
**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**

**April 10, 2019
Date of Report (Date of earliest event reported)**

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 92121**

(Address of principal executive offices, including zip code)

(858) 731-8389

(Registrant's telephone number, including area code)

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))
-

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 1.01 Entry into a Material Definitive Agreement.

On April 10, 2019, aTyr Pharma, Inc. (the “Company”) entered into a securities purchase agreement (the “Purchase Agreement”) with an institutional investor, The Federated Kaufmann Small Cap Fund, and with Paul Schimmel, Ph.D., a director of the Company, relating to the issuance and sale of 9,242,143 shares of the Company’s common stock, par value \$0.001 per share (the “Common Stock”). The shares of Common Stock will be sold in a registered direct offering at a purchase price of \$0.541 per share for gross proceeds of approximately \$5.0 million. Upon consummation of the offering, 45,742,332 shares of Common Stock will be outstanding. The Company expects to use the proceeds from the financing primarily to advance its ATYR1923 therapeutic program and for general corporate purposes. The closing of the offering is expected to take place on April 12, 2019, subject to the satisfaction of customary closing conditions. The Purchase Agreement is attached as Exhibit 10.1 hereto, and is incorporated herein by reference.

The Purchase Agreement contains customary representations, warranties, and agreements by the Company, and customary indemnification and other obligations of the Company and the investors.

The common stock will be issued pursuant to a prospectus supplement which was filed with the Securities and Exchange Commission, in connection with a shelf takedown from the Company’s registration statement on Form S-3 (File No. 333-211998) which became effective on June 22, 2016. A copy of the opinion of Goodwin Procter LLP relating to the legality of the issuance and sale of the shares in the offering is attached as Exhibit 5.1 hereto.

On April 11, 2019, the Company issued a press release announcing the offering. A copy of the press release is attached as Exhibit 99.1 hereto and is incorporated herein by reference.

The Purchase Agreement is attached hereto as an exhibit to provide investors and security holders with information regarding its terms. It is not intended to provide any other factual information about the Company. The representations, warranties and covenants contained in the Purchase Agreement were made only for purposes of the Purchase Agreement and as of specific dates, were solely for the benefit of the parties to the Purchase Agreement, and may be subject to limitations agreed upon by the contracting parties. The foregoing description of the Purchase Agreement does not purport to be complete and is qualified in its entirety by reference to Exhibit 10.1 hereto.

Item 8.01 Other Information.

On April 10, 2019, the Company delivered written notice to Cowen and Company, LLC (“Cowen”) that it was suspending and terminating the prospectus supplement related to the Company’s Common Stock, pursuant to the terms of the Sales Agreement (the “ATM Prospectus Supplement”), dated June 13, 2016 (the “Sales Agreement”), by and between the Company and Cowen. The Company will not make any sales of its securities pursuant to the Sales Agreement, unless and until a new prospectus supplement is filed. Other than the termination of the ATM Prospectus Supplement, the Sales Agreement remains in full force and effect.

A copy of the Sales Agreement was filed as Exhibit 1.2 to the Company’s Registration Statement on Form S-3 (333-211998) filed with the Securities and Exchange Commission on June 13, 2016.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
5.1	Opinion of Goodwin Procter LLP
10.1	Securities Purchase Agreement, dated April 10, 2019, by and among aTyr Pharma, Inc. and the investors thereunder
23.1	Consent of Goodwin Procter LLP (included in Exhibit 5.1)
99.1	Press Release dated April 11, 2019

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: April 11, 2019

April 10, 2019

aTyr Pharma, Inc.
3545 John Hopkins Court, Suite #250
San Diego, CA 92121

Re: Securities Registered under Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-3 (File No. 333-211998) (as amended or supplemented, the "Registration Statement") filed on June 13, 2016 with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration of the offer by aTyr Pharma, Inc., a Delaware corporation (the "Company") of up to \$150,000,000 of any combination of securities of the types specified therein. The Registration Statement was declared effective by the Commission on June 22, 2016. Reference is made to our opinion letter dated June 13, 2016 and included as Exhibit 5.1 to the Registration Statement. We are delivering this supplemental opinion letter in connection with the prospectus supplement (the "Prospectus Supplement") filed on April 11, 2019 by the Company with the Commission pursuant to Rule 424 under the Securities Act. The Prospectus Supplement relates to the offering by the Company of up to 9,242,143 shares of the Company's Common Stock, par value \$0.001 per share (the "Shares") covered by the Registration Statement. The Shares are being sold to the investors named in, and pursuant to, a purchase agreement among the Company and such investors (the "Purchase Agreement").

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinion set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinion set forth below, on certificates of officers of the Company.

The opinion set forth below is limited to the Delaware General Corporation Law.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, upon issuance and delivery against payment therefor, in accordance with the terms of the Purchase Agreement, the Shares will be validly issued, fully paid and non-assessable.

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement and to the references to our firm under the caption "Legal Matters" in the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

ACTIVE/99185236.2

aTyr Pharma, Inc.
April 10, 2019
Page 2

Very truly yours,

/s/ Goodwin Procter LLP
GOODWIN PROCTER LLP

ACTIVE/99185236.2

ATYR PHARMA, INC.
SECURITIES PURCHASE AGREEMENT

THIS SECURITIES PURCHASE AGREEMENT (the “**Agreement**”) is made as of the 10th day of April, 2019, by and among aTyr Pharma, Inc., a Delaware corporation (the “**Company**”), and the investors set forth on the signature pages hereto (the “**Investors**” and each, an “**Investor**”).

WHEREAS, the Investors wish to purchase, and the Company wishes to sell, upon the term and conditions stated in this Agreement, shares of the Company’s common stock, par value \$0.001 per share (the “**Common Stock**”), as described in this Agreement, with the offer and sale of such shares to be made pursuant to the Company’s Registration Statement and Prospectus (each as defined below);

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Company and the Investors hereby agree as follows:

1. Purchase and Sale of the Shares.

1.1. **Issue and Sale of Common Stock.** Subject to the terms and conditions of this Agreement, each Investor, severally and not jointly, agrees to purchase at the Closing (as defined below), and the Company agrees to issue and sell to such Investor at the Closing, the number of shares of the Company’s Common Stock set forth on such Investor’s signature page hereto at a purchase price of \$0.541 per share. The shares of Common Stock to be purchased at the Closing hereunder are referred to herein as the “**Shares**”.

1.2. **Closing.** Upon satisfaction or waiver of the conditions set forth in Section 1.3, the purchase and sale of the Shares shall take place at the offices of Goodwin Procter LLP located at 3 Embarcadero Center, Floor 28, San Francisco, California at 10:00 A.M., on April 12, 2019, or at such other time and place as the Company and the Investors may mutually agree upon in writing (which time and place are designated as the “**Closing**”). At the Closing, the Company shall cause its transfer agent to deliver to each Investor, via electronic book-entry, registered in the name of each Investor or, if so indicated on the Investor Questionnaire attached hereto as Exhibit A, in the name of a nominee designated by such Investor, the Shares that such Investor is purchasing against payment of the purchase price therefor by wire transfer of immediately available funds to an account specified by the Company in writing to the Investors.

1.3. Conditions.

(a) The obligations of each Investor to purchase the Shares are subject to the satisfaction or waiver by such Investor of the following conditions as of the Closing:

(i) The accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect (as defined below), in all respects) when made and as of the Closing of the representations and warranties of the Company contained herein (unless as of a specific date therein in which case they shall be accurate as of such date);

(ii) The Investors shall have received a certificate, dated the date of the Closing, duly executed by an executive officer of the Company on behalf of the Company, certifying that:

(A) the condition specified in Section 1.3(a)(i) has been satisfied;

(B) all obligations, covenants and agreements of the Company required to be performed at or prior to the Closing have been performed;

(iii) The Investors shall have received a certificate, dated the date of the Closing, duly executed by the secretary of the Company, certifying (A) the Bylaws of the Company, and (B) resolutions of the Board approving this Agreement and the transactions contemplated hereby;

(iv) The Investors shall have received, on or prior to the Closing, a copy of the irrevocable instructions to the transfer agent instructing the transfer agent to register the Shares in book entry form registered in the name of the Investor;

(v) The Investors shall have received a copy of the Prospectus Supplement (as defined below), which may be delivered in accordance with Rule 172 under the Securities Act of 1933, as amended (the “**Securities Act**”);

(vi) The Company shall have received notification from the NASDAQ Capital Market (“**NASDAQ**”) that the listing of additional shares review process has been completed, and NASDAQ shall not have made any objection to consummation of the transaction contemplated by this Agreement;

(vii) From the date hereof to the date of the Closing, trading in the Common Stock shall not have been suspended by the Securities and Exchange Commission (the “**Commission**”) or NASDAQ, and, at any time prior to the Closing, trading in securities generally as reported by Bloomberg L.P. shall not have been suspended or limited, or minimum prices shall not have been established on securities whose trades are reported by such service, or on NASDAQ or any other trading market or exchange, nor shall a banking moratorium have been declared either by the United States or New York State authorities nor shall there have occurred any material outbreak or escalation of hostilities or other national or international calamity of such magnitude in its effect on, or any material adverse change in, any financial market which, in each case, in the reasonable judgment of such Investor, makes it impracticable or inadvisable to purchase the Shares at the Closing; and

(viii) There shall have been no Material Adverse Effect (as defined in Section 2.1) with respect to the Company since the date hereof.

(b) The obligations of the Company to sell the Shares to the Investors are subject to the satisfaction or waiver of the following condition as of the Closing:

(i) The accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) when made and as of the Closing of the representations and warranties of the Investors contained herein (unless as of a specific date therein in which case they shall be accurate as of such date); and

(ii) the Company shall have received notification from NASDAQ that the listing of additional shares review process has been completed, and NASDAQ shall not have made any objection to consummation of the transaction contemplated by this Agreement.

2. **Representations, Warranties and Covenants of the Company.** The Company hereby represents and warrants to each Investor that:

2.1 **Organization and Qualification.** The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. The Company is not in violation or default of any of the provisions of its certificate of incorporation, bylaws or other organizational or charter documents. The Company is qualified to do business as a foreign entity and is in good standing in each jurisdiction in which the nature of the business conducted by the Company or its subsidiary makes such qualification necessary, except where the failure to so qualify could not reasonably be expected to have a Material Adverse Effect. For purposes of this Agreement, a “**Material Adverse Effect**” means any material and adverse effect on (a) the assets, liabilities, financial condition, business, or operations of the Company and its subsidiary, taken as a whole or (b) the ability of the Company and its subsidiary, taken as a whole, to carry out their business as of the date of this Agreement or to meet their obligations under this Agreement on a timely basis.

2.2 **Authorization; Enforcement.** The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and otherwise to carry out its obligations hereunder. The execution and delivery of this Agreement by the Company and the consummation by it of the transactions contemplated hereby have been duly authorized by the board of directors of the Company and no further action is required by the Company, its board of directors, or stockholders in connection therewith other than in connection with the Required Approvals (as defined below). This Agreement has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof, will constitute the

valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except (a) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (b) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (c) insofar as indemnification and contribution provisions may be limited by applicable law (collectively, the **"Enforceability Exceptions"**).

2.3 **No Conflicts.** The execution, delivery and performance by the Company of this Agreement, the issuance and sale of the Shares and the consummation by it of the transactions contemplated hereby do not and will not (a) conflict with or violate any provision of the Company's certificate of incorporation, bylaws or other organizational or charter documents; (b) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any lien upon any of the properties or assets of the Company or its subsidiary, or give to others any rights of termination, amendment, anti-dilution or similar adjustments, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company or subsidiary debt or otherwise) or other understanding to which the Company or its subsidiary is a party or by which any property or asset of the Company or its subsidiary is bound or affected and which, in each case, is filed as an exhibit to the Company's Annual Report on Form 10-K for the year ended December 31, 2018 (the **"Annual Report"**); or (c) subject to any Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company is bound or affected, except in the case of each of clauses (b) and (c), such as would not have or reasonably be expected to result in a Material Adverse Effect.

2.4 **Filings, Consents and Approvals.** The Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other person in connection with the execution, delivery and performance by the Company of this Agreement, other than: (a) the filing with the Commission of the Prospectus Supplement; (b) the notification to NASDAQ for the listing of the Shares; and (c) such filings as are required to be made under applicable state securities laws (collectively, the **"Required Approvals"**).

2.5 **Issuance of Securities.** The Shares have been duly authorized and, when issued and paid for in accordance with this Agreement will be duly and validly issued, fully paid and nonassessable.

2.6 **Registration.** The Company meets the requirements for use of Form S-3 under the Securities Act, and has filed with the Commission a registration statement on such Form (Registration File No. 333-211998), which became effective as of June 22, 2016, for the registration under the Securities Act of the Shares. The Company will file with the Commission pursuant to Rule 424(b) under the Securities Act, and the rules and regulations (the **"Rules and Regulations"**) of the Commission promulgated thereunder, a supplement to the form of prospectus filed with the Commission on June 13, 2016 and related to such registration statement, relating to the offer to sell and proposed sale of the Shares and the plan of distribution thereof. Such registration statement, including the exhibits thereto, as amended at the date of this Agreement, is hereinafter called the **"Registration Statement"**; such prospectus in the form filed with the Commission on June 13, 2016, is hereinafter called the **"Base Prospectus"**; the supplemented form of prospectus, in the form in which it will be filed with the Commission pursuant to Rule 424(b) is hereinafter called the **"Prospectus Supplement"**; and the Base Prospectus and Prospectus Supplement are hereinafter called the **"Prospectus."** Any reference herein to the Registration Statement, the Base Prospectus, the Prospectus Supplement or the Prospectus shall be deemed to refer to and include the documents incorporated by reference therein (the **"Incorporated Documents"**) pursuant to Item 12 of Form S-3 which were filed under the Securities Exchange Act of 1934, as amended (the **"Exchange Act"**), on or before the date of this Agreement, or the issue date of the Base Prospectus or the Prospectus Supplement, as the case may be. The sale of the Shares hereunder meets the requirements of General Instruction I.B.6 of Form S-3. No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued under the Securities Act or Exchange Act, no order preventing or suspending the use of the Base Prospectus or the Prospectus Supplement has been issued and no proceedings for any of those purposes have been instituted or are pending or, to the Company's knowledge, contemplated. The Company has complied with each request (if any) from the Commission for additional information. Each of the Registration Statement and any post-effective amendment thereto, at the time it became effective, complied in all material respects with the Securities Act and the Exchange Act and the applicable Rules and Regulations and did not

and, as amended or supplemented, if applicable, will not, contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. Each of the Base Prospectus and the Prospectus Supplement, as amended or supplemented, does not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. Notwithstanding the foregoing, the Company makes no representations or warranties as to information, if any, contained in or omitted from the Prospectus Supplement or any amendment thereof or supplement thereto in reliance upon and in conformity with information furnished in writing to the Company by or on behalf of any Investor specifically for use in the Prospectus Supplement.

2.7 **SEC Reports; Financial Statements.**

(a) The Company has complied in all material respects with requirements to file all reports, schedules, forms, statements and other documents required to be filed by the Company under the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, together with the Registration Statement and the Prospectus being collectively referred to herein as the “**SEC Reports**”) The financial statements of the Company included in the foregoing materials comply in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved (“**GAAP**”), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of the Company and its consolidated subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.

2.8 **Material Changes; Undisclosed Events, Liabilities or Developments.** Since the date of the latest audited financial statements included within the SEC Reports, except as specifically disclosed in a subsequent SEC Report filed prior to the date hereof, (a) there has been no event, occurrence or development that has had or that would reasonably be expected to result in a Material Adverse Effect, (b) the Company has not incurred any material liabilities (contingent or otherwise) other than (i) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (ii) liabilities not required to be reflected in the Company’s financial statements pursuant to GAAP or disclosed in filings made with the Commission, (c) the Company has not altered its method of accounting, (d) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock and (e) the Company has not issued any equity securities to any officer, director, or any person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a person as such terms are used in and construed under Rule 405 under the Securities Act (an “**Affiliate**”), except pursuant to existing Company stock option plans or except as contemplated by this Agreement.

2.9 **Litigation.** Other than as disclosed in the Prospectus, there is no action, suit, inquiry, notice of violation, proceeding or investigation pending or, to the knowledge of the Company, threatened against or affecting the Company, its subsidiary or any of their respective properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an “**Action**”) which (a) adversely affects or challenges the legality, validity or enforceability of any of the Agreement, the Shares, or the transactions contemplated herein, or (b) would, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect. Neither the Company nor its subsidiary, nor any director or officer thereof, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty with respect to the Company or its subsidiary. There has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or officer of the Company in such capacity. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company or its subsidiary under the Exchange Act or the Securities Act.

2.10 **Compliance.** Neither the Company nor its subsidiary: (a) is in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the

Company or its subsidiary under), nor has the Company or its subsidiary received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived) which, in each case, is filed as an exhibit to the Annual Report; (b) is in violation of any judgment, decree or order of any court, arbitrator or other governmental authority; or (c) is or has been in violation of any statute, rule, ordinance or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws relating to taxes, environmental protection, occupational health and safety, product quality and safety and employment and labor matters, except in each case as would not have or reasonably be expected to result in a Material Adverse Effect

2.11 **Listing.** The Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act and is listed on NASDAQ under the symbol "LIFE", and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or de-listing the Shares from NASDAQ, nor has the Company received any notification that the Commission or NASDAQ is contemplating terminating such registration or listing, except as described in the Prospectus.

2.12 **Capitalization.** The capitalization of the Company is as set forth in the SEC Reports.

2.13 **Investment Company.** The Company is not, and is not an Affiliate of, and immediately after receipt of payment for the Shares, will not be or be an Affiliate of, an "investment company" within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not become an "investment company" subject to registration under the Investment Company Act of 1940, as amended.

2.14 **Registration Rights.** Other than as disclosed in the SEC Reports, no person has any right to cause the Company or its subsidiary to effect the registration under the Securities Act of any securities of the Company.

2.15 **Disclosure.** Except with respect to the material terms and conditions of the transactions contemplated by this Agreement, the Company confirms that neither it nor any other person acting on its behalf has provided any of the Investors or their agents or counsel with any information that it believes constitutes or might constitute material, non-public information which is not otherwise disclosed in the Prospectus Supplement or the SEC Reports. The Company understands and confirms that the Investors will rely on the foregoing representation in effecting transactions in securities of the Company. All of the disclosure furnished by or on behalf of the Company to the Investors regarding the Company and its subsidiary, their respective businesses and the transactions contemplated hereby is true and correct in all material respects and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading. The Company acknowledges and agrees that no Investor makes or has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 3.

2.16 **Acknowledgment Regarding Investors' Purchase of Shares.** The Company acknowledges and agrees that each Investor is acting solely in the capacity of an arm's length purchaser with respect to this Agreement and the transactions contemplated hereby. The Company further acknowledges that no Investor is acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to this Agreement and the transactions contemplated hereby and any advice given by any Investor or any of their respective representatives or agents in connection with this Agreement and the transactions contemplated hereby is merely incidental to the Investor's purchase of the Shares. The Company further represents to each Investor that the Company's decision to enter into this Agreement has been based solely on the independent evaluation of the transactions contemplated hereby by the Company and its representatives.

2.17 **Maximum Investment.** As of the Closing, the number of Shares issued to any Investor (or any group of investors (as identified in a public filing made with the Commission) of which the Investor is a party pursuant to this Agreement will not constitute more than 17.5% of the issued and outstanding shares of Common Stock (or securities convertible into or exercisable for shares of Common Stock) or the voting power of the Company after giving effect to the issue and sale of the Shares hereunder.

3. **Representations and Warranties of the Investor.** Each Investor hereby represents and warrants to the Company that:

3.1 **Authorization; Enforcement.** The Investor has full right, power and authority to enter into this Agreement and to consummate the transactions contemplated hereby and, if such Investor is not a natural person, has taken all necessary action to authorize the execution, delivery and performance of this Agreement. This Agreement constitutes a valid and binding obligation of the Investor enforceable against the Investor in accordance with its terms, except as enforceability may be limited by the Enforceability Exceptions.

3.2 **No Conflicts.** If the Investor is not a natural person, the execution, delivery and performance by the Investor of this Agreement, the issuance and sale of the Shares and the consummation by it of the transactions contemplated hereby do not and will not conflict with or violate any provision of the Investor's certificate or articles of incorporation, bylaws or other organizational or charter documents.

3.3 **Investor Questionnaire; Reliance.** The Investor has answered all questions on the signature page for use in preparation of the Prospectus Supplement and Exhibit A hereto and the answers thereto are true and correct as of the date hereof and will be true and correct as of the Closing, unless the Investor otherwise notifies the Company in writing in accordance with Section 4.5 at least one business day prior to Closing. The Investor, in connection with its decision to purchase the Shares, relied only upon the Base Prospectus, the Prospectus Supplement, the Incorporated Documents, and any representations and warranties of the Company contained herein.

3.4 **Access to Information.** The Investor has had full access to the Base Prospectus and the Incorporated Documents, and was able to read, review, download and print such materials, if desired. The Investor and its advisors, if any, have been afforded the opportunity to ask questions of the Company. The Investor understands that its investment in the Shares involves a high degree of risk, including the risks identified under the caption "Risk Factors" in the Base Prospectus or Prospectus Supplement. The Investor is knowledgeable, sophisticated and experienced in making, and is qualified to make, decisions with respect to investments in securities representing an investment decision like that involved in the purchase of the Shares. The Investor is able to bear the economic risk of an investment in the Shares and, at the present time, is able to afford a complete loss of such investment.

3.5 **State and Federal Review.** The Investor understands that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Shares or the fairness or suitability of the investment in the Shares nor have such authorities passed upon or endorsed the merits of the offering of the Shares.

3.6 **Action outside the United States.** The Investor acknowledges, represents and agrees that no action has been or will be taken in any jurisdiction outside the United States by the Company that would permit an offering of the Shares, or possession or distribution of offering materials in connection with the issue of the Shares in any jurisdiction outside the United States where action for that purpose is required.

3.7 **Residency.** The Investor, if a natural person, is a resident of that state or country specified in its address on such Investor's signature page hereof.

3.8 **Legal, Tax and Investment Advice.** The Investor understands that nothing in this Agreement or any other materials presented to the Investor in connection with the purchase and sale of the Shares constitutes legal, tax or investment advice. The Investor has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of the Shares.

3.9 **Certain Transactions and Confidentiality.** The Investor has not, directly or indirectly, nor has any person acting on behalf of or pursuant to any understanding with the Investor, executed any transactions in securities of the Company, including short sales, prior to the date hereof. The Investor has maintained the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction).

3.10 **Certain Representations.** The Investor acknowledges and agrees that the Company makes or has made no representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 2.

4. Miscellaneous.

4.1 **Successors and Assigns.** Except as otherwise provided herein, the terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement. The Company may not assign this Agreement or any rights or obligations hereunder without the prior written consent of each Investor (other than by merger).

4.2 **Governing Law.** All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by and construed and enforced in accordance with the internal laws of the State of New York. Each party agrees that all legal proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is improper or is an inconvenient venue for such proceeding.

4.3 **Counterparts; Facsimile or Electronic Transmission.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Facsimile (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party) or electronic transmission signatures shall be as effective as original signatures.

4.4 **Titles and Subtitles.** The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

4.5 **Notices.** Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) when sent by facsimile (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); or (iii) one business day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses and facsimile numbers for such communications shall be the address and number indicated for such party on the signature page hereof.

4.6 **Finder's Fee.** Each party represents that it neither is nor will be obligated for any finders' fee or commission in connection with this transaction. Each Investor agrees to indemnify and to hold harmless the Company from any liability for any commission or compensation in the nature of a finders' fee (and the costs and expenses of defending against such liability or asserted liability) for which such Investor or any of its officers, partners, employees, or representatives is responsible. The Company agrees to indemnify and hold harmless each Investor from any liability for any commission or compensation in the nature of a finders' fee (and the costs and expenses of defending against such liability or asserted liability) for which the Company or any of its officers, employees or representatives is responsible.

4.7 **Indemnification of Federated Kaufmann.** Subject to the provisions of this Section 4.7, the Company will indemnify and hold The Federated Kaufmann Small Cap Fund ("**Federated Kaufmann**") and its directors, officers, stockholders, members, partners, employees and agents (and any other persons with a functionally equivalent role of a person holding such titles notwithstanding a lack of such title or any other title), each person who controls Federated Kaufmann (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, shareholders, agents, members, partners or employees (and any other persons with a functionally equivalent role of a person holding such titles notwithstanding a lack of such title or any other title) of such controlling persons (each, an "**Investor Party**") harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys' fees and costs of investigation that any such Investor Party may suffer or incur as a result of or relating to

(a) any breach of any of the representations, warranties, covenants or agreements made by the Company in this Agreement or (b) any action instituted against the Investor Parties in any capacity, or any of them or their respective Affiliates, by any stockholder of the Company who is not an Affiliate of such Investor Party, with respect to any of the transactions contemplated by this Agreement (unless such action is based upon a breach of such Investor Party's representations, warranties or covenants under this Agreement or any agreements or understandings such Investor Party may have with any such stockholder or any violations by such Investor Party of state or federal securities laws or any conduct by such Investor Party which constitutes fraud, gross negligence, willful misconduct or malfeasance). If any action shall be brought against any Investor Party in respect of which indemnity may be sought pursuant to this Agreement, such Investor Party shall promptly notify the Company in writing, and the Company shall have the right to assume the defense thereof with counsel of its own choosing reasonably acceptable to the Investor Party. Any Investor Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Investor Party except to the extent that (i) the employment thereof has been specifically authorized by the Company in writing, (ii) the Company has failed after a reasonable period of time to assume such defense and to employ counsel or (iii) in such action there is, in the reasonable opinion of counsel, a material conflict on any material issue between the position of the Company and the position of such Investor Party, in which case the Company shall be responsible for the reasonable fees and expenses of no more than one such separate counsel. The Company will not be liable to any Investor Party under this Agreement (y) for any settlement by an Investor Party effected without the Company's prior written consent, which shall not be unreasonably withheld or delayed; or (z) to the extent, but only to the extent that a loss, claim, damage or liability is attributable to any Investor Party's breach of any of the representations, warranties, covenants or agreements made by such Investor Party in this Agreement. The indemnification required by this Section 4.7 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or are incurred. The indemnity agreements contained herein shall be in addition to any cause of action or similar right of any Investor Party against the Company or others and any liabilities the Company may be subject to pursuant to law.

4.8 **Equal Treatment of Investors.** No consideration (including any modification of this Agreement) shall be offered or paid to any person to amend or consent to a waiver or modification of any provision of this Agreement unless the same consideration is also offered to all of the parties to the Agreement. For clarification purposes, this provision constitutes a separate right granted to each Investor by the Company and negotiated separately by each Investor, and is intended for the Company to treat the Investors as a class and shall not in any way be construed as the Investors acting in concert or as a group with respect to the purchase, disposition or voting of the Shares or otherwise.

4.9 **Amendments and Waivers.** Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and each Investor.

4.10 **Severability.** If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provision shall be excluded from this Agreement and the balance of the Agreement shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms.

4.11 **Entire Agreement.** This Agreement and the other documents referred to herein constitute the entire agreement among the parties and no party shall be liable or bound to any other party in any manner by any warranties, representations, or covenants except as specifically set forth herein or therein.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

aTyr Pharma, Inc.

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

Address: 3545 John Hopkins Court, Suite #250
San Diego, California 92121

[Investor Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

Name of Investor: Schimmel Revocable Trust Cleo Schimmel Ttee Paul R. Schimmel Ttee. U/ A Dtd 09/06/2000

Signature of Authorized Signatory of Investor: /s/ Paul Schimmel

Name of Authorized Signatory: Paul Schimmel

Title of Authorized Signatory: Trustee

Email Address of Authorized Signatory: _____

Facsimile Number of Authorized Signatory: _____

Address for Notice of Investor:

Number of Shares of Common Stock to Be Purchased: 1,828,428

Total Purchase Price: \$ 999,999.55

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

Name of Investor: Federated Kaufman Small Cap Fund

Signature of Authorized Signatory of Investor: /s/ Thomas M. Brakel

Name of Authorized Signatory: Thomas M. Brakel

Title of Authorized Signatory: Portfolio Manager

Email Address of Authorized Signatory: _____

Facsimile Number of Authorized Signatory: _____

Address for Notice of Investor:

Number of Shares of Common Stock to Be Purchased: 7,393,715

Total Purchase Price: \$ 3,999,999.82

IMMEDIATE RELEASE**Contact:**

Joyce Allaire

Managing Director, LifeSci Advisors, LLC

jallaire@lifesciadvisors.com**aTyr Pharma Announces \$5 Million Registered Direct Offering led by The Federated Kaufmann Small Cap Fund**

SAN DIEGO – April 11, 2019 – aTyr Pharma, Inc. (Nasdaq: LIFE), a biotherapeutics company engaged in the discovery and development of innovative medicines based on novel immunological pathways, today announced that it has entered into a definitive agreement with The Federated Kaufmann Small Cap Fund and Paul Schimmel, Ph.D., an existing stockholder and a director of the company, to purchase an aggregate of \$5.0 million of aTyr’s common stock in a registered direct offering conducted without an underwriter or placement agent. Under the terms of the offering, aTyr will sell approximately 9.2 million shares at a price of \$0.541 per share, which was the Nasdaq closing consolidated bid price on April 10, 2019. The closing of the offering is expected to take place on April 12, 2019. Proceeds from the offering will be used to advance clinical development of aTyr’s lead therapeutic candidate, ATYR1923, and for other general corporate purposes.

The securities described above are being offered pursuant to a shelf registration statement (File No. 333-211998) filed with the Securities and Exchange Commission (SEC), which was declared effective on June 22, 2016. A prospectus supplement relating to the offering will be filed by the Company with the SEC and will be available on the SEC’s website at www.sec.gov. Copies of the prospectus supplement and accompanying prospectus may also be obtained directly from the Company by contacting aTyr Pharma, Inc., 3545 John Hopkins Court, Suite #250, San Diego, CA 92121. This announcement is neither an offer to sell nor a solicitation of an offer to buy any shares of aTyr’s common stock in the registered direct offering. There shall not be any offer, solicitation of an offer to buy, or sale of the securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction. The registered direct offering is, and will be, made only by means of a prospectus, including a prospectus supplement, forming a part of the effective registration statement. The final terms of the offering will be disclosed in the prospectus supplement to be filed with the SEC.

About aTyr

aTyr is a biotherapeutics company engaged in the discovery and development of innovative medicines based on novel immunological pathways. aTyr’s research and development efforts are concentrated on a newly discovered area of biology, the extracellular functionality 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. aTyr is focused on the therapeutic translation of

the Resokine pathway, comprised of extracellular proteins derived from the histidyl tRNA synthetase gene family. ATYR1923 is a clinical-stage product candidate which binds to the neuropilin-2 receptor and is designed to down-regulate immune engagement in interstitial lung diseases and other immune-mediated diseases. For more information, please visit <http://www.atyrpharma.com>.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Litigation Reform Act. 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, including statements regarding the proposed closing, timing, and size of the offering, and the anticipated use of proceeds from the offering, reflect our current views about our plans, intentions, and expectations, which are based on the information currently available to us and on assumptions we have made. 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, 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.