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): May 21, 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, California (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 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)

Dere-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Dere-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 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company \Box

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 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(d)

Effective as of May 21, 2021, the aTyr Pharma, Inc. (the "Company") Board of Directors (the "Board") appointed Sara L. Zaknoen, M.D. to the Board. Dr. Zaknoen was appointed as a Class I director, and will serve until the Company's annual meeting of stockholders in 2022 or until her successor is duly elected and qualified or her earlier resignation or removal. As a non-employee director, Dr. Zaknoen will receive cash and equity compensation pursuant to the Company's current non-employee director compensation policy, which is described in the Company's proxy statement for its 2021 annual meeting of stockholders filed with the SEC on March 24, 2021.

Dr. Zaknoen is not a party to any transaction with the Company that would require disclosure under Item 404(a) of Regulation S-K, and there are no arrangements or understanding between her and any other persons pursuant to which Dr. Zaknoen was selected as a director.

In connection with her appointment as a director, Dr. Zaknoen entered into the Company's standard form of indemnification agreement and was granted an option to purchase 2,285 shares of the Company's Common Stock at an exercise price equal to the closing price of the Company's common stock on the Nasdaq Capital Market on May 21, 2021, which will vest in equal monthly installments during the three years following the effective date of her appointment to the Board, subject to her continued service on the Board.

On May 25, 2021, the Company issued a press release announcing appointment of Dr. Zaknoen to the Board. A copy of the press release is attached as Exhibit 99.1 to this Current Report on Form 8-K.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

99.1 Press Release of aTyr Pharma, Inc., dated May 25, 2021

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: May 25, 2021

IMMEDIATE RELEASE Contact: Ashlee Dunston Director, Investor Relations and Corporate Communications adunston@atyrpharma.com

aTyr Pharma Strengthens Board of Directors with Appointment of Dr. Sara Zaknoen

SAN DIEGO – May 25, 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 the appointment of Sara Zaknoen, M.D., to the company's Board of Directors. Dr. Zaknoen is an experienced pharmaceutical drug development and clinical research executive having previously served as Chief Medical Officer at several biotech companies.

"We are very pleased to welcome Sara, a highly accomplished executive with experience in drug development, to our Board of Directors," said Sanjay S. Shukla, M.D., M.S., President and Chief Executive Officer of aTyr. "While we work toward the readout of our proof-of-concept study for our lead therapeutic candidate, ATYR1923, in pulmonary sarcoidosis in the third quarter of this year, we also continue to further our pipeline of antibodies targeting Neuropilin-2, including ATYR2810, which is in preclinical development for cancer. We believe Sara's experience advancing programs at both biotech and large pharma companies is ideally situated to support and guide aTyr as we prepare for the next clinical stage program to emerge from our tRNA synthetase biology platform."

Through her company, Zed Strategic Consulting, Dr. Zaknoen has worked as a clinical drug development consultant with large pharma and biotech companies across multiple disease indications since 2014. Previously, Dr. Zaknoen held Chief Medical Officer positions at several biotechnology companies, including Ignyta, Inc., Polynoma LLC, Tragara Pharmaceuticals, Inc. and Cabrellis Pharmaceuticals Corporation. Prior to that, Dr. Zaknoen served as Executive Director of Phase 2/3 Clinical Oncology Research at Novartis Pharmaceutical Corporation where she provided oversight for a number of important marketed therapies, such as Gleevec®, Tasigna® and Exjade®. This included supervising the execution of clinical studies, including registrational trials, and involvement with new drug applications and label expansion activities. As Director of Clinical Oncology Research at Schering-Plough (now Merck) she was the lead physician on the Temodar® program, supporting its approval and launch. Additional professional experience includes: Assistant Professor of Medicine at the University of Cincinnati Medical Center; Director of Experimental Therapeutics at the Western Pennsylvania Hospital, Western Pennsylvania Cancer Institute; and Medical Staff Fellow at the National Cancer Institute. Dr. Zaknoen completed her residency, internship and fellowship in hematology/oncology at the University of Minnesota. She received her M.D. from Indiana University School of Medicine and her B.S. in chemistry and biology from Valparaiso University.

Dr. Zaknoen added, "I am thrilled to join the Board of Directors at aTyr, particularly at an exciting time for the company, which includes an important inflection point as they prepare to advance their pulmonary sarcoidosis program. In addition,

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the research team is making significant progress with their next pipeline candidate, ATYR2810, in oncology. I look forward to helping the company develop this emerging new therapeutic approach, which I believe has the potential to drive great value for the company."

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 <u>http://www.atyrpharma.com</u>.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forwardlooking 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 potential therapeutic benefits and applications of our tRNA synthetase biology platform and related product candidates; timelines and plans with respect to certain development activities; 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 forwardlooking 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.

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