As filed with the Securities and Exchange Commission on June 2, 2017

Registration No. 333-

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

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

OBALON THERAPEUTICS, INC.
(Exact Name of Registrant as Specified in its Charter)

Delaware	**26-1828101**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

5421 Avenida Encinas, Suite F
Carlsbad, California 92008
(Address of Principal Executive Offices) (Zip Code)

Obalon Therapeutics, Inc. 2016 Equity Incentive Plan
Obalon Therapeutics, Inc. 2016 Employee Stock Purchase Plan
(Full Title of the Plan)

Andrew Rasdal
President and Chief Executive Officer
Obalon Therapeutics, Inc.
5421 Avenida Encinas, Suite F
Carlsbad, California 92008
(760) 795-6558
(Name, address, and telephone number, including area code, of agent for service)

Copy to:
B. Shayne Kennedy
LATHAM & WATKINS LLP
650 Town Center Drive, 20th Floor
Costa Mesa, California 92626
Telephone: (714) 540-1235
Facsimile: (714) 755-8290

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

Large accelerated filer ¨	Accelerated filer ¨
Non-accelerated filer ¨ (Do not check if a smaller reporting company)	Smaller reporting company ¨
	Emerging growth company x

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 . x

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	**Amount to be Registered (1)**	**Proposed Maximum Offering Price per Share**	**Proposed Maximum Aggregate Offering Price**	**Amount of Registration Fee**
Common Stock, $0.001 par value per share				
--- To be issued under the 2016 Equity Incentive Plan	760,924 (2)	$9.34 (3)	$7,107,031	$824
--- To be issued under the 2016 Employee Stock Purchase Plan	190,231 (4)	$7.94 (5)	$1,510,435	$176

(1) Pursuant to Rule 416(a) of 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 becomes issuable under the Registrant’s 2016 Equity Incentive Plan (the “2016 Plan”) or 2016 Employee Stock Purchase Plan (the “2016 ESPP”) by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration that increases the number of the Registrant’s outstanding shares of common stock.

(2) Represents additional shares of the Registrant’s common stock that became available for issuance on January 1, 2017 under the 2016 Plan, pursuant to the evergreen provision of the 2016 Plan.

(3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) and 457(h) of the Securities Act, and based upon the average of the high and low prices of the Registrant’s common stock as reported on the Nasdaq Global Market on May 26, 2017.

(4) Represents additional shares of the Registrant’s common stock that became available for issuance on January 1, 2017 under the 2016 ESPP, pursuant to the evergreen provision of the 2016 ESPP.

(5) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) and 457(h) of the Securities Act, and based upon the average of the high and low prices of the Registrant’s common stock as reported on the Nasdaq Global Market on May 26, 2017, multiplied by 85%, which is the percentage of the trading price per share applicable to purchasers under the 2016 ESPP.

EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed for the purpose of registering an additional 951,155 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. 333-213988) is effective: (i) the 2016 Equity Incentive Plan, as a result of the operation of an automatic annual increase provision therein, which added 760,924 shares of common stock, and (ii) the 2016 Employee Stock Purchase Plan, as a result of the operation of an automatic annual increase provision therein, which added 190,231 shares of common stock.

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

Except as set forth below, pursuant to Instruction E of Form S-8, the contents of the Registration Statements on Form S-8 filed with the Securities and Exchange Commission on October 6, 2016 (File No. 333-213988) are incorporated by reference herein.

Item 8. Exhibits

The Exhibit Index immediately preceding the exhibits is incorporated by reference.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 the City of Carlsbad, State of California, on June 2, 2017.

OBALON THERAPEUTICS, INC.

By:	/s/ Andrew Rasdal
Name:	Andrew Rasdal
Title:	President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Andrew Rasdal and William Plovanic, and each of them, as his or her true and lawful attorney-in-fact and agent with full power of substitution, for him or her in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent 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 for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his or her substitute, may lawfully do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ Andrew Rasdal Andrew Rasdal	President, Chief Executive Officer and Director (Principal Executive Officer)	June 2, 2017
/s/ William Plovanic William Plovanic	Chief Financial Officer (Principal Financial Officer)	June 2, 2017
/s/ Nooshin Hussainy Nooshin Hussainy	Vice President of Finance (Principal Accounting Officer)	June 2, 2017
/s/ Kim Kamdar Kim Kamdar	Chairperson of the Board of Directors	June 2, 2017
/s/ Ray Dittamore Ray Dittamore	Director	June 2, 2017
/s/ Douglas Fisher Douglas Fisher	Director	June 2, 2017
/s/ Les Howe Les Howe	Director	June 2, 2017
/s/ David Moatazedi David Moatazedi	Director	June 2, 2017
/s/ Jonah Shacknai Jonah Shacknai	Director	June 2, 2017
/s/ Sharon Stevenson Sharon Stevenson	Director	June 2, 2017

EXHIBIT INDEX

Exhibit Number	Description	Incorporated by Reference			File Number	Filed Herewith
		Form	Exhibit	Date Filed		
4.1	Restated Certificate of Incorporation of Obalon Therapeutics, Inc.	S-1/A	3.2	9/26/16	333-213551	
4.2	Amended and Restated Bylaws of Obalon Therapeutics, Inc.	S-1/A	3.4	9/26/16	333-213551	
4.3	Form of Common Stock Certificate.	S-1	4.1	9/9/16	333-213551	
5.1	Opinion of Latham & Watkins LLP.					X
23.1	Consent of Latham & Watkins LLP (included in Exhibit 5.1).					X
23.2	Consent of KPMG LLP, Independent Registered Public Accounting Firm.					X
24.1	Power of Attorney (included in the signature page to this registration statement).					X
99.1	Obalon Therapeutics, Inc. 2016 Equity Incentive Plan and form of award agreements thereunder.	S-1/A	10.3	9/26/16	333-213551	
99.2	Obalon Therapeutics, Inc. 2016 Employee Stock Purchase Plan and form of enrollment agreement.	S-1/A	10.4	9/26/16	333-213551	
99.3	Form of Non-Employee Director Option Agreement.	10-K	10.8	2/23/17	001-37897	

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Exhibit 5.1

June 2, 2017

Obalon Therapeutics, Inc.
5421 Avenida Encinas, Suite F
Carlsbad, CA 92008

Re: Registration Statement on Form S-8: 951,155 shares of Common Stock, par value $0.001 per share, of Obalon Therapeutics, Inc.

Ladies and Gentlemen:

We have acted as special counsel to Obalon Therapeutics, Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing by the Company with the Securities and Exchange Commission (the "Commission") of a registration statement on Form S–8 (the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), relating to the issuance of up to 951,155 shares of the Company's common stock, par value $0.001 per share (the "Shares"), which may be issued pursuant to the Company's 2016 Equity Incentive Plan and 2016 Employee Stock Purchase Plan (together, the "Plans"). This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or the prospectus forming a part thereof, 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 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 for legal consideration in excess of par value 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 of the Company 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 issue 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 nonassessable. In rendering the foregoing

LATHAM & WATKINS LLP

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 Securities 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 Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Latham & Watkins LLP

Exhibit 23.2

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Obalon Therapeutics, Inc.:

We consent to the use of our report dated February 23, 2017, with respect to the consolidated balance sheets of Obalon Therapeutics, Inc. as of December 31, 2016 and 2015, and the related consolidated statements of operations and comprehensive loss, convertible preferred stock and stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2016, incorporated herein by reference.

/s/ KPMG LLP

San Diego, California
June 2, 2017