Registration No. 333-

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

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

SELECTA BIOSCIENCES, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

26-1622110

(I.R.S. Employer Identification No.)

65 Grove Street Watertown, Massachusetts 02472 (Address of Principal Executive Offices) (Zip Code)

Selecta Biosciences, Inc. 2016 Incentive Award Plan Selecta Biosciences, Inc. 2016 Employee Stock Purchase Plan (Full Title of the Plan)

> Carsten Brunn, Ph.D. President and Chief Executive Officer Selecta Biosciences, Inc. 65 Grove Street Watertown, Massachusetts 02472 (Name and Address of Agent for Service)

(617) 923-1400 (Telephone Number, including Area Code, of Agent for Service)

Copies to:

Peter N. Handrinos, Esq. Latham & Watkins LLP 200 Clarendon Street Boston, MA 02116 (617) 948-6060

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," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	Accelerated filer	х
Non-accelerated filer	Smaller reporting company	x
	Emerging growth company	х

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, par value \$0.0001 per share	1,087,971 shares(2)	\$3.77 (3)	\$4,101,650.67	\$533
Common Stock, par value \$0.0001 per share	4,351,893 shares(4)	\$3.77 (3)	\$16,406,636.61	\$2,130

(1) In accordance with Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement (this "Registration Statement") shall be deemed to cover any additional securities that may from time to time be offered or issued under the Selecta Biosciences, Inc. 2016 Employee Stock Purchase Plan ("ESPP") and the Selecta Biosciences, Inc. 2016 Incentive Award Plan (the "Incentive Plan") to prevent dilution resulting from stock splits, stock dividends or similar transactions.

(2) Consists of 1,087,971 shares of Common Stock that may become issuable under the ESPP pursuant to its terms.

(3) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 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 June 5, 2020.

(4) Consists of 4,351,893 shares of Common Stock that may become issuable under the Incentive Plan pursuant to its terms.

EXPLANATORY NOTE

This Registration Statement on Form S-8 is being filed for the purpose of registering an additional 1,087,971 shares of the common stock of Selecta Biosciences, Inc. (the "Registrant") to be issued pursuant to the ESPP and an additional 4,351,893 shares of the Registrant's common stock to be issued pursuant to the Incentive Plan. A Registration Statement of the Registrant on Form S-8 relating to the same employee benefit plans is effective.

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

Except as set forth below, the contents of the Registration Statements on Form S-8 (File Nos. 333-212215 and 333-224109) filed with the Securities and Exchange Commission, relating to the ESPP and Incentive Plan, are incorporated by reference herein.

Item 8. Exhibits.

Number	Description
<u>4.1</u>	Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-37798) filed on June 29, 2016)
<u>4.2</u>	Amended and Restated By-laws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-37798) filed on June 29, 2016)
<u>5.1+</u>	Opinion of Latham & Watkins LLP, counsel to the Registrant
<u>23.1+</u>	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm
<u>23.2 +</u>	Consent of Latham & Watkins LLP (included in Exhibit 5.1)
24.1+	Power of attorney (included on signature pages below)
<u>99.1</u>	Selecta Biosciences, Inc. 2016 Incentive Award Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-2111555) filed on June 8, 2016)
<u>99.2</u>	Selecta Biosciences, Inc. 2016 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.3 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-211555) filed on June 8, 2016).

+ Filed herewith

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 Watertown, Commonwealth of Massachusetts, on this 10th day of June, 2020.

SELECTA BIOSCIENCES, INC.

By: /s/ Carsten Brunn, Ph.D.

Carsten Brunn, Ph.D. President and Chief Executive Officer, and Director

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Selecta Biosciences, Inc. (the "Company"), hereby severally constitute and appoint the Chief Executive Officer of the Company, who is currently Carsten Brunn, Ph.D., and the Chief Financial Officer of the Company, who is currently Bradford D. Dahms, 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, 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 by the following persons in the capacities and on the dates indicated.

Signature	<u>Title</u>	Date
/s/ Carsten Brunn, Ph.D.	President and Chief Executive Officer, and Director	June 10, 2020
Carsten Brunn, Ph.D.	(Principal Executive Officer)	
/s/ Bradford D. Dahms Bradford D. Dahms	Chief Financial Officer (Principal Financial and Accounting Officer)	June 10, 2020
/s/ Goran A. Ando, M.D. Goran A. Ando, M.D.	Director	June 10, 2020
/s/ Timothy C. Barabe Timothy C. Barabe	Director	June 10, 2020
/s/ Carrie S. Cox Carrie S. Cox	Chairman of the Board	June 10, 2020
/s/ Scott D. Myers Scott D. Myers	Director	June 10, 2020
/s/ Aymeric Sallin Aymeric Sallin	Director	June 10, 2020
/s/ Timothy Springer, Ph.D. Timothy Springer, Ph.D.	Director	June 10, 2020
/s/ Patrick Zenner Patrick Zenner	Director	June 10, 2020

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

June 10, 2020

Selecta Biosciences, Inc. 65 Grove Street Watertown, MA 02472

Re: Registration Statement on Form S-8; 5,439,864 shares of Selecta Biosciences, Inc. Common Stock, \$0.0001 par value per share

Ladies and Gentlemen:

We have acted as special counsel to Selecta Biosciences, 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 "*Act*"), relating to the issuance by the Company of up to 5,439,864 shares of common stock of the Company, \$0.0001 par value per share (the "*Shares*"), issuable under the Selecta Biosciences, Inc. 2016 Incentive Award Plan (the "*2016 Plan*") and the Selecta Biosciences, Inc. 2016 Employee Stock Purchase Plan (the "*2016 ESPP*" and, together with the 2016 Plan, the "*Plans*"). 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 prospectus forming a part thereof, other than as expressly stated herein with respect to the issue 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 grants or awards under the Plans are duly authorized by all necessary corporate action and duly 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

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by all necessary corporate action of the Company, and the Shares will be validly issued, fully paid and nonassessable. 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

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2016 Employee Stock Purchase Plan and 2016 Incentive Award Plan of Selecta Biosciences, Inc. of our report dated March 12, 2020 with respect to the consolidated financial statements of Selecta Biosciences, Inc. and subsidiaries included in its Annual Report (Form 10-K) for the year ended December 31, 2019, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts June 10, 2020