UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

Organogenesis Holdings Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

Non-accelerated filer

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98-1329150 (I.R.S. employer identification no.)

Smaller reporting company

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85 Dan Road
Canton, MA 02021
(Address of principal executive offices)

Organogenesis Inc. 2003 Stock Incentive Plan Organogenesis Holdings Inc. 2018 Equity and Incentive Plan (Full title of the plan(s))

Lori Freedman
Vice President and General Counsel
Organogenesis Holdings Inc.
85 Dan Road
Canton, MA 02021
(Name and address of agent for service)

(781) 575-0775 (Telephone number, including area code, of agent for service)

Copies to:

William R. Kolb Stacie S. Aarestad Foley Hoag LLP 155 Seaport Boulevard Boston, Massachusetts 02210 Telephone: (617) 832-1000 Telecopy: (617) 832-7000

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 $\hat{a} \in \mathbb{C}$ accelerated filer, $\hat{a} \in \mathbb{C}$ and $\hat{a} \in \mathbb{C}$ in Rule 12b-2 of the Exchange Act.

Large accelerated filer \hat{a} Accelerated filer \hat{a}

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 13(a) of the Exchange Act. a ~ []

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
Class A Common Stock, \$0.0001 par value	6,501,844(2)	\$1.95(3)	\$12,678,595.80	\$1,536.65
Class A Common Stock, \$0.0001 par value	90,000(4)	\$7.035	\$633,150.00	\$76.74
Class A Common Stock, \$0.0001 par value	9,108,996(5)	\$10.80(6)	\$98,377,156.80	\$11,923.31
Total:	15,700,840		\$111,688,902.60	\$13,536.69

- Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Actâ€□), this Registration Statement shall also cover any additional shares of the registrant's common stock that become issuable 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
- Represents shares of the Registrant's Class A common stock issuable upon exercise of outstanding stock options granted pursuant to the Organogenesis Inc. 2003 Stock Incentive Plan (the "2003 Planâ€∏) as of February 8, 2019.
- The proposed maximum offering price per share has been estimated in accordance with Rule 457(h) under the Securities Act solely for the 3. purpose of calculating the registration fee with respect to shares reserved for future issuance upon exercise of stock options granted pursuant to the 2003 Plan, based on the weighted average exercise price (rounded to the nearest cent) for such outstanding options.
- 4. Represents shares of the Registrant's Class A common stock issuable upon exercise of outstanding stock options granted pursuant to the Organogenesis Holdings Inc. 2018 Equity and Incentive Plan (the "2018 Planâ€∏) as of February 8, 2019.
- Represents shares of the Registrant's Class A common stock available for issuance pursuant to awards that may be issued in the future under 5. the 2018 Plan as of February 8, 2019.
- The proposed maximum offering price per share has been estimated in accordance with Rule 457(c) and Rule 457(h) under the Securities Act 6. solely for the purpose of calculating the registration fee with respect to shares reserved for future issuance based on the average of the high and low price of the registrant's common stock as quoted on the Nasdaq Capital Market on February 7, 2019.

PART I

INFORMATION REQUIRED IN THE SECTION 10(A) PROSPECTUS

The information called for by Part I of Form S-8 is omitted from this Registration Statement in accordance with Rule 428 of the Securities Act and the instructions to Form S-8. In accordance with the rules and regulations of the Securities and Exchange Commission (the $\hat{a} \in \mathbb{C}$ Commission $\hat{e} \subseteq \mathbb{C}$) and the instructions to Form S-8, such documents are not being filed with the Commission either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by the Registrant are incorporated by reference in this registration statement:

- a) Registrant's joint proxy statement/prospectus dated November 30, 2018, which was filed on November 30, 2018 and is part of the Registration Statement on Form S-4 originally filed with the Commission on August 29, 2018 (Registration No. 333-2227090), including any amendments or supplements thereto;
- b) Registrant's Current Reports on Form 8-K, filed with the Commission on January 9, 2018, January 22, 2018, February 9, 2018, February 14, 2018, June 28, 2018, August 17, 2018, August 30, 2018, October 4, 2018 (as amended October 30, 2018), October 9, 2018, October 30, 2018, November 5, 2018, December 10, 2018, December 11, 2018, December 12, 2018, December 14, 2018 (Form 8-K12G3), January 7, 2019 (Film No. 19512275), January 7, 2019 (Film No. 19513981) and January 30, 2019; and
- c) The description of the Registrant's common stock contained in the Registrant's Registration Statement on Form 8-A (Registration No. 001-37906), filed by the registrant with the Commission on October 5, 2016.

All documents subsequently filed by Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this registration statement and to be a part hereof from the dates of filing of those documents.

Under no circumstances will any information furnished under items 2.02 or 7.01 of Form 8-K be deemed incorporated herein by reference unless such Form 8-K expressly provides to the contrary.

You may request a copy of the filings incorporated by reference herein, at no cost, by writing or telephoning the Registrant at:

Organogenesis Holdings Inc. 85 Dan Road Canton, MA 02021 Tel: (781) 575-0775

You should rely only on the information provided or incorporated by reference in this registration statement or any related prospectus. The Registrant has not authorized anyone to provide you with different information. You should not assume that the information in this registration statement or any related prospectus is accurate as of any date other than the date on the front of the document.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

The validity of the securities registered hereby is being passed upon for Organogenesis Holdings Inc. by Foley Hoag LLP, Boston, Massachusetts.

Item 6. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law (the "DGCLâ€]) provides that a corporation may indemnify directors and officers as well as other employees and individuals against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any threatened, pending or completed actions, suits or proceedings in which such person is made a party by reason of such person being or having been a director, officer, employee or agent of the Registrant. The DGCL provides that Section 145 is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaws, agreement, vote of stockholders or disinterested directors or otherwise. The Registrant's Certificate of Incorporation and Bylaws provide for indemnification by the Registrant of its directors and officers to the fullest extent permitted by the DGCL.

Section 102(b)(7) of the DGCL permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) for unlawful payments of dividends or unlawful stock repurchases, redemptions or other distributions or (4) for any transaction from which the director derived an improper personal benefit. The Registrant's Certificate of Incorporation provides for such limitation of liability to the fullest extent permitted by the DGCL.

The Registrant maintains standard policies of insurance under which coverage is provided (1) to its directors and officers against loss arising from claims made by reason of breach of duty or other wrongful act, while acting in their capacity as directors and officers of the Registrant, and (2) to the Registrant with respect to payments which may be made by the Registrant to such officers and directors pursuant to any indemnification provision contained in the Registrantê[™]S Certificate of Incorporation and Bylaws or otherwise as a matter of law.

The Registrant has entered into indemnity agreements with each of its directors and executive officers providing for the indemnification described above. The Registrant believes that these limitations on liability are essential to attracting and retaining qualified persons as directors and executive officers.

Under agreements which may be entered into by us, certain of its directors and officers may be entitled to indemnification by underwriters and agents who participate in the distribution of securities covered by this registration statement against certain liabilities, including liabilities under the Securities Act.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit number	<u>Description</u>
3.1	Certificate of Incorporation of Organogenesis Holdings Inc. (incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form 8-K filed with the Commission on December 11, 2018)
3.2	Bylaws of Organogenesis Holdings Inc. (incorporated by reference to Exhibit 3.2 to the Registrant's Registration Statement on Form 8-K filed with the Commission on December 11, 2018)
4.1	2003 Stock Incentive Plan, as amended (incorporated by reference to Exhibit 10.27 to the Registrant's Registration Statement on Form 8-K filed with the Commission on December 11, 2018)
4.2	2018 Equity Incentive Plan (incorporated by reference to Exhibit 10.30 to the Registrant's Registration Statement on Form 8-K filed with the Commission on December 11, 2018)
5.1	Opinion of Foley Hoag LLP. Filed herewith.
23.1	Consent of RSM US LLP relating to Organogenesis Inc.'s Financial Statements. Filed herewith.
23.2	Consent of RSM US LLP relating to NuTech Medical Target Business' Financial Statements. Filed herewith.
23.3	Consent of Marcum LLP relating to Avista Healthcare Public Acquisition Corp.'s Financial Statements. Filed herewith.
23.4	Consent of Foley Hoag LLP (included in Exhibit 5.1). Filed herewith.
24.1	Power of attorney (included on signature page of this Registration Statement). Filed herewith.

Item 9. Undertakings.

The undersigned registrant hereby undertakes:

- (a)(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; and
 - (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;

provided, *however*, that paragraphs (i) and (ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference 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; and
- 4. For purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act that is incorporated by reference in the 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. 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 Securities and Exchange Commission such indemnification is against public policy as expressed in the 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 Act and will be governed by the final adjudication of such issue.

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 Canton, Massachusetts, as of February 11, 2019.

ORGANOGENESIS HOLDINGS INC.

By: /s/ Gary S. Gillheeney, Sr.

Gary S. Gillheeney, Sr.
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints each of Gary S. Gillheeney, Sr., Timothy M. Cunningham and Lori Freedman as such person's true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for such person in such person's 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 all documents in connection therewith, with the SEC, granting unto each 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 and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

In accordance with the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	<u>Title</u>	<u>Date</u>
/s/ Gary S. Gillheeney, Sr. Gary S. Gillheeney, Sr.	President and Chief Executive Officer (Principal Executive Officer), Director	February 11, 2019
/s/ Timothy M. Cunningham Timothy M. Cunningham	Chief Financial Officer (Principal Financial and Accounting Officer)	February 11, 2019
/s/ Alan A. Ades Alan A. Ades	Director	February 11, 2019
/s/ Maurice Ades Maurice Ades	Director	February 11, 2019
/s/ Albert Erani Albert Erani	Director	February 11, 2019
/s/ Arthur S. Leibowitz Arthur S. Leibowitz	Director	February 11, 2019
/s/ Wayne D. Mackie Wayne D. Mackie	Director	February 11, 2019
/s/ Glenn H. Nussdorf Glenn H. Nussdorf	Director	February 11, 2019
/s/ Joshua Tamaroff Joshua Tamaroff	Director	February 11, 2019



February 11, 2019

Organogenesis Holdings Inc. 85 Dan Road Canton, MA 02021

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We are familiar with the Registration Statement on Form S-8 (the $\hat{a} \in \mathbb{R}$ **Registration Statement** $\hat{a} \in \mathbb{C}$ being filed by Organogenesis Holdings Inc., a Delaware corporation (the $\hat{a} \in \mathbb{C}$ **Company** $\hat{a} \in \mathbb{C}$), with the Securities and Exchange Commission (the $\hat{a} \in \mathbb{C}$ **Commission** $\hat{a} \in \mathbb{C}$) under the Securities Act of 1933, as amended (the $\hat{a} \in \mathbb{C}$ **Securities Act** $\hat{a} \in \mathbb{C}$), on the date hereof. The Registration Statement relates to the offer and sale by the Company of up to 15,700,840 shares (the $\hat{a} \in \mathbb{C}$ **Shares** $\hat{a} \in \mathbb{C}$) of its Class A common stock, par value \$0.0001 per share (the $\hat{a} \in \mathbb{C}$ **Common Stock** $\hat{a} \in \mathbb{C}$), consisting of:

- 1. 6,501,844 shares of Common Stock issuable upon exercise of outstanding stock options granted pursuant to the Organogenesis Inc. 2003 Stock Incentive Plan (the "**2003 Plan**â€□);
- 2. 90,000 shares of Common Stock issuable upon exercise of outstanding stock options granted pursuant to the Company's 2018 Equity and Incentive Plan (the "**2018 Plan**â€] and, together with the 2003 Plan, the "**Plans**â€]); and
- 3. 9,108,996 shares of Common Stock issuable pursuant to awards that may be issued in the future under the 2018 Plan.

In arriving at the opinion expressed below, we have examined and relied upon the Certificate of Incorporation and Bylaws of the Company, the records of meetings and consents of the Company's Board of Directors and of its stockholders, and the Plans, each as provided to us by the Company. In addition, we have examined and relied on the originals or copies certified or otherwise identified to our satisfaction of all such corporate records of the Company and such other documents and certificates of public officials, officers and representatives of the Company and such other persons, and we have made such investigations of law, as we have deemed appropriate as a basis for the opinion expressed below.

We have assumed that all Shares to be issued under the Plans, whether issued directly or upon the exercise or vesting of awards under the Plans, will be issued in accordance with the applicable terms of the Plans and such awards. We have also assumed that the consideration to be received by the Company for the Shares will be valid consideration with a value that equals or exceeds the par value thereof.

In rendering the opinions expressed below, we express no opinion other than as to the federal laws of the United States and the Delaware General Corporation Law, including the statutory provisions contained therein, applicable provisions of the Delaware Constitution and the reported judicial decisions interpreting these provisions.

Based upon and subject to the foregoing, it is our opinion that the Shares, when issued and delivered by the Company in accordance with the terms of the Plans and the awards thereunder against the Company $\hat{a} \in \mathbb{T}^M$ s receipt of the purchase price or other consideration therefor, will be validly issued, fully paid and non-assessable.

Seaport West 155 Seaport Boulevard Boston, MA 02210-2600

617 832 1000 main 617 832 7000 fax This opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

This opinion is being delivered solely for the benefit of the Company and such other persons as are entitled to rely upon it pursuant to the applicable provisions of the Securities Act. This opinion may not be used, quoted, relied upon or referred to for any other purpose, nor may it be used, quoted, relied upon or referred to by any other person, for any purpose, without our prior written consent.

We consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to us under the heading "Item 5. Interests of Named Experts and Counselâ€☐ in the Registration Statement. In giving such 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.

This opinion shall be interpreted in accordance with the Legal Opinion Principles issued by the Committee on Legal Opinions of the American Bar Association's Section of Business Law, as published in 53 Business Lawyer 831 (May 1998).

Very truly yours,

FOLEY HOAG LLP

By: /s/ Stacie S. Aarestad

a Partner

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statement on Form S-8 of Organogenesis Holdings Inc. of our report dated March 23, 2018, relating to the consolidated financial statements of Organogenesis Inc. appearing in the Current Report on Form 8-K of Organogenesis Holdings Inc. dated December 11, 2018.

/s/ RSM US LLP

Boston, Massachusetts February 11, 2019

Consent of Independent Auditor

We consent to the incorporation by reference in this Registration Statement on Form S-8 of Organogenesis Holdings Inc. of our report dated November 7, 2017 relating to the financial statements of NuTech Medical Target Business appearing in the Current Report on Form 8-K of Organogenesis Holdings Inc. dated December 11, 2018.

/s/ RSM US LLP

Boston, Massachusetts February 11, 2019

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of Organogenesis Holdings Inc. on Form S-8, of our report dated March 14, 2018, with respect to our audits of the financial statements of Avista Healthcare Public Acquisition Corp. as of December 31, 2017 and 2016, and for the two years in the period ended December 31, 2017, and for the period from December 4, 2015 (inception) through December 31, 2015, appearing in the Registration Statement on Form S-4 of Avista Healthcare Public Acquisition Corp. filed on August 29, 2018 (Registration No. 333-2227090), including any amendments or supplements thereto. We were dismissed as auditors on December 10, 2018 and, accordingly, we have not performed any audit or review procedures with respect to any financial statements appearing in such Prospectus for the periods after the date of our dismissal. We also consent to the reference to our firm under the heading "Experts†in the Prospectus, which is part of this Registration Statement.

/s/ Marcum LLP

Marcum LLP New York, NY February 11, 2019