

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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

Oncobiologics, Inc.

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction of Incorporation or organization)

7 Clarke Drive
Cranbury, New Jersey 08512

(Address of principal executive offices) (Zip code)

2015 Equity Incentive Plan

(Full title of the plan)

Pankaj Mohan, Ph.D.
Chairman, President and Chief Executive Officer
Oncobiologics, Inc.
7 Clarke Drive
Cranbury, New Jersey 08512
(609) 619-3990

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

Copies to:

Yvan-Claude Pierre
Daniel I. Goldberg
Marianne C. Sarrazin
Cooley LLP
1114 Avenue of the Americas
New York, New York 10036
(212) 479-6000

Lawrence A. Kenyon
Chief Financial Officer
Oncobiologics, Inc.
7 Clarke Drive
Cranbury, New Jersey 08512
(609) 619-3990

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 the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

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

Accelerated filer

Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price per Share(4)	Proposed Maximum Aggregate Offering Price(4)	Amount of Registration Fee
Common Stock, par value \$0.01 per share, reserved for issuance pursuant to the 2015 Equity Incentive Plan	1,391,451(2)(3)	\$ 3.44	\$ 4,786,591.44	\$ 554.77

- (1) Pursuant to Rule 416(a) promulgated under the Securities Act of 1933, as amended (the "**Securities Act**"), this Registration Statement shall also cover any additional shares of Registrant's common stock, par value \$0.01 (the "**Common Stock**"), that become issuable under the 2015 Equity Incentive Plan ("**2015 EIP**"), set forth herein by reason of any stock dividend, stock split, recapitalization or other similar transaction effected that results in an increase to the number of outstanding shares of Common Stock.
- (2) Represents additional shares of Common Stock reserved for future issuance under the 2015 EIP by reason of the automatic increase provision of the 2015 EIP.
- (3) The number of shares of Common Stock reserved for issuance under the 2015 EIP will automatically increase on January 1st each year, starting on January 1, 2017 and continuing through January 1, 2026, by the lesser of (A) 3% of the total number of shares of Common Stock outstanding on December 31st of the immediately preceding calendar year and (B) a number determined by the Registrant's board of directors.
- (4) Estimated in accordance with Rule 457(h) under the Securities Act solely for the purpose of calculating the registration fee on the basis of \$3.44, the average of the high and low prices of the Registrant's Common Stock as reported on the NASDAQ Global Market on February 10, 2017.

EXPLANATORY NOTE

Oncobiologics, Inc. (the “**Registrant**”) is filing this Registration Statement on Form S-8 for the purpose of registering an additional 1,391,451 shares of its Common Stock, issuable to eligible persons under the 2015 EIP, which Common Stock is in addition to the shares of Common Stock registered on the Registrant’s Form S-8 filed on May 13, 2016 (File No. 333-211362) (the “**Prior Form S-8**”).

PART II

ITEM 3. INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

Pursuant to General Instruction E to Form S-8, the contents of the Prior Form S-8 filed by the Registrant are incorporated by reference herein. In addition, the following documents filed by the Registrant with the Securities and Exchange Commission (“**SEC**”) are incorporated by reference into this Registration Statement:

- a) The Registrant’s latest annual report on Form 10-K, filed with the SEC on December 29, 2016, as amended January 27, 2017.
- b) The Registrant’s quarterly report on Form 10-Q, filed with the SEC on February 14, 2017.
- c) The Registrant’s current reports on Form 8-K, filed with the SEC on February 3, 2017 and February 6, 2017, under the Securities Exchange Act of 1934, as amended.
- d) The description of the Registrant’s Common Stock contained in the Registrant’s registration statement on Form 8-A filed with the SEC on April 29, 2016, including any amendments or reports filed for the purpose of updating such description.

All documents, reports and definitive proxy or information statements filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended, (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished on such form that relate to such items) on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered have been sold or that deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document that also is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

ITEM 8. EXHIBITS

Exhibit Number	Description
4.1(1)	Amended and Restated Certificate of Incorporation of Oncobiologics, Inc.
4.2(2)	Amended and Restated Bylaws of Oncobiologics, Inc.
4.3(3)	Amendment to the Amended and Restated Bylaws of Oncobiologics, Inc.
5.1	Opinion of Cooley LLP.
23.1	Consent of Independent Registered Public Accounting Firm.
23.2	Consent of Cooley LLP (included in Exhibit 5.1).
24.1	Power of Attorney (see signature page hereto).

99.1(4) 2015 Equity Incentive Plan.

99.2(5) Forms of agreements and award grant notices 2015 Equity Incentive Plan.

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- (1) Previously filed as Exhibit 3.1 to the Registrant's current report on Form 8-K, filed with the SEC on May 19, 2016, and incorporated by reference herein.
 - (2) Previously filed as Exhibit 3.2 to the Registrant's current report on Form 8-K, filed with the SEC on May 19, 2016, and incorporated by reference herein.
 - (3) Previously filed as Exhibit 3.1 to the Registrant's current report on Form 8-K, filed with the SEC on November 29, 2016, and incorporated by reference herein.
 - (4) Previously filed as Exhibit 10.3 to the Registrant's registration statement on Form S-1 (File No. 333-209011), filed with the SEC on January 15, 2016, and incorporated by reference herein.
 - (5) Previously filed as Exhibit 10.4 to the Registrant's registration statement on Form S-1 (File No. 333-209011), filed with the SEC on January 15, 2016, and incorporated by reference herein.
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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 Cranbury, New Jersey, on February 15, 2017.

ONCOBIOLOGICS, INC.

By: /s/ Pankaj Mohan
Pankaj Mohan, Ph.D.
Chairman, President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Pankaj Mohan, Ph.D. and Lawrence A. Kenyon, and each of them, his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, 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 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 all that said attorneys-in-fact and agents, or each of them, or their or his or her substitutes or substitute, 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 in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Pankaj Mohan</u> Pankaj Mohan, Ph.D.	Chairman, President and Chief Executive Officer <i>(Principal Executive Officer)</i>	February 15, 2017
<u>/s/ Lawrence A. Kenyon</u> Lawrence A. Kenyon	Chief Financial Officer <i>(Principal Accounting and Financial Officer)</i>	February 15, 2017
<u>/s/ Todd C. Brady</u> Todd C. Brady, M.D., Ph.D.	Director	February 15, 2017
<u>/s/ Scott Canute</u> Scott Canute	Director	February 15, 2017
<u>/s/ Albert D. Dyrness</u> Albert D. Dyrness	Director	February 15, 2017
<u>/s/ Donald J. Griffith</u> Donald J. Griffith	Director	February 15, 2017
<u>/s/ Kurt J. Hilzinger</u> Kurt J. Hilzinger	Director	February 15, 2017
<u>/s/ Robin Smith Hoke</u> Robin Smith Hoke	Director	February 15, 2017

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Yvan-Claude Pierre
T: +1 212-479-6721
ypierre@cooley.com

February 15, 2017

Oncobiologics, Inc.
7 Clarke Drive
Cranbury, New Jersey 08512

Ladies and Gentlemen:

You have requested our opinion, as counsel to Oncobiologics, Inc., a Delaware corporation (the "**Company**"), in connection with the filing by the Company of a Registration Statement on Form S-8 (the "**Registration Statement**") with the Securities and Exchange Commission covering the offering of up to 1,391,451 shares (the "**2015 Plan Shares**") of the Company's common stock, par value \$0.01 per share (the "**Common Stock**"), pursuant to the Company's 2015 Equity Incentive Plan (the "**2015 Plan**").

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and the related prospectuses, (b) the Company's Amended and Restated Certificate of Incorporation and the Company's Amended and Restated Bylaws, as amended, each as currently in effect as of the date hereof, (c) the 2015 Plan and (d) the originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness and authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies, the accuracy, completeness and authenticity of certificates of public officials; and the due authorization, execution and delivery of all documents by all persons other than the Company where authorization, execution and delivery are prerequisites to the effectiveness of such documents. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not sought independently to verify such matters.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion as to whether the laws of any particular jurisdiction other than those identified above are applicable to the subject matter of this opinion. We are not rendering any opinion as to compliance with any federal or state law, rule or regulation relating to securities, or to the sale or issuance thereof.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued in accordance with the 2015 Plan, the Registration Statement and the related prospectuses, will be validly issued, fully paid and nonassessable (except as to shares issued pursuant to certain deferred payment arrangements, which will be fully paid and nonassessable when such deferred payments are made in full).

We consent to the filing of this opinion as an exhibit to the Registration Statement

Sincerely,

COOLEY LLP

By: /s/ Yvan-Claude Pierre
Yvan-Claude Pierre

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Oncobiologics, Inc.:

We consent to the use of our report incorporated herein by reference. Our report dated December 29, 2016 contains an explanatory paragraph that states that Oncobiologics, Inc. has incurred recurring losses and negative cash flows from operations since inception and has an accumulated deficit at September 30, 2016 of \$147.4 million and \$4.6 million of indebtedness that is due on demand, which raises substantial doubt about its ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ KPMG LLP

Philadelphia, Pennsylvania
February 15, 2017
