

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

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

**Albireo Pharma, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of incorporation  
or organization)

**90-0136863**  
(I.R.S. Employer Identification No.)

**10 Post Office Square, Suite 502 South, Boston, Massachusetts**  
(Address of principal executive offices)

**02109**  
(Zip code)

**2017 Inducement Equity Incentive Plan**  
(Full title of the plan)

**Thomas A. Shea**  
**Chief Financial Officer and Treasurer**  
**Albireo Pharma, Inc.**

**10 Post Office Square, Suite 502 South**  
**Boston, Massachusetts 02109**  
**(857) 254-5555**

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

Copy to:

**Megan N. Gates, Esq.**  
**John P. Condon, Esq.**  
**Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.**  
**One Financial Center**  
**Boston, Massachusetts 02111**  
**(617) 542-6000**  
**Facsimile: (617) 542-2241**

**Peter A. Zorn, Esq.**  
**Chief Corporate Officer, General Counsel and Secretary**  
**Albireo Pharma, Inc.**  
**10 Post Office Square, Suite 502 South**  
**Boston, Massachusetts 02109**  
**(857) 254-5555**

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.

Large accelerated filer  Accelerated filer   
Non-accelerated filer  (Do not check if a smaller reporting company) 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.

**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, \$0.01 par value per share	150,000 shares	\$23.28 (2)	\$3,492,000 (2)	\$434.76

- (1) The number of shares of common stock, par value \$0.01 per share ("Common Stock"), of Albireo Pharma, Inc. (the "Registrant") stated above consists of the aggregate number of shares which may be sold upon the exercise of options or issuance of stock-based awards which may hereafter be granted under the Registrant's 2017 Inducement Equity Incentive Plan (the "Plan"). The maximum number of shares which may be sold upon the exercise of such options or issuance of stock-based awards granted under the Plan is subject to adjustment in accordance with certain antidilution and other provisions of the Plan. Accordingly, pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement covers, in addition to the number of shares stated above, an indeterminate number of shares which may be subject to grant or otherwise issuable after the operation of any such antidilution and other provisions.

- (2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(c) and Rule 457(h) promulgated under the Securities Act. The offering price per share and the aggregate offering price for shares reserved for future grant or issuance under the Plan are based on the average of the high and the low price of the Registrant's Common Stock as reported on The Nasdaq Capital Market as of a date (December 14, 2017) within five business days prior to filing this Registration Statement.
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## EXPLANATORY NOTE

This Registration Statement registers 150,000 shares of common stock, par value \$0.01 per share, of the Registrant (the “Common Stock”) reserved for issuance under the Registrant’s 2017 Inducement Equity Incentive Plan (the “Plan”). This Registration Statement registers additional securities of the same class as other securities for which a registration statement filed on Form S-8 of the Registrant relating to an employee benefit plan is effective (File No. 333-215264). The information contained in the Registrant’s registration statement on Form S-8 (File No. 333-215264), except for Item 8 “Exhibits,” is hereby incorporated by reference pursuant to General Instruction E of Form S-8.

## PART II

### INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

#### Item 8. Exhibits.

<u>Exhibit Number</u>	<u>Exhibit Description</u>	<u>Filed Herewith</u>	<u>Incorporated by Reference herein from Form or Schedule</u>	<u>Filing Date</u>	<u>SEC File/Reg. Number</u>
4.1.1	<a href="#">Restated Certificate of Incorporation of the Registrant, as amended.</a>		S-3 (Exhibit 4.1.1)	10/13/2017	333-220958
4.1.2	<a href="#">Certificate of Designation of Series A Convertible Preferred Stock of the Registrant, filed with the Secretary of State of the State of Delaware on May 17, 2011.</a>		8-K (Exhibit 4.6)	5/19/2011	001-33451
4.1.3	<a href="#">Certificate of Designation of Series B Convertible Preferred Stock of the Registrant, filed with the Secretary of State of the State of Delaware on June 26, 2012.</a>		8-K (Exhibit 4.8)	6/27/2012	001-33451
4.2	<a href="#">Amended and Restated Bylaws of the Registrant.</a>		S-8 (Exhibit 4.2)	7/6/2007	333-144407
4.3	<a href="#">Form of common stock certificate.</a>		10-K (Exhibit 4.1)	12/22/2016	001-33451
5.1	<a href="#">Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. with respect to the legality of the securities being registered.</a>	X			
23.1	<a href="#">Consent of Ernst &amp; Young LLP (United States).</a>	X			
23.2	<a href="#">Consent of Ernst &amp; Young LLP (United Kingdom).</a>	X			
23.3	<a href="#">Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in Exhibit 5.1).</a>	X			
24.1	<a href="#">Powers of Attorney (included on the signature page to this registration statement).</a>	X			
99.1	<a href="#">2017 Inducement Equity Incentive Plan.</a>		10-Q (Exhibit 10.1)	11/14/2017	001-33451

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## SIGNATURES

*The Registrant.* 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 Boston, Commonwealth of Massachusetts, on December 18, 2017.

ALBIREO PHARMA, INC.

By: /s/ Ronald H.W. Cooper  
Ronald H.W. Cooper  
*President and Chief Executive Officer*

## SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Albireo Pharma, Inc., hereby severally constitute and appoint Ronald H.W. Cooper, Thomas A. Shea and Peter A. Zorn, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him and in his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8 of Albireo Pharma, Inc., and to file the same, with all exhibits thereto and other documents in connection therewith, with the 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 or necessary to be done in and about the premises, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his substitute or substitutes 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 below by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Ronald H.W. Cooper</u> Ronald H.W. Cooper	President, Chief Executive Officer and Director (principal executive officer)	December 18, 2017
<u>/s/ Thomas A. Shea</u> Thomas A. Shea	Chief Financial Officer (principal financial officer and principal accounting officer)	December 18, 2017
<u>/s/ David Chiswell, Ph.D.</u> David Chiswell, Ph.D.	Chairman of the Board of Directors	December 18, 2017
<u>/s/ Julia R. Brown</u> Julia R. Brown	Director	December 18, 2017
<u>/s/ Michael Gutch, Ph.D.</u> Michael Gutch, Ph.D.	Director	December 18, 2017
<u>/s/ Roger A. Jeffs, Ph.D.</u> Roger A. Jeffs, Ph.D.	Director	December 18, 2017
<u>/s/ Heather Preston, M.D.</u> Heather Preston, M.D.	Director	December 18, 2017
<u>/s/ Davey S. Scoon</u> Davey S. Scoon	Director	December 18, 2017



One Financial Center  
Boston, MA 02111  
617-542-6000  
617-542-2241 fax  
www.mintz.com

December 18, 2017

Albireo Pharma, Inc.  
10 Post Office Square, Suite 502 South  
Boston, Massachusetts 02109

Ladies and Gentlemen:

We have acted as legal counsel to Albireo Pharma, Inc., a Delaware corporation (the “Company”), in connection with the preparation and filing with the Securities and Exchange Commission (the “Commission”) of a Registration Statement on Form S-8 (the “Registration Statement”), pursuant to which the Company is registering the issuance under the Securities Act of 1933, as amended (the “Securities Act”), of an aggregate of 150,000 shares (the “Shares”) of the Company’s common stock, \$0.01 par value per share (the “Common Stock”) that may be issued pursuant to the Company’s 2017 Inducement Equity Incentive Plan (the “Plan”). This opinion is being rendered in connection with the filing of the Registration Statement with the Commission. All capitalized terms used herein and not otherwise defined shall have the respective meanings given to them in the Registration Statement.

In connection with this opinion, we have examined the Company’s Restated Certificate of Incorporation, as amended, and Amended and Restated Bylaws, each as currently in effect; such other records of the corporate proceedings of the Company and certificates of the Company’s officers as we have deemed relevant; and the Registration Statement and the exhibits thereto.

In our examination, we have assumed the genuineness of all signatures, the legal capacity of natural persons, 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 the originals of such copies, and the truth and correctness of any representations and warranties contained therein. In addition, we have assumed that the Company will receive any required consideration in accordance with the terms of the Plan.

Our opinion expressed herein is limited to the General Corporation Law of the State of Delaware and we express no opinion with respect to the laws of any other jurisdiction. No opinion is expressed herein with respect to the qualification of the Shares under the securities or blue sky laws of any state or any foreign jurisdiction.

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.

**Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.**

BOSTON | LONDON | LOS ANGELES | NEW YORK | SAN DIEGO | SAN FRANCISCO | STAMFORD | WASHINGTON

December 18, 2017

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Based upon the foregoing, we are of the opinion that the Shares, when issued and delivered in accordance with the terms of the Plan, will be validly issued, fully paid and non-assessable.

We understand that you wish to file 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 promulgated under the Securities Act, and we hereby consent thereto. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Mintz, Levin, Cohn, Ferris,  
Glovsky and Popeo, P.C.

Mintz, Levin, Cohn, Ferris,  
Glovsky and Popeo, P.C.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8), pertaining to the 2017 Inducement Equity Incentive Plan of Albireo Pharma, Inc. of our report dated March 27, 2017, with respect to the consolidated financial statements of Albireo Pharma, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2016, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP  
Boston, Massachusetts  
December 14, 2017

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2017 Inducement Equity Incentive Plan of Albireo Pharma, Inc. of our report dated July 13, 2016, with respect to the consolidated financial statements of Albireo Pharma, Inc. for the year ended December 31, 2015, included in the Annual report (Form 10-k) of Albireo Pharma, Inc., for the year ended December 31, 2016, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP  
Reading, England  
December 14, 2017