

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

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

| | | | |
|--|--|---|---|
| 1. Name and Address of Reporting Person* <u>DOMAIN ASSOCIATES</u> <hr/> (Last) (First) (Middle) <u>ONE PALMER SQUARE</u> <hr/> (Street) <u>PRINCETON NJ 08542</u> <hr/> (City) (State) (Zip) | 2. Date of Event Requiring Statement (Month/Day/Year) <u>05/06/2015</u> | 3. Issuer Name and Ticker or Trading Symbol <u>aTYR PHARMA INC [LIFE]</u> | |
| | | 4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below) | 5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) 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 | 6,286 ⁽¹⁾ | D ⁽¹⁾ (2)(3) | |
| Common Stock | 6,286 ⁽⁴⁾⁽⁵⁾ | D ⁽⁴⁾ | |

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: Direct (D) or Indirect (I) (Instr. 5) | 6. Nature of Indirect Beneficial Ownership (Instr. 5) |
|--|--|-----------------|---|----------------------------|--|--|---|
| | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | |
| | | | | | | | |

1. Name and Address of Reporting Person*
DOMAIN ASSOCIATES

 (Last) (First) (Middle)
ONE PALMER SQUARE

 (Street)
PRINCETON NJ 08542

 (City) (State) (Zip)

1. Name and Address of Reporting Person*
BLAIR JAMES C

 (Last) (First) (Middle)
C/O DOMAIN ASSOCIATES, LLC
ONE PALMER SQUARE

 (Street)
PRINCETON NJ 08542

 (City) (State) (Zip)

1. Name and Address of Reporting Person*
DOVEY BRIAN H

 (Last) (First) (Middle)
C/O DOMAIN ASSOCIATES, LLC
ONE PALMER SQUARE

 (Street)
PRINCETON NJ 08542

 (City) (State) (Zip)

| (City) | (State) | (Zip) |
|--|---------|----------|
| 1. Name and Address of Reporting Person* | | |
| TREU JESSE I | | |
| (Last) | (First) | (Middle) |
| C/O DOMAIN ASSOCIATES, LLC | | |
| ONE PALMER SQUARE | | |
| (Street) | | |
| PRINCETON | NJ | 08542 |
| (City) | (State) | (Zip) |

| | | |
|--|---------|----------|
| 1. Name and Address of Reporting Person* | | |
| SCHOEMAKER KATHLEEN K | | |
| (Last) | (First) | (Middle) |
| C/O DOMAIN ASSOCIATES, LLC | | |
| ONE PALMER SQUARE | | |
| (Street) | | |
| PRINCETON | NJ | 08542 |
| (City) | (State) | (Zip) |

| | | |
|--|---------|----------|
| 1. Name and Address of Reporting Person* | | |
| VITULLO NICOLE | | |
| (Last) | (First) | (Middle) |
| C/O DOMAIN ASSOCIATES, LLC | | |
| ONE PALMER SQUARE | | |
| (Street) | | |
| PRINCETON | NJ | 08542 |
| (City) | (State) | (Zip) |

| | | |
|--|---------|----------|
| 1. Name and Address of Reporting Person* | | |
| Halak Brian K | | |
| (Last) | (First) | (Middle) |
| C/O DOMAIN ASSOCIATES, LLC | | |
| ONE PALMER SQUARE | | |
| (Street) | | |
| PRINCETON | NJ | 08542 |
| (City) | (State) | (Zip) |

| | | |
|--|---------|----------|
| 1. Name and Address of Reporting Person* | | |
| Kamdar Kim P. | | |
| (Last) | (First) | (Middle) |
| C/O DOMAIN ASSOCIATES, LLC | | |
| ONE PALMER SQUARE | | |
| (Street) | | |
| PRINCETON | NJ | 08542 |
| (City) | (State) | (Zip) |

Explanation of Responses:

1. These securities are directly beneficially owned by the designated Reporting Person and may be deemed to be indirectly beneficially owned by each of the Reporting Owners listed below, each of whom is a managing member of the designated Reporting Person. Pursuant to Instruction 5(b)(iv) of Form 3, each such individual has elected to report as indirectly beneficially owned the entire number of securities owned by the designated Reporting Person, however each of them disclaims beneficial ownership of any securities, and any proceeds thereof, that exceed his or her pecuniary interest therein and/or that are not actually distributed to him or her.
2. As managing members of the sole general partner of Domain Partners VIII, L.P., each Reporting Owner listed below (except for Kim P. Kamdar) may also be deemed to indirectly beneficially own the securities of the Issuer held by Domain Partners VIII, L.P., as reported on a Form 3 for Domain Partners VIII, L.P. filed on the same date as this Form 3.
3. As managing members of the sole general partner of DP VIII Associates, L.P., each Reporting Owner listed below (except for Kim P. Kamdar) may also be deemed to indirectly beneficially own the securities of the Issuer held by DP VIII Associates, L.P., as reported on a Form 3 for DP VIII Associates, L.P. filed on the same date as this Form 3.
4. These securities are directly beneficially owned by James C. Blair.
5. These shares are subject to the Issuer's right of repurchase, which lapses in 36 equal monthly installments beginning on June 1, 2014.

Remarks:

/s/ Kathleen K. Schoemaker, as
Managing Member,
individually, and as Attorney-
in-Fact for J. Blair, B. Dovey,
J. Treu, N. Vitullo, B. Halak
and K. Kamdar 05/06/2015

** 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 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).

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.