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

FORM S-8 REGISTRATION STATEMENT **UNDER** THE SECURITIES ACT OF 1933

Unity Biotechnology, 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)

26-4726035 (I.R.S. Employer **Identification Number)**

3280 Bayshore Blvd, Suite 100 Brisbane, California
(650) 614-5220
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

2018 Incentive Award Plan 2018 Employee Stock Purchase Plan (Full Title of the Plan)

Keith R. Leonard Jr. **Chairman and Chief Executive Officer** Unity Biotechnology, Inc. 3280 Bayshore Blvd, Suite 100 Brisbane, California 94005 (650) 416-1192

Tamara L. Tompkins, Esq. General Counsel and Secretary Unity Biotechnology, Inc. 3280 Bayshore Blvd, Suite 100 Brisbane, CA 94005 Telephone: (650) 416-1192	Brian J. Cuneo, Esq. Latham & Watkins LLP 140 Scott Drive Menlo Park, CA 94025 Telephone: (650) 328-4600
Facsimile: (415) 656-4371	Facsimile: (650) 463-2600
indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller rehe definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in	
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 standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. \Box	complying with any new or revised financial accounting

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price Per Share	Amount of Registration Fee
Common Stock, \$0.0001 par value per share	2,125,510 (3)	\$10.43	\$22,169,069.30	\$2,686.90
Common Stock, \$0.0001 par value per share	424,143 (4)	\$10.43	\$4,423,811.49	\$536.17
Total:	2,549,653	\$10.43	\$26,592,880.79	\$3,223.07

- Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement shall also cover any additional shares of the Registrant's common stock that become issuable under the 2018 Incentive Award Plan (the "2018 Plan") and the 2018 Employee Stock Purchase Plan (the "ESPP") by reason of any stock dividend, stock split, recapitalization or similar transaction effected without the Registrant's receipt of consideration which would increase the number of outstanding shares of common stock.
- This estimate is made pursuant to Rule 457(c) and Rule 457(h) of the Securities Act solely for purposes of calculating the registration fee. The Proposed Maximum Offering Price Per Share for shares available for future grant is the average of the high and low prices for the registrant's common stock as reported on The Nasdaq Global Select Market on March 4, 2019, which is \$10.43.
- (3) Represents (i) 2,120,715 additional shares of common stock available for future issuance under the 2018 Plan resulting from an annual increase as of January 1, 2019 and (ii) 4,795 additional shares of common stock available for future issuance under the 2018 Plan, primarily resulting from repurchases of awards outstanding under the Company's 2013 Equity Incentive Plan.
- (4) Represents the additional shares of common stock available for future issuance under the ESPP resulting from an annual increase as of January 1, 2019.

Proposed sale to take place as soon after the effective date of the registration statement as awards under the plans are exercised and/or vest.

EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed for the purpose of registering an additional 2,549,653 shares of the Registrant's common stock issuable under the following employee benefit plans for which a Registration Statement of the Registrant on Form S-8 (File No. 333-224726) is effective: (i) the 2018 Incentive Award Plan, as a result of (x) the operation of an automatic annual increase provision therein, which added 2,120,715 shares of common stock, and (y) 4,795 additional shares available under the 2018 Incentive Award Plan, primarily resulting from repurchases of awards outstanding under the Company's 2013 Equity Incentive Plan, and (ii) the 2018 Employee Stock Purchase Plan, as a result of the operation of an automatic annual increase provision therein, which added 424,143 shares of common stock.

INCORPORATION BY REFERENCE OF CONTENTS OF REGISTRATION STATEMENT ON FORM S-8

Pursuant to Instruction E of Form S-8, the contents of the Registration Statement on Form S-8 filed with the Securities and Exchange Commission on M	∕ l ay 7,
2018 (File No. 333-224726) is incorporated by reference herein.	

		Incorp	orated by Refer	ence	Filed H <u>erewith</u>
Exhibit Number	Exhibit Description	Form	Date	Number	
4.1	Amended and Restated Certificate of Incorporation.	8-K	5-7-18	3.1	
4.2	Amended and Restated Bylaws.	8-K	5-7-18	3.2	
4.3	Form of Common Stock Certificate.	S-1/A	4-23-18	4.2	
5.1	Opinion of Latham & Watkins LLP.				X
23.1	Consent of Independent Registered Public Accounting Firm.				X
23.2	Consent of Latham & Watkins LLP (included in Exhibit 5.1).				X
24.1	Power of Attorney. Reference is made to the signature page to the Registration Statement.				X
99.1(a)#	2018 Incentive Award Plan.	S-8	5-7-18	99.2(a)	
99.1(b)#	Form of Stock Option Grant Notice and Stock Option Agreement under the 2018 Incentive Award Plan.	S-1	4-5-18	10.4(b)	
99.1(c)#	Form of Restricted Stock Award Grant Notice under the 2018 Incentive Award Plan.	S-1	4-5-18	10.4(c)	
99.1(d)#	Form of Restricted Stock Unit Award Grant Notice under the 2018 Incentive Award Plan.	S-1	4-5-18	10.4(d)	
99.2#	2018 Employee Stock Purchase Plan.	S-8	5-7-18	99.3	

[#] Indicates management contract or compensatory plan.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Brisbane, California.

Unity Biotechnology, Inc.

By: /s/ Keith R. Leonard Jr.

Keith R. Leonard Jr. Chief Executive Officer

POWER OF ATTORNEY

Date: March 6, 2019

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints each of Keith R. Leonard Jr., Robert C. Goeltz II and Tamara L. Tompkins his or her true and lawful attorneys-in-fact and agents, with full power of substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the U.S. Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming that all said attorneys-in-fact and agents, or their, his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons on behalf of the Registrant, in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Keith R. Leonard Jr.	Chairman, Chief Executive Officer and Director	March 6, 2019
Keith R. Leonard Jr.	(Principal Executive Officer)	,
/s/ Robert C. Goeltz II	Chief Financial Officer	March 6, 2019
Robert C. Goeltz II	(Principal Financial and Accounting Officer)	March 0, 2013
	• " /	
/s/ Paul L. Berns	Director	March 6, 2019
Paul L. Berns		
/s/ Kristina M. Burow	Director	March 6, 2019
Kristina M. Burow		
/s/ Graham K. Cooper	Director	March 6, 2019
Graham K. Cooper		
/s/ Nathaniel E. David	President and Director	March 6, 2019
Nathaniel E. David		
/s/ David L. Lacey	Director	March 6, 2019
David L. Lacey		
/s/ Robert T. Nelsen	Director	March 6, 2019
Robert T. Nelsen		
/s/ Margo R. Roberts	Director	March 6, 2019
Margo R. Roberts		
/s/ Camille D. Samuels	Director	March 6, 2019
Camille D. Samuels	Director	Maich 0, 2019
Camme D. Samuels		

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2018 Incentive Award Plan and 2018 Employee Stock Purchase Plan of Unity Biotechnology, Inc. of our report dated March 6, 2019, with respect to the financial statements of Unity Biotechnology, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2018, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Redwood City, California March 6, 2019

Exhibit 5.1

140 Scott Drive

Menlo Park, California 94025

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FIRM / AFFILIATE OFFICES Beiiina Moscow Boston Munich Brussels New York Century City Orange County Chicago Paris Duhai Rivadh Düsseldorf Rome Frankfurt San Diego Hamburg San Francisco Seoul Hong Kong Houston Shanghai London Silicon Valley Los Angeles Singapore Madrid Tokyo Washington, D.C. Milan

LATHAM & WATKINS LLP

March 6, 2019

Unity Biotechnology, Inc. 3280 Bayshore Blvd, Suite 100 Brisbane, California 94005

Re: Registration Statement on Form S-8; 2,549,653 shares of Common Stock of Unity Biotechnology, Inc., par

value \$0.0001 per share

Ladies and Gentlemen:

We have acted as special counsel to Unity Biotechnology, Inc., a Delaware corporation (the "Company"), in connection with the registration by the Company of an aggregate of 2,549,653 shares of common stock of the Company, par value \$0.0001 per share (the "Common Stock"), consisting of 2,125,510 shares of Common Stock (the "2018 Plan Shares") issuable under the 2018 Incentive Award Plan (the "2018 Plan") and 424,143 shares of Common Stock (the "ESPP Shares" and, together with the 2018 Plan Shares, the "Shares") issuable under the 2018 Employee Stock Purchase Plan (the "ESPP" and together with the 2018 Plan, the "Plans").

The Shares are included in a registration statement on Form S-8 under the Securities Act of 1933, as amended (the "Act"), filed with the Securities and Exchange Commission (the "Commission") on March 6, 2019 (the "Registration")

Statement"). This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or the related prospectuses, other than as expressly stated herein with respect to the issuance of the Shares.

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to the

LATHAM & WATKINS LLP

General Corporation Law of the State of Delaware (the "*DGCL*"), and we express no opinion with respect to any other laws.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof, when the Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the purchasers and have been issued by the Company against payment therefor in the circumstances contemplated by the Plans, assuming in each case that the individual issuances, grants or awards under the Plans are duly authorized by all necessary corporate action and duly issued, granted or awarded and exercised in accordance with the requirements of law and the Plans (and the agreements and awards duly adopted thereunder and in accordance therewith), the issuance and sale of the Shares will have been duly authorized by all necessary corporate action of the Company, and the Shares will be validly issued, fully paid and non-assessable. In rendering the foregoing opinion, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the DGCL.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Latham & Watkins LLP