

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

**Amendment No. 1
to
Form S-4
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

Syros Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2834
(Primary Standard Industrial
Classification Code Number)

45-3772460
(I.R.S. Employer
Identification Number)

35 CambridgePark Drive, 4th Floor
Cambridge, Massachusetts 02140
(617) 744-1340

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Nancy A. Simonian, M.D.
President and Chief Executive Officer
Syros Pharmaceuticals, Inc.
35 CambridgePark Drive, 4th Floor
Cambridge, Massachusetts 02140
(617) 744-1340

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Cynthia T. Mazareas, Esq.
Joseph B. Conahan, Esq.
Eric P. Hanson, Esq.
Stephanie L. Leopold, Esq.
Wilmer Cutler Pickering Hale and Dorr LLP
60 State Street
Boston, Massachusetts 02109
(617) 526-6000

Richard Cunningham
Chief Executive Officer
Tyme Technologies, Inc.
1 Pluckemin Way – Suite 103
Bedminster, New Jersey 07921
(212) 461-2315

Elizabeth A. Difley
Brandon C. Mason
Faegre Drinker Biddle & Reath LLP
One Logan Square, Suite 2000
Philadelphia, Pennsylvania 19103-6996
(215) 988-2700

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement and the satisfaction or waiver of all other conditions under the Merger Agreement described herein.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
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 7(a)(2)(B) of the Securities Act.

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer)

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer)

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Commission, acting pursuant to said section 8(a), may determine.

EXPLANATORY NOTE

This Amendment No. 1 to the Registration Statement on Form S-4 of Syros Pharmaceuticals, Inc. (File No. 333-266184) (the "Registration Statement") is an exhibits-only filing to file Exhibits 5.1, 23.3, 99.1 and 99.2 and restate the list of exhibits set forth in Item 21 of Part II of the Registration Statement. Accordingly, this Amendment No. 1 consists only of the facing page, this explanatory note, Part II of the Registration Statement, the signature page and the exhibits filed herewith. The prospectus is unchanged and has therefore been omitted from this filing.

PART II
INFORMATION NOT REQUIRED IN PROXY
STATEMENT/PROSPECTUS

Item 20. Indemnification of Directors and Officers

Subsection (a) of Section 145 of the DGCL empowers a corporation to indemnify any person who was or is a party or who is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful.

Subsection (b) of Section 145 empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person acted in any of the capacities set forth above, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 145 further provides that to the extent a director or officer of a corporation has been successful on the merits or otherwise in the defense of any action, suit or proceeding referred to in subsections (a) and (b) of Section 145, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith; that indemnification provided for by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and the indemnification provided for by Section 145 shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of such person's heirs, executors and administrators. Section 145 also empowers the corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his status as such, whether or not the corporation would have the power to indemnify such person against such liabilities under Section 145.

Section 102(b)(7) of the DGCL provides that a corporation's certificate of incorporation may contain a provision eliminating or limiting the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.

Syros' restated certificate of incorporation provides that Syros will indemnify each person who was or is a party or threatened to be made a party to or is involved in any threatened, pending or completed action, suit or

proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of Syros) by reason of the fact that he or she is or was, or has agreed to become, Syros' director or officer, or is or was serving, or has agreed to serve, at Syros' request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, Syros' best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Syros' restated certificate of incorporation also provides that Syros will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of Syros to procure a judgment in Syros' favor by reason of the fact that the Indemnitee is or was, or has agreed to become, Syros' director or officer, or is or was serving, or has agreed to serve, at Syros' request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, Syros' best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to Syros, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by Syros against all expenses (including attorneys' fees) actually and reasonably incurred by him or her or on his or her behalf in connection therewith. If Syros does not assume the defense, expenses must be advanced to an Indemnitee under certain circumstances.

Syros has entered into indemnification agreements with its directors and executive officers. In general, these agreements provide that Syros will indemnify the director or executive officer to the fullest extent permitted by law for claims arising in his or her capacity as a director or officer of Syros or in connection with their service at Syros' request for another corporation or entity. The indemnification agreements also provide for procedures that will apply in the event that a director or executive officer makes a claim for indemnification and establish certain presumptions that are favorable to the director or executive officer.

Syros maintains a general liability insurance policy that covers certain liabilities of its directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers.

Certain of Syros' non-employee directors may, through their relationships with their employers, be insured and/or indemnified against certain liabilities in their capacity as members of Syros' board of directors.

Insofar as the forgoing provisions permit indemnification of directors, executive officers, or persons controlling Syros for liability arising under the Securities Act, Syros has been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Syros has purchased and intends to maintain insurance on behalf of any person who is or was a director or officer of Syros against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

The limitation of liability and indemnification provisions in Syros' restated certificate of incorporation and second amended may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit Syros and its stockholders. A stockholder's investment may be

harmful to the extent Syros pays the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. There is no pending litigation or proceeding naming any of Syros' directors or officers as to which indemnification is being sought, nor is Syros aware of any pending or threatened litigation that may result in claims for indemnification by any director or officer.

Under the Merger Agreement, from the closing of the merger through the sixth anniversary of the closing, the parties agree that all rights to indemnification, exculpation or advancement of expenses now existing in favor of, and all limitations on the personal liability of, each present and former director or officer, of Syros or Tyme provided for in the respective organizational documents of Syros and Tyme in effect as of July 3, 2022, the date of the Merger Agreement, shall continue to be honored and in full force and effect.

Under the Merger Agreement, the certificate of incorporation and bylaws of the combined company will contain provisions no less favorable with respect to indemnification, advancement of expenses and exculpation of present and former directors and officers of Syros than are presently set forth in Syros' restated certificate of incorporation and second amended and restated bylaws, which provisions shall not be amended, modified or repealed for a period of six years' time from the closing of the merger in a manner that would materially and adversely affect the rights thereunder of individuals who, at or prior to the closing, were officers or directors of Syros.

The Merger Agreement also provides that Syros shall either (i) maintain in force for at least six years after the closing a policy or (ii) purchase an insurance policy in effect for six years from the closing, providing at least the same coverage as the current directors' and officers' liability insurance policies maintained by Syros and containing terms and conditions that are not materially less favorable to current and former officers and directors of Syros.

Item 21. Exhibits and Financial Statement Schedules

(a) *Exhibit Index*

A list of exhibits filed with this registration statement on FormS-4 is set forth on the Exhibit Index and is incorporated herein by reference.

(b) *Financial Statements*

The financial statements filed with this registration statement on FormS-4 are set forth on the Financial Statement Index and is incorporated herein by reference.

Item 22. Undertakings

(a) The undersigned registrant hereby undertakes as follows:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum

offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for purposes of determining liability under the Securities Act to any purchaser, each filing of the Registrant's annual report pursuant to Section 13(a) or 15 (d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15 (d) of the Exchange Act) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(5) That prior to any public reoffering of the securities registered hereunder through use of a prospectus which is a part of this registration statement, by any person or party who is deemed to be an underwriter within the meaning of Rule 145(c), the issuer undertakes that such reoffering prospectus will contain the information called for by the applicable registration form with respect to reofferings by persons who may be deemed underwriters, in addition to the information called for by the other items of the applicable form.

(6) That every prospectus (i) that is filed pursuant to paragraph (a)(5) immediately preceding, or (ii) that purports to meet the requirements of Section 10(a) (3) of the Securities Act and is used in connection with an offering of securities subject to Rule 415, will be filed as a part of an amendment to the registration statement and will not be used until such amendment is effective, and that, for purposes of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(7) To respond to requests for information that is incorporated by reference into this joint proxy statement/prospectus pursuant to Item 4, 10(b), 11, or 13 of Form S-4, within one business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the registration statement through the date of responding to the request.

(8) To supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in the registration statement when it became effective.

(b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such

director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

Exhibit Number	Exhibit Description	Incorporated by Reference (if applicable)			
		Form	File No.	Exhibit	Filing Date
2.1	Agreement and Plan of Merger, dated July 3, 2022, by and among Syros Pharmaceuticals, Inc., Tack Acquisition Corp. and Tyme Technologies, Inc.	8-K	001-37813	2.1	July 5, 2022
2.2	Form of Support Agreement by and between Syros Pharmaceuticals, Inc. and certain stockholders of Tyme Technologies, Inc.	8-K	001-37813	10.1	July 5, 2022
2.3	Form of Support Agreement by and between Tyme Technologies, Inc. and certain stockholders of Syros Pharmaceuticals, Inc.	8-K	001-37813	10.2	July 5, 2022
2.4	Form of Lock-Up Agreement	8-K	001-37813	10.3	July 5, 2022
3.1	Restated Certificate of Incorporation of Syros Pharmaceuticals, Inc.	10-Q	001-37813	3.1	May 1, 2019
3.2	Amended and Restated By-Laws of Syros Pharmaceuticals, Inc.	10-Q	001-37813	3.2	August 5, 2021
4.1	Specimen Stock Certificate Evidencing Shares of Common Stock of Syros Pharmaceuticals, Inc.	S-1	333-211818	4.1	June 3, 2016
4.2	Form of Warrant to Purchase Common Stock or Pre-Funded Warrant	8-K	001-37813	4.1	July 5, 2022
4.3	Form of Pre-Funded Warrant	8-K	001-37813	4.2	July 5, 2022
5.1*	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP as to the validity of the shares of common stock of Syros Pharmaceuticals, Inc. being issued in the merger				
10.1	Securities Purchase Agreement, dated July 3, 2022, by and between Syros Pharmaceuticals, Inc. and the persons party thereto	8-K	001-37813	10.4	July 5, 2022
10.2	Registration Rights Agreement, dated July 3, 2022, by and between Syros Pharmaceuticals, Inc. and the persons party thereto	8-K	001-37813	10.5	July 5, 2022
10.3	Registration Rights Agreement, dated July 3, 2022, by and between Syros Pharmaceuticals, Inc., 667, L.P. and Baker Brothers Life Sciences, L.P.	8-K	001-37813	10.6	July 5, 2022
10.4	Amendment to Loan and Security Agreement, dated July 3, 2022, by and among Syros Pharmaceuticals, Inc. and Oxford Finance LLC, as collateral agent and lender	8-K	001-37813	10.7	July 5, 2022

Exhibit Number	Exhibit Description	Incorporated by Reference (if applicable)			
		Form	File No.	Exhibit	Filing Date
10.5†	Form of Syros Pharmaceuticals, Inc. 2022 Equity Incentive Plan				
23.1†	Consent of Ernst & Young LLP				
23.2†	Consent of Grant Thornton LLP				
23.3*	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in the opinion filed as Exhibit 5.1 and incorporated by reference)				
24.1†	Power of Attorney (included in the signature page to the original filing of this registration statement)				
99.1*	Form of Preliminary Proxy Card of Syros Pharmaceuticals, Inc.				
99.2*	Form of Preliminary Proxy Card of Tyme Technologies, Inc.				
99.3†	Consent of Piper Sandler & Co.				
99.4†	Consent of Moelis & Company LLC				
101.INS†	XBRL Instance Document				
101.SCH†	XBRL Taxonomy Extension Schema Document				
101.CAL†	XBRL Taxonomy Extension Calculation Linkbase Document				
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document				
101.LAB†	XBRL Taxonomy Extension Label Linkbase Document				
101.PRE†	XBRL Taxonomy Extension Presentation Linkbase Document				
107†	Filing Fee Table				

* Filed herewith.

† Previously filed.

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the city of Cambridge, Commonwealth of Massachusetts, on the 1st day of August, 2022.

Syros Pharmaceuticals, Inc.

By: /s/ Nancy Simonian
Name: Nancy Simonian, M.D.
Title: President and Chief Executive Officer

Pursuant to the requirements of the Securities Act, this report has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Nancy Simonian</u> Nancy Simonian, M.D.	President, Chief Executive Officer and Director (<i>Principal Executive Officer</i>)	August 1, 2022
<u>/s/ Jason Haas</u> Jason Haas	Chief Financial Officer (<i>Principal Financial Officer and Principal Accounting Officer</i>)	August 1, 2022
* <u>Peter Wirth</u>	Chair of the Board of Directors	August 1, 2022
* <u>Srinivas Akkaraju, M.D., Ph.D.</u>	Director	August 1, 2022
* <u>Mark J. Alles</u>	Director	August 1, 2022
* <u>Deborah Dunsire, M.D.</u>	Director	August 1, 2022
* <u>S. Gail Eckhardt, M.D.</u>	Director	August 1, 2022

*By: /s/ Nancy Simonian, M.D.
Nancy Simonian, M.D.
Attorney-in-Fact

Signature	Title	Date
* _____ Marsha H. Fanucci	Director	August 1, 2022
* _____ Amir Nashat, Ph.D.	Director	August 1, 2022
* _____ Phillip A. Sharp, Ph.D.	Director	August 1, 2022
* _____ Richard A. Young, Ph.D.	Director	August 1, 2022
*By: /s/ Nancy Simonian, M.D. _____ Nancy Simonian, M.D. Attorney-in-Fact		

WILMERHALE

August 1, 2022

Syros Pharmaceuticals, Inc.
35 CambridgePark Drive, 4th Floor
Cambridge, MA 02140+1 617 526 6000 (t)
+1 617 526 5000 (f)
wilmerhale.com

Re: Registration Statement on Form S-4

Ladies and Gentlemen:

This opinion is furnished to you in connection with a Registration Statement on Form S-4 (File No. 333-266184) (the "Registration Statement") filed by Syros Pharmaceuticals, Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), for the registration of up to 74,255,612 shares of common stock, \$0.001 par value per share (the "Shares") of the Company.

The Shares are to be issued by the Company pursuant to the Agreement and Plan of Merger (the "Merger Agreement"), dated as of July 3, 2022, by and among the Company, Tack Acquisition Corp. ("Merger Sub"), and Tyme Technologies, Inc. ("Merger Partner"), which has been filed as Annex A to the Joint Proxy Statement/Prospectus forming part of the Registration Statement (the "Joint Proxy Statement/Prospectus"), pursuant to which Merger Sub will merge with and into Merger Partner (the "Merger"), with Merger Partner surviving as a wholly owned subsidiary of the Company.

We are acting as counsel for the Company in connection with the issuance by the Company of the Shares. We have examined and relied upon signed copies of the Registration Statement to be filed with the Commission, including the exhibits thereto. We have also examined and relied upon the Merger Agreement, the Restated Certificate of Incorporation of the Company (as amended or restated from time to time, the "Certificate of Incorporation"), the Second Amended and Restated By-laws of the Company (as amended or restated from time to time, the "Bylaws"), minutes of meetings of the stockholders and the Board of Directors of the Company as provided to us by the Company, and such other documents as we have deemed necessary for purposes of rendering the opinions hereinafter set forth.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the legal capacity of all signatories, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as copies, the authenticity of such original documents and the completeness and accuracy of the corporate minute books of the Company.

Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109

Beijing Berlin Boston Brussels Denver Frankfurt London Los Angeles New York Palo Alto San Francisco Washington

Syros Pharmaceuticals, Inc.
August 1, 2022
Page 2

We express no opinion herein as to the laws of any state or jurisdiction other than the General Corporation Law of the State of Delaware. We also express no opinion herein with respect to compliance by the Company with the securities or "blue sky" laws of any state or other jurisdiction of the United States or of any foreign jurisdiction. We express no opinion and make no statement herein with respect to the antifraud laws of any jurisdiction.

Based upon and subject to the foregoing, we are of the opinion that upon the approval by the stockholders of the Company of the issuance of the Shares, the Shares, when issued in accordance with the terms and conditions of the Merger Agreement, will be duly authorized, for issuance, validly issued, fully paid and nonassessable.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act and to the use of our name therein and in the related Joint Proxy Statement/Prospectus under the caption "Legal Matters." In giving such consent, we do not hereby 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 of the Commission.

Very truly yours,

WILMER CUTLER PICKERING
HALE AND DORR LLP

By: /s/ WILMER CUTLER PICKERING HALE AND DORR LLP
WILMER CUTLER PICKERING HALE AND DORR LLP

Syros Pharmaceuticals, Inc.
Special Meeting of Stockholders
September 15, 2022 at 10:00 A.M. ET, virtually via the Internet at meetnow.global/MYRZKZT.
To access the virtual meeting, you must have the information that is printed in the shaded bar located on the reverse side of this form.



▼ IF VOTING BY MAIL, SIGN, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼

Proxy – Syros Pharmaceuticals, Inc.



Notice of 2022 Special Meeting of Stockholders

Proxy Solicited by Board of Directors for Special Meeting – Thursday, September 15, 2022

Nancy A. Simonian, Jason Haas, or either of them (the "Proxies"), each with the power of substitution, are hereby authorized to represent and vote the shares of the undersigned, with all the powers which the undersigned would possess if personally present, at the Special Meeting of Stockholders of Syros Pharmaceuticals, Inc. to be held virtually via the internet on September 15, 2022 or at any postponement or adjournment thereof.

Shares represented by this proxy will be voted by the stockholder. If no such directions are indicated, the Proxies will have authority to vote FOR Proposals 1, 2, 3, 4 and 5.

In their discretion, the Proxies are authorized to vote upon such other business as may properly come before the meeting or at any postponement or adjournment thereof.

(Items to be voted appear on reverse side)

C Non-Voting Items

Change of Address – Please print new address below.

Comments – Please print your comments below.



YOUR VOTE IS IMPORTANT. PLEASE VOTE TODAY.

Vote by Internet – QUICK *** EASY
 IMMEDIATE – 24 Hours a Day, 7 Days a Week or by Mail

TYME TECHNOLOGIES, INC.

Your Internet vote authorizes the named proxies to vote your shares in the same manner as if you marked, signed, dated and returned your proxy card. Votes submitted electronically over the Internet must be received by 11:59 p.m., Eastern Time, on September 14, 2022



INTERNET –
www.cstproxyvote.com

Use the Internet to vote your proxy. Have your proxy card available when you access the above website. Follow the prompts to vote your shares.



Vote at the Meeting –

If you plan to attend the virtual online special meeting, you will need your 12 digit control number to vote electronically at the special meeting. To attend the special meeting, visit: <https://www.cstproxy.com/tymeinc/2022>

PLEASE DO NOT RETURN THE PROXY CARD IF YOU ARE VOTING ELECTRONICALLY .



MAIL – Mark, sign and date your proxy card and return it in the postage-paid envelope provided.

▲ FOLD HERE • DO NOT SEPARATE • INSERT IN ENVELOPE PROVIDED ▲

PROXY

THE BOARD OF DIRECTORS OF TYME TECHNOLOGIES, INC. RECOMMENDS A VOTE "FOR" PROPOSALS 1, 2, 3 AND 4. ALL OF THE PROPOSALS ARE PROPOSALS OF THE COMPANY.

Please mark your votes like this

Proposal 1.

Adoption of the Merger Agreement, a copy of which is attached as Annex A to the accompanying joint proxy statement/prospectus.

FOR	AGAINST	ABSTAIN
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Proposal 2.

Approve, on a non-binding advisory basis, merger-related compensation payable to Tyme's named executive officers.

FOR	AGAINST	ABSTAIN
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Proposal 3.

Approval of an amendment to Tyme's amended and restated certificate of incorporation in the form attached as Annex K to the accompanying joint proxy statement/prospectus, to effect a reverse stock split of Tyme common stock, by a ratio of not less than 1-for-15 and not more than 1-for-75, such ratio and the implementation and timing of the reverse stock split to be determined in the discretion of Tyme's board of directors.

FOR	AGAINST	ABSTAIN
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Proposal 4.

Consider and vote upon an adjournment of the Tyme Special Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of Proposals 1, 2 and 3 or to ensure that any supplement or amendment to the accompanying joint proxy statement/prospectus is timely provided to holders of Tyme common stock.

FOR	AGAINST	ABSTAIN
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONTROL NUMBER

Signature _____ Signature, if held jointly _____ Date _____, 2022.

Note: Please sign exactly as name appears hereon. When shares are held by joint owners, both should sign. When signing as attorney, executor, administrator, trustee, guardian, or corporate officer, please give title as such.

**Important Notice Regarding the Internet Availability of Proxy
Materials for the Special Meeting of Stockholders**

**To view the Joint Proxy Statement /Prospectus and 2022
Annual Report to Stockholders and attend the
Special Meeting, please go to:
<https://www.cstproxy.com/tymeinc/2022>**

▲ FOLD HERE • DO NOT SEPARATE • INSERT IN ENVELOPE PROVIDED ▲

PROXY

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

TYME TECHNOLOGIES, INC.

The undersigned appoints Richard Cunningham and James Biehl, and each of them, as proxies, each with the power to appoint his substitute, and authorizes each of them to represent and to vote, as designated on the reverse hereof, all of the shares of common stock of Tyme Technologies, Inc. held of record by the undersigned at the close of business on August 8, 2022 at the Special Meeting of Stockholders of Tyme Technologies, Inc. to be held on September 15, 2022 at 11:00 AM (Eastern Time), or at any adjournment or postponement thereof.

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED IN THE MANNER DIRECTED HEREIN. IF NO CONTRARY DIRECTION IS MADE, THE PROXY WILL BE VOTED IN FAVOR OF PROPOSALS 1, 2, 3 AND 4, AND IN ACCORDANCE WITH THE JUDGMENT OF THE PERSONS NAMED AS PROXY HEREIN ON ANY OTHER MATTERS THAT MAY PROPERLY COME BEFORE THE ANNUAL MEETING OR ANY ADJOURNMENT OR POSTPONEMENT THEREOF. ALL OTHER PROXIES HERETOFORE GIVEN BY THE UNDERSIGNED TO VOTE SHARES OF COMMON STOCK AT THE SPECIAL MEETING ARE EXPRESSLY REVOKED.

(Continued, and to be marked, dated and signed, on the other side)