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

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**FORM 8-K**

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**CURRENT REPORT  
Pursuant to Section 13 or 15(d) of the  
Securities Exchange Act of 1934**

**Date of Report (Date of earliest event reported): July 19, 2015**

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**ATYR PHARMA, INC.**

(Exact name of registrant as specified in its charter)

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**Delaware**  
(State or other jurisdiction  
of incorporation)

**001-37378**  
(Commission  
File Number)

**20-3435077**  
(I.R.S. Employer  
Identification No.)

**3545 John Hopkins Court, Suite #250  
San Diego, CA 92121**  
(Address of principal executive offices, including zip code)

**(858) 731-8389**  
(Registrant's telephone number, including area code)

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Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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**Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.**

On July 19, 2015, aTyr Pharma, Inc. (the “Company”) and David M. Weiner, M.D., the Company’s Chief Medical Officer, agreed upon a transition plan whereby Dr. Weiner will transition from his role as Chief Medical Officer to that of a clinical advisor to the Company supporting the Company’s execution of its clinical trials of Resolaris through the first quarter of 2016. The Company anticipates that this transition will be implemented within the next few weeks.

**Item 7.01 Regulation FD Disclosure.**

In connection with Dr. Weiner’s transition to an advisory role, the Company issued a press release on July 20, 2015. A copy of the press release is attached as Exhibit 99.1.

The information furnished pursuant to this Item 7.01 in this Current Report on Form 8-K, including Exhibit 99.1, shall not be deemed “filed” for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (“Exchange Act”) or otherwise subject to the liability of that section, nor shall such information be deemed incorporated by reference in any filing under the Exchange Act or the Securities Act of 1933, as amended, regardless of the general incorporation language of such filing, except as shall be expressly set forth by specific reference in such filing.

**Item 9.01 Financial Statements and Exhibits.**

*(d) Exhibits.*

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press release dated July 20, 2015

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**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: July 20, 2015

**aTyr Pharma, Inc.**

By: /S/ JOHN D. MENDLEIN

John D. Mendlein, Ph.D.

Chief Executive Officer and Executive Chairman

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**EXHIBIT INDEX**

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press release dated July 20, 2015

**FOR IMMEDIATE RELEASE****Contact:****Marcy Graham**

Vice President, Investor Relations &amp; Corporate Communications

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858-223-1163

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**ATYR PHARMA ANNOUNCES TRANSITIONS IN CLINICAL DEVELOPMENT & OPERATIONS**

SAN DIEGO – July 20, 2015 – aTyr Pharma, Inc. (Nasdaq: LIFE), a biotherapeutics company engaged in the discovery and development of Physiocrine-based therapeutics to address severe rare diseases, today announced that it will transition oversight of clinical development and operations to Ms. Kelly Blackburn and Melissa Ashlock, M.D. as David Weiner, M.D., transitions from his current position as aTyr’s Chief Medical Officer into a clinical advisory role through the end of the first quarter of 2016.

“Our ongoing Phase 1b/2 clinical trial is continuing on track in facioscapulohumeral muscular dystrophy (FSHD) as the first orphan indication for Resolaris™, our natural immuno-modulator and lead product candidate, thanks to the leadership and expertise of David, Kelly and Melissa,” said John Mendlein, Ph.D., CEO and executive chairman of aTyr Pharma. “We want to thank David for his early contributions to our FSHD program, and we are pleased that he will remain with us as an advisor during this transition and our ongoing FSHD trial.”

“aTyr’s Physiocrine biology represents a number of potentially transformative therapeutic opportunities. I have enjoyed working with our accomplished leadership team here to bring meaningful medicines to patients with rare genetic muscle diseases with an immune component,” said Dr. Weiner. “I remain enthusiastic about the potential clinical benefit that Resolaris™ can bring to these patients.”

“Our clinical team is also enthusiastic about our ability to expand Resolaris clinical testing to other muscular dystrophies beyond FSHD, and other rare diseases such as interstitial lung disease (ILD),” said Mendlein. “Our clinical team includes the expertise of Dr. Melissa Ashlock and Ms. Kelly Blackburn who were deeply involved in the rare disease pipeline of the Cystic Fibrosis Foundation and Vertex, respectively, which led to two approved novel therapeutics for genetic disease, cystic fibrosis, Kalydeco and Orkambi.”

Resolaris™, a first-in-class protein therapeutic, is currently being tested in an ongoing Phase 1b/2 clinical trial in adult patients with facioscapulohumeral muscular dystrophy (FSHD), and the Company also plans to initiate a Phase 1b/2 clinical trial in early onset FSHD patients in the third quarter of 2015. Additionally, aTyr expects to begin a Phase 1b/2 trial of Resolaris™ in LGMD (limb-girdle muscular dystrophy) 2B in the fourth quarter of 2015, as well as an additional trial in specific indications of interstitial lung disease, or ILD, in the first half of 2016.

**About aTyr Pharma**

aTyr Pharma is engaged in the discovery and clinical development of innovative medicines for patients suffering from severe rare diseases using its knowledge of Physiocrine biology, a newly discovered set of physiological modulators. The Company’s lead candidate, Resolaris™, is a first-in-class intravenous protein therapeutic for the treatment of rare myopathies with an immune component. Resolaris™ is currently in a Phase 1b/2 clinical trial in adult patients with facioscapulohumeral muscular dystrophy (FSHD). Trials are planned in additional indications, including early onset FSHD and limb-girdle muscular dystrophy (LGMD) 2B. Trials are also planned for indications in interstitial lung disease (ILD). To protect

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this pipeline, aTyr built an intellectual property estate comprising 45 issued or allowed patents and over 240 pending patent applications that are solely owned or exclusively licensed by aTyr. aTyr's key programs are currently focused on severe, rare diseases characterized by immune dysregulation for which there are currently limited or no treatment options. The Company was founded by Professors Paul Schimmel, Ph.D., and Xiang-Lei Yang, Ph.D., two leading aminoacyl tRNA synthetase scientists at The Scripps Research Institute.

#### **Forward-Looking Statements**

This press release contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. Any statements in this release that are not historical facts may be considered such "forward-looking statements." Such forward looking statements, which represent management's intent, belief, or current expectations, involve risks and uncertainties and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Some of the potential risks and uncertainties that could cause actual results to differ from those predicted include the Company's ability to raise additional funding, its ability to develop or commercialize current or new product candidates, uncertainties and delays inherent in pre-clinical studies and clinical trials, unexpected new data, safety and technical issues, competition, and market conditions. These and additional risks and uncertainties are more fully described in the Company's filings with the Securities and Exchange Commission, including its most recent Quarterly Report on Form 10-Q. Undue reliance should not be placed on forward-looking statements, which speak only as of the date they are made. The Company disclaims any obligation to update any forward-looking statements to reflect new information, events or circumstances after the date they are made, or to reflect the occurrence of unanticipated events.

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