

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

FORM 8-K

CURRENT REPORT

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

Date of Report (Date of earliest event reported): January 12, 2021

ATYR PHARMA, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

001-37378
(Commission File Number)

20-3435077
(IRS Employer
Identification No.)

3545 John Hopkins Court, Suite #250
San Diego
(Address of Principal Executive Offices)

92121
(Zip Code)

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

Not Applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligations 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))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.001 per share	LIFE	The Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 or Rule 12b-2 of the Securities Exchange Act of 1934.

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 8.01 Other Events.

On January 14, 2021, aTyr Pharma, Inc. (the “Company”) announced that its partner Kyorin Pharmaceutical Co., Ltd., a wholly owned subsidiary of Kyorin Holdings, Inc., has completed the last subject visit in its Phase 1 clinical trial of aTyr’s lead therapeutic candidate ATYR1923 (known as KRP-R120 in Japan). This achievement has triggered a \$2.0 million milestone payment to the Company.

A press release announcing the completion of subject visits for the Phase 1 trial of ATYR1923 in Japan is attached as Exhibit 99.1 hereto.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Press Release of aTyr Pharma, Inc. dated January 14, 2021

SIGNATURE

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.

ATYR PHARMA, INC.

By: /s/ Jill M. Broadfoot
Jill M. Broadfoot
Chief Financial Officer

Date: January 14, 2021

**IMMEDIATE RELEASE****Contact:**

Ashlee Dunston

Director, Investor Relations and Corporate Communications

adunston@atyrpharma.com**aTyr Pharma Announces Partner Kyorin Pharmaceutical, Co., Ltd. Completes Subject Visits for Phase 1 Trial of ATYR1923 in Japan**

SAN DIEGO – January 14, 2021– aTyr Pharma, Inc. (Nasdaq: LIFE), a biotherapeutics company engaged in the discovery and development of innovative medicines based on novel biological pathways, today announced that its partner Kyorin Pharmaceutical Co., Ltd., or Kyorin, a wholly owned subsidiary of Kyorin Holdings, Inc., has completed the last subject visit in its Phase 1 clinical trial of aTyr’s lead therapeutic candidate ATYR1923 (known as KRP-R120 in Japan). This achievement has triggered a milestone payment to aTyr.

“We applaud Kyorin for its timely advancement of this study. We are highly encouraged by their progress with the clinical program for ATYR1923 in Japan since becoming our partner early last year,” said Dr. Sanjay Shukla, M.D., M.S., President and Chief Executive Officer of aTyr.

The Phase 1 trial, which is being conducted by Kyorin, is a placebo-controlled study to evaluate the safety, pharmacokinetics and immunogenicity of ATYR1923 in 32 healthy Japanese male volunteers. Results from this study are intended to enable Kyorin to initiate patient trials in interstitial lung disease (ILD) in Japan.

Kyorin is aTyr’s partner for the development and commercialization of ATYR1923 for ILDs in Japan.

About ATYR1923

aTyr is developing ATYR1923 as a potential therapeutic for patients with inflammatory lung diseases. ATYR1923, a fusion protein comprised of the immuno-modulatory domain of histidyl tRNA synthetase fused to the FC region of a human antibody, is a selective modulator of neuropilin-2 that downregulates the innate and adaptive immune response in inflammatory disease states. aTyr recently completed enrollment in a proof-of-concept Phase 1b/2a trial evaluating ATYR1923 in patients with pulmonary sarcoidosis, a form of interstitial lung disease. This Phase 1b/2a study is a multi-ascending dose, placebo-controlled, first-in-patient study of ATYR1923 that has been designed to evaluate the safety, tolerability, steroid sparing effect, immunogenicity and pharmacokinetics profile of multiple doses of ATYR1923. In response to the COVID-19 pandemic, aTyr completed a Phase 2 clinical trial with ATYR1923 in COVID-19 patients with severe respiratory complications. This Phase 2 study was a randomized, double blind, placebo-controlled study that was designed to evaluate the safety and preliminary efficacy of a single dose of ATYR1923.

About aTyr

aTyr is a biotherapeutics company engaged in the discovery and development of innovative medicines based on novel biological pathways. aTyr's research and development efforts are concentrated on a newly discovered area of biology, the extracellular functionality and signaling pathways of tRNA synthetases. aTyr has built a global intellectual property estate directed to a potential pipeline of protein compositions derived from 20 tRNA synthetase genes and their extracellular targets. aTyr's primary focus is ATYR1923, a clinical-stage product candidate which binds to the neuropilin-2 receptor and is designed to down-regulate immune engagement in inflammatory lung diseases. For more information, please visit <http://www.atyrpharma.com>.

About Kyorin

Trusted among patients and professionals in the medical industry, Kyorin Pharmaceutical Co., Ltd. strives to be a company that contributes to public health and is recognized as one with social significance by improving its presence in specific therapeutic areas and through global discovery of novel drugs. Kyorin Pharmaceutical Co., Ltd. uses a franchise customer strategy where its marketing efforts are focused on respiratory, otolaryngology and urology. In drug discovery, it is deploying 'selection and concentration' and promoting activities aimed at first-in-class drug discovery, such as actively searching for and introducing external drug discovery themes as well as multi-tiered program development. For more information, please visit <http://www.kyorin-pharm.co.jp>.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are usually identified by the use of words such as "anticipates," "believes," "estimates," "expects," "intends," "may," "plans," "projects," "seeks," "should," "will," and variations of such words or similar expressions. We intend these forward-looking statements to be covered by such safe harbor provisions for forward-looking statements and are making this statement for purposes of complying with those safe harbor provisions. These forward-looking statements include statements regarding the potential therapeutic benefits and applications of ATYR1923; timelines and plans with respect to certain development activities (such as the scope and timelines of clinical trials), potential benefits of collaborations and certain development goals. These forward-looking statements also reflect our current views about our plans, intentions, expectations, strategies and prospects, which are based on the information currently available to us and on assumptions we have made. Although we believe that our plans, intentions, expectations, strategies and prospects, as reflected in or suggested by these forward-looking statements, are reasonable, we can give no assurance that the plans, intentions, expectations or strategies will be attained or achieved. All forward-looking statements are based on estimates and assumptions by our management that, although we believe to be reasonable, are inherently uncertain. Furthermore, actual results may differ materially from those described in these forward-looking statements and will be affected by a variety of risks and factors that are beyond our control including, without limitation, uncertainty regarding the COVID-19 pandemic, risks associated with the discovery, development and regulation of our product candidates, the risk that we or our partners may cease or delay preclinical or clinical development activities for any of our existing or future product candidates for a variety of reasons (including difficulties or delays in patient enrollment in planned clinical trials), the possibility that existing

collaborations could be terminated early, and the risk that we may not be able to raise the additional funding required for our business and product development plans, as well as those risks set forth in our most recent Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and in our other SEC filings. Except as required by law, we assume no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.