$     |
| Class A<br>Common<br>Stock |            |              |         |   |             | 88,262    | Ι     | $\frac{\mathbf{By Funds}}{(13)}$     |
| Class A<br>Common<br>Stock |            |              |         |   |             | 7,483     | Ι     | $\underline{\text{By Funds}}_{(14)}$ |
| Class A<br>Common<br>Stock |            |              |         |   |             | 18,910    | Ι     | $\frac{\mathbf{By Funds}}{(15)}$     |
| Class B<br>Common<br>Stock |            |              |         |   |             | 40,000    | Ι     | By LLC<br>(16)                       |
| Class A<br>Common<br>Stock |            |              |         |   |             | 3,040     | I     | By LLC<br>(17)                       |

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

Persons who respond to the collection of information contained in this form are not (9-02) required to respond unless the form displays a currently valid OMB control

#### number.

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

| 1. Title of<br>Derivative<br>Security<br>(Instr. 3) | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction Date<br>(Month/Day/Year) | 3A. Deemed<br>Execution Date, if<br>any<br>(Month/Day/Year) | 4.<br>Transactio<br>Code<br>(Instr. 8) | 5.<br>orNumber<br>of<br>Derivative<br>Securities<br>Acquired<br>(A) or<br>Disposed<br>of (D)<br>(Instr. 3,<br>4, and 5) |                     | ate                | Amou<br>Unde<br>Secur | le and<br>unt of<br>rlying<br>ities<br>. 3 and 4) | 8. Price of<br>Derivative<br>Security<br>(Instr. 5) | 9. Nu<br>Deriv<br>Secur<br>Bene<br>Owne<br>Follo<br>Repo<br>Trans<br>(Instr |
|---|---|---|---|--|---|---------------------|--------------------|-----------------------|---|---|---|
|   |   |   |   | Code V                                 | (A) (D)   | Date<br>Exercisable | Expiration<br>Date | Title                 | Amount<br>or<br>Number<br>of<br>Shares            |   |   |

## **Reporting Owners**

| Reporting Owner Name / Addre  | SS         | Relationships |         |       |  |  |  |  |  |
|---|------------|---------------|---------|-------|--|--|--|--|--|
|   | Director   | 10% Owner     | Officer | Other |  |  |  |  |  |
| ROBERTS BRYAN E<br>C/O VENROCK<br>3340 HILLVIEW AVENUE<br>PALO ALTO, CA 94304 | Х          |               |         |       |  |  |  |  |  |
| Signatures  |            |               |         |       |  |  |  |  |  |
| /s/ Bryan E.<br>Roberts   | 01/13/2014 |               |         |       |  |  |  |  |  |

<u>\*\*</u>Signature of Date Reporting Person

### **Explanation of Responses:**

- \* 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 sales reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by Venrock Healthcare Capital Partners,
   (1) L.P. ("VHCP") and VHCP Co-Investment Holdings, LLC ("VHCP Co-Investment") on October 30, 2013 and modified on November 27, 2013.

VHCP holds an aggregate of 1,240,167 shares of Class A Common Stock of the Issuer. VHCP Management, LLC ("VHCP

(2) Management") is the general partner of VHCP and may be deemed to beneficially own these shares. Dr. Roberts is a managing member of VHCP Management and may be deemed to beneficially own these shares. Dr. Roberts and VHCP Management expressly disclaim beneficial ownership over these shares except to the extent of their indirect pecuniary interests therein.

VHCP Co-Investment holds an aggregate of 235,476 shares of Class A Common Stock of the Issuer. VHCP Management is the manager of VHCP Co-Investment and may be deemed to beneficially own these shares. Dr. Roberts is a managing member of VHCP

(3) Of VHCP Co-investment and may be deemed to beneficially own these shares. Dr. Roberts is a managing memoer of VHCP
 Management and may be deemed to beneficially own these shares. Dr. Roberts and VHCP Management expressly disclaim beneficial ownership over these shares except to the extent of their indirect pecuniary interests therein.

VHCP holds an aggregate of 988,040 shares of Class A Common Stock of the Issuer. VHCP Management is the general partner of

(4) VHCP and may be deemed to beneficially own these shares. Dr. Roberts is a managing member of VHCP Management and may be deemed to beneficially own these shares. Dr. Roberts and VHCP Management expressly disclaim beneficial ownership over these shares except to the extent of their indirect pecuniary interests therein.

VHCP Co-Investment holds an aggregate of 187,603 shares of Class A Common Stock of the Issuer. VHCP Management is the manager of VHCP Co-Investment and may be deemed to beneficially own these shares. Dr. Roberts is a managing member of VHCP

(5) Of VHCP Co-investment and may be deemed to beneficially own these shares. Dr. Roberts is a managing member of VHCP
 Management and may be deemed to beneficially own these shares. Dr. Roberts and VHCP Management expressly disclaim beneficial ownership over these shares except to the extent of their indirect pecuniary interests therein.

(6) VHCP holds an aggregate of 774,200 shares of Class A Common Stock of the Issuer. VHCP Management is the general partner of VHCP and may be deemed to beneficially own these shares. Dr. Roberts is a managing member of VHCP Management and may be deemed to beneficially own these shares. Dr. Roberts and VHCP Management expressly disclaim beneficial ownership over these shares except to the extent of their indirect pecuniary interests therein.

VHCP Co-Investment holds an aggregate of 147,000 shares of Class A Common Stock of the Issuer. VHCP Management is the manager of VHCP Co-Investment and may be deemed to beneficially own these shares. Dr. Roberts is a managing member of VHCP

(7) Of VITCE Co-investment and may be deemed to beneficially own these shares. Dr. Roberts is a managing member of VITCE
 Management and may be deemed to beneficially own these shares. Dr. Roberts and VHCP Management expressly disclaim beneficial ownership over these shares except to the extent of their indirect pecuniary interests therein.

The reporting person is a member of the Management Company. Under an agreement between the reporting person and the Management Company, the reporting person is deemed to hold 9,554 of the reported shares for the sole benefit of the Management Company and

(8) must hold or sell these 9,554 shares solely upon the direction of the Management Company. The Management Company may be deemed the indirect beneficial owner of these 9,554 shares, and the reporting person may be deemed the indirect beneficial owner of these 9,554 shares through his interest in the Management Company. The reporting person disclaims beneficial ownership of these 9,554 shares except to the extent of his pecuniary interest therein.

Venrock Associates II, L.P. holds an aggregate of 1,862,497 shares of Class A Common Stock of the Issuer. The reporting person is a general partner of Venrock Associates II, L.P. and may be deemed to beneficially own these shares. The reporting person disclaims beneficial ownership of these shares except to the extent of his indirect pecuniary interest therein.

Venrock Entrepreneurs Fund, L.P. ("VEF") holds an aggregate of 36,290 shares of Class B Common Stock of the Issuer. Venrock Management, LLC ("VM") is the sole general partner of VEF and may be deemed to beneficially own these shares. Dr. Roberts is a

- (10) Management, ELC (VM) is the sole general parties of VEP and may be deemed to benericiarly own these shares. Dr. Roberts and VM expressly disclaim beneficial ownership over all shares held by VEF, except to the extent of their indirect pecuniary interests therein.
- VM holds an aggregate of 105 shares of Class A Common Stock of the Issuer. Dr. Roberts is a member of VM and may be deemed to(11) beneficially own these shares. Dr. Roberts expressly disclaims beneficial ownership over all shares held by VM, except to the extent of his indirect pecuniary interest therein.
- Venrock Associates holds an aggregate of 1,919,704 shares of Class B Common Stock of the Issuer. The reporting person is a general
   (12) partner of Venrock Associates and may be deemed to beneficially own these shares. The reporting person disclaims beneficial ownership of these shares except to the extent of his indirect pecuniary interest therein.

Venrock Associates V, L.P. ("VA5") holds an aggregate of 88,262 shares of Class A Common Stock of the Issuer. Venrock Management V, LLC ("VM5") is the sole general partner of VA5 and may be deemed to beneficially own these shares. Dr. Roberts is a

(13) Management V, EEC (VMS) is the sole general particle of VAS and may be deemed to beneficiary own these shares. Dr. Roberts and VMS expressly disclaim beneficial ownership over all shares held by VAS, except to the extent of their indirect pecuniary interests therein.

Venrock Partners V, L.P. ("VP5") holds an aggregate of 7,483 shares of Class A Common Stock of the Issuer. Venrock Partners Management V, LLC ("VPM5") is the sole general partner of VP5 and may be deemed to beneficially own these shares. Dr. Roberts is a

(14) Management V, LLC (VPMS) is the sole general partner of VPS and may be deemed to beneficially own these shares. Dr. Roberts is a member of VPM5 and may be deemed to beneficially own these shares. Dr. Roberts and VPM5 expressly disclaim beneficial ownership over all shares held by VP5, except to the extent of their indirect pecuniary interests therein.

VHCP Management holds an aggregate of 18,910 shares of Class A Common Stock of the Issuer. Dr. Roberts is a managing member of
 (15) VHCP Management and may be deemed to beneficially own these shares. Dr. Roberts expressly disclaims beneficial ownership over these shares except to the extent of his indirect pecuniary interest therein.

Consists of 40,000 shares of Class B Common Stock of the issuer held by the Managment Company. Dr. Roberts is a member of the(16) Management Company and may be deemed to beneficially own these shares. Dr. Roberts disclaims beneficial ownership of these shares except to the extent of his indirect pecuniary interest therein.

Consists of 3,040 shares of Class A Common Stock of the issuer held by the Management Company. Dr. Roberts is a member of the(17) Management Company and may be deemed to beneficially own these shares. Dr. Roberts disclaims beneficial ownership of these shares except to the extent of his indirect pecuniary interest therein.

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

### Explanation of Responses:

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.