

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

FORM S-3
**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)

480 Arsenal Way
Watertown, MA 02472
(617) 923-1400
(Address, including zip code, and telephone number, including area code, of
registrant's principal executive offices)

26-1622110
(I.R.S. Employer
Identification Number)

Werner Cautreels, Ph.D.
Selecta Biosciences, Inc.
480 Arsenal Way
Watertown, MA 02472
(617) 923-1400
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

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Latham & Watkins LLP
200 Clarendon Street
Boston, MA 02116
(617) 948-6000

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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
Non-accelerated filer

(Do not check if a smaller reporting company)

Accelerated filer

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 comply with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered (1)	Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.0001 par value per share	3,167,921 shares	\$ 19.12	\$ 60,570,650.00	\$ 7,021.00

(1) Consists of (a) 3,088,791 outstanding shares of the registrant's common stock and (b) 79,130 shares of the registrant's common stock issuable upon exercise of common stock purchase warrants. Pursuant to Rule 416(a) of the Securities Act of 1933, as amended, this registration statement also covers such additional shares as may hereafter be offered or issued to prevent dilution resulting from stock splits, stock dividends, recapitalizations or certain other capital adjustments.

(2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) under the Securities Act of 1933, as amended. The price per share and aggregate

offering price are based on the average of the high and low prices of the registrant's common stock on July 10, 2017, as reported on The NASDAQ Global Market.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information contained in this prospectus is not complete and may be changed. The selling stockholders named in this prospectus may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, Dated July 12, 2017

PROSPECTUS

Selecta Biosciences, Inc.



3,167,921 Shares of Common Stock

This prospectus relates to the proposed offering and resale by the selling stockholders identified in this prospectus of up to an aggregate of 3,167,921 shares of common stock, par value \$0.0001 per share, of Selecta Biosciences, Inc., of which 3,088,791 shares are presently issued and outstanding and 79,130 shares are issuable upon exercise of a warrant to purchase shares of common stock. The shares being offered were issued and sold to accredited investors in a private placement, or the 2017 Private Placement, which closed on June 27, 2017. We are not selling any shares of common stock under this prospectus and will not receive any of the proceeds from the sale or other disposition of common stock by the selling stockholders.

The selling stockholders may sell the shares of common stock on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale, in the over-the-counter market, in one or more transactions otherwise than on these exchanges or systems, such as privately negotiated transactions, or using a combination of these methods, and at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. See the disclosure under the heading "Plan of Distribution" elsewhere in this prospectus for more information about how the selling stockholders may sell or otherwise dispose of their shares of common stock hereunder.

The selling stockholders may sell any, all or none of the securities offered by this prospectus and we do not know when or in what amount the selling stockholders may sell their shares of common stock hereunder following the effective date of the registration statement of which this prospectus forms a part.

Our common stock is listed on The NASDAQ Global Market under the symbol "SELB". On July 12, 2017, the last reported sale price of our common stock on The NASDAQ Global Market was \$19.05 per share.

Investing in our common stock involves a high degree of risk. Before making an investment decision, please read the information under the heading "Risk Factors" beginning on page 3 of this prospectus and in the documents incorporated by reference into this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is _____, 2017.

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ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, utilizing a “shelf” registration process. Under this shelf registration process, the selling stockholders may from time to time sell the shares of common stock described in this prospectus in one or more offerings.

We have not authorized anyone to give any information or to make any representation other than those contained or incorporated by reference in this prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus. The selling stockholders are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where it is lawful to do so. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy any shares other than the registered shares to which they relate, nor does this prospectus constitute an offer to sell or the solicitation of an offer to buy shares in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus is delivered or shares are sold on a later date.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference in this prospectus include “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. For this purpose, any statements contained or incorporated herein that relate to future events or conditions may be deemed to be forward-looking statements, including, but not limited to, statements regarding our future results of operations and financial position, business strategy, prospective products and product candidates, their expected performance and impact on healthcare costs, marketing approval from the U.S. Food and Drug Administration, or the FDA, regulatory approval, reimbursement for our product candidates, research and development costs, timing of regulatory filings, timing and likelihood of success, plans and objectives of management for future operations and future results of anticipated products. Without limiting the foregoing, the words “believes,” “anticipates,” “plans,” “expects” and similar expressions are intended to identify forward-looking statements. Such forward-looking statements represent management’s current expectations and are inherently uncertain. There are a number of important factors that could materially impact the value of our common stock or cause actual results to differ materially from those indicated by such forward-looking statements. We discuss many of these risks in greater detail in the documents incorporated by reference herein, including under the heading “Risk Factors” in any of our filings with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act.

These important factors, among others, could cause actual results to differ materially from those indicated by forward-looking statements made herein and presented elsewhere by management from time to time. Any such forward-looking statements represent management's estimates only as of the date of the relevant document. While we may elect to update such forward-looking statements at some point in the future, we disclaim any obligation to do so, even if subsequent events cause our views to change. These forward-looking statements should not be relied upon as representing our views as of any date subsequent to the date such statements are made. We undertake no obligation to revise or update any forward-looking statements, except to the extent required by law.

PROSPECTUS SUMMARY

This summary highlights selected information appearing elsewhere in this prospectus or in documents incorporated herein by reference. This summary is not complete and does not contain all of the information that you should consider before making your investment decision. You should carefully read the entire prospectus, including the information set forth in the section entitled "Risk Factors" and the information that is incorporated by reference into this prospectus. See the sections entitled "Where You Can Find More Information" and "Incorporation of Certain Information by Reference" for a further discussion on incorporation by reference. References in this prospectus to "we," "us," "our," "our company" or "Selecta" refer to Selecta Biosciences, Inc.

Our Company

We are a clinical-stage biopharmaceutical company using our proprietary synthetic vaccine particle, or SVP, technology to discover and develop targeted therapies that are designed to modulate the immune system to effectively and safely treat rare and serious diseases. Many such diseases are treated with biologic therapies that are foreign to the patient's immune system and, therefore, elicit an undesired immune response. Our proprietary SVP technology encapsulates an immunomodulator in biodegradable nanoparticles to induce antigen-specific immune tolerance to mitigate the formation of anti-drug antibodies in response to life-sustaining biologic drugs. We believe our SVP technology has the potential for broad applications to both enhance existing biologic drugs and enable novel therapies. Our lead product candidate, SEL-212, is a combination of a therapeutic enzyme and our SVP technology designed to be the first biologic treatment for gout that durably controls uric acid in refractory gout and dissolves and removes harmful deposits of uric acid crystals in chronic tophaceous gout, each a painful and debilitating disease with unmet medical need.

Emerging Growth Company

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012. We will remain an emerging growth company until the earliest of (1) the last day of the fiscal year following the fifth anniversary of the completion of our initial public offering of common stock on June 27, 2016, (2) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.0 billion, (3) the last day of the fiscal year in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700.0 million as of the prior June 30th, and (4) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period.

Corporate History and Information

We filed our certificate of incorporation with the Secretary of State of Delaware on December 10, 2007. Our principal executive offices are located at 480 Arsenal Way, Watertown, MA 02472, and our telephone number is (617) 923-1400. Our website address is www.selectabio.com. The information on, or that can be accessed through, our website is not part of this prospectus. We have included our website address as an inactive textual reference only.

THE OFFERING

Common stock outstanding as of June 27, 2017	18,951,384
Common stock offered by the selling stockholders	Up to 3,167,921 shares ⁽¹⁾
Common stock outstanding after this offering	18,951,384 shares ⁽²⁾
Terms of the offering	The selling stockholders will determine when and how they sell the common stock offered in this prospectus, as described in “Plan of Distribution.”
Use of proceeds	We will not receive any of the proceeds from the sale of the shares of common stock being offered under this prospectus. We may, however, receive proceeds from the warrant issued to one of the selling stockholders in the event such warrant is exercised for cash. See “Use of Proceeds.”
NASDAQ symbol	Our common stock is listed on The NASDAQ Global Market under the symbol SELB.
Risk factors	You should read the “Risk Factors” section of this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.

(1) Consists of (i) 3,088,791 shares of common stock outstanding and (ii) 79,130 shares of common stock issuable upon exercise of warrants issued in connection with the 2017 Private Placement.

(2) Based solely on 18,951,384 shares of common stock outstanding as of June 27, 2017 plus 3,088,791 shares of common stock sold in the 2017 Private Placement; excludes shares of common stock issuable upon exercise of the warrant issued in connection with the 2017 Private Placement.

RISK FACTORS

Investment in any securities offered pursuant to this prospectus involves risks. Before making an investment decision, you should carefully consider the specific risks described under the caption “Risk Factors” in any of our filings with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, which we have incorporated herein by reference. Each of the risks described in these headings could adversely affect our business, financial condition, results of operations and prospects, and could result in a complete loss of your investment. For more information, see “Where You Can Find More Information.”

USE OF PROCEEDS

We will not receive any of the proceeds from the sale of shares of our common stock in this offering. The selling stockholders will receive all of the proceeds from this offering. We may, however, receive proceeds from the warrant issued to one of the selling stockholders in the event such warrant is exercised for cash.

SELLING STOCKHOLDERS

This prospectus covers the resale or other disposition from time to time by the selling stockholders identified in the table below of up to an aggregate of 3,167,921 shares of our common stock, which consists of (i) 3,088,791 shares of our common stock issued and sold to investors and (ii) a warrant to purchase 79,130 shares of our common stock in connection with the 2017 Private Placement.

On June 26, 2017, we entered into a securities purchase agreement with certain of the selling stockholders, or the Securities Purchase Agreement, pursuant to which we sold in a private placement an aggregate of 2,750,000 shares of our common stock for aggregate gross proceeds of \$44 million, at a purchase price equal to \$16.00 per share. Also on June 26, 2017, we entered into a securities purchase agreement with Timothy Springer, Ph.D., one of our directors, or the Springer Securities Purchase Agreement, pursuant to which we sold an additional 338,791 shares of our common stock and a warrant to purchase 79,130 shares of our common stock, resulting in additional aggregate gross proceeds of approximately \$6 million. The purchase price paid by our director who purchased shares in the 2017 Private Placement was \$17.71 per share. The exercise price under the warrant is \$17.71 per warrant share and the purchase price for the warrant was equal to \$0.125 times each share of our common stock purchasable thereunder. Throughout this prospectus, when we refer to the Securities Purchase Agreements, we are referring to the Securities Purchase Agreement together with the Springer Securities Purchase Agreement. This prospectus covers the resale or other disposition by the selling stockholders or their transferees of up to the total number of shares of common stock issued to the selling stockholders pursuant to the Securities Purchase Agreements or issuable upon exercise of the warrant sold pursuant to the Springer Securities Purchase Agreement. Throughout this prospectus, when we refer to the selling stockholders in this prospectus, we are referring to the purchasers under the Securities Purchase Agreements.

We are registering the above-referenced shares to permit the selling stockholders and their pledgees, donees, transferees or other successors-in-interest that receive their shares after the date of this prospectus to resell or otherwise dispose of the shares in the manner contemplated under "Plan of Distribution" herein.

Except as otherwise disclosed herein, the selling stockholders do not have, and within the past three years has not had, any position, office or other material relationship with us.

The following table sets forth the name of the selling stockholders, the number of shares owned by the selling stockholders, the number of shares that may be offered under this prospectus and the number of shares of our common stock owned by the selling stockholder assuming all of the shares registered for resale hereby are sold. The number of shares in the column "Number of Shares Being Offered" represents all of the shares that the selling stockholders may offer under this prospectus. The selling stockholders may sell some, all or none of their shares. We do not know how long the selling stockholders will hold the shares before selling them, and we currently have no agreements, arrangements or understandings with the selling stockholders regarding the sale or other disposition of any of the shares. The shares covered hereby may be offered from time to time by the selling stockholders.

The information set forth below is based upon information obtained from the selling stockholders in connection with the 2017 Private Placement. The percentages of shares owned after the offering are based on 18,951,384 shares of our common stock outstanding as of June 27, 2017, plus the shares of common stock registered for resale hereby.

<u>Name of Selling Stockholder</u>	<u>Shares of Common Stock Beneficially Owned Prior to Offering (1)</u>	<u>Number of Shares Being Offered</u>	<u>Shares of Common Stock Beneficially Owned After Offering (2)</u>	
			<u>Number</u>	<u>Percent</u>
Timothy A. Springer, Ph.D.(3)	2,126,777	417,921	1,708,856	7.7%
Vivo Capital Fund VIII, L.P. (4)	983,395	659,000	324,395	1.5%
Vivo Capital Surplus Fund VIII, L.P. (4)	135,794	91,000	44,794	*

Perceptive Life Sciences Master Fund, Ltd. (5)	797,325	593,750	203,575	*
Baker Brothers Life Sciences, L.P. (6)	256,924	84,213	172,711	*
667, L.P. (6)	32,885	9,537	23,348	*
Amzak Health Investors LLC(7)	424,800	375,000	49,800	*
Biomedical Offshore Value Fund, Ltd. (8)	361,529	361,529	—	—
GEF-SMA, L.P. (8)	255,798	255,798	—	—
Biomedical Value Fund, L.P. (8)	235,334	235,334	—	—
Class D Series of GE-PS, L.P. (8)	84,839	84,839	—	—

* Less than 1%.

- (1) “Beneficial ownership” is a term broadly defined by the SEC in Rule 13d-3 under the Exchange Act, and includes more than the typical form of stock ownership, that is, stock held in the person’s name. The term also includes what is referred to as “indirect ownership,” meaning ownership of shares as to which a person has or shares investment power. For purposes of this table, a person or group of persons is deemed to have “beneficial ownership” of any shares that are currently exercisable or exercisable within 60 days of July 12, 2017.
- (2) Assumes that all shares being registered in this prospectus are resold to third parties and that the selling stockholders sell all shares of common stock registered under this prospectus held by such selling stockholder.
- (3) Consists of (i) 355,413 shares of common stock held individually, (ii) 79,130 shares of common stock underlying warrants exercisable within 60 days of July 12, 2017 and held individually, (iii) 445,576 shares of common stock held by TAS Partners, LLC, or TAS, (iv) 4,304 shares of common stock underlying warrants exercisable within 60 days of July 12, 2017 held by TAS, (v) 1,237,028 shares of common stock held by Leukon Investments LP, or Leukon, (vi) 5,326 shares of common stock underlying warrants exercisable within 60 days of July 12, 2017 held by Leukon. LKST, Inc. is the general partner of Leukon. Timothy Springer, a member of our board of directors, is the president of LKST, Inc. and is also the manager of TAS. Mr. Springer disclaims beneficial ownership of the shares held by TAS and Leukon. Each of TAS and Leukon disclaim beneficial ownership of the shares held by the other. The address of TAS and Leukon is 36 Woodman Road, Chestnut Hill, MA 02467.
- (4) Vivo Capital VIII, LLC is the general partner of both Vivo Capital Fund VIII, L.P. and Vivo Capital Surplus Fund VIII, L.P. The managing partners of Vivo Capital VIII, LLC are Frank Kung, Albert Cha, Edgar Engleman, Chen Yu and Shan Fu, none of whom has individual voting or investment power with respect to these shares and each of whom disclaims beneficial ownership of such shares. The address for Vivo Capital VIII, LLC is 505 Hamilton Avenue, Suite 207575 High Street, Suite 201, Palo Alto, CA 94301.
- (5) Perceptive Advisors, LLC (“Perceptive Advisors”) is the investment advisor of Perceptive Life Sciences Master Fund, Ltd (“Perceptive LSMF”). Joseph E. Edelman, as the General Partner of Perceptive Advisors, has voting and investment power over the shares owned by Perceptive LSMF.
- (6) Baker Bros. Advisors LP is the investment adviser to 667, L.P. (“667”) and Baker Brothers Life Sciences, L.P. (“BBLS”) and has voting and investment power over the shares directly held by 667 and BBLS. Julian C. Baker and Felix J. Baker are the managing partners of Baker Bros. Advisors LP and may be deemed to be beneficial owners of securities of the Issuer directly held by 667 and BBLS and may be deemed to have the power to vote or direct the vote of and the power to dispose or direct the disposition of such securities. Baker Bros. Advisors LP, Julian C. Baker and Felix J. Baker disclaim beneficial ownership of the securities held directly by 667 and BBLS, except to the extent of their pecuniary interest. The address for Baker Bros. Advisors LP is 667 Madison Ave., 21st Floor, New York, NY 10065.
- (7) Consists of (i) 48,000 shares of common stock held by Amzak Capital Management, or ACM, and (ii) 375,000 shares of common stock held by Amzak Health Investors LLC, or AHI. The address of ACM and AHI is 980 N. Federal Highway, Suite 315, Boca Raton, FL 33432. Michael Kazma is the managing member of both ACM

and AHI and disclaims beneficial ownership of the shares held by ACM and AHI, except to the extent of any pecuniary interest therein.

- (8) Great Point Partners, LLC (“Great Point”) is the investment manager of each of Biomedical Value Fund, L.P., Biomedical Offshore Value Fund, Ltd., Class D Series of GEF-PS, L.P. and GEF-SMA, L.P. (collectively, the “Great Point Selling Stockholders”), and by virtue of such status may be deemed to be the beneficial owner of the shares listed above. Each of Dr. Jeffrey R. Jay, M.D. (“Dr. Jay”), as senior managing member of Great Point and Mr. David Kroin (“Mr. Kroin”), as special managing member of Great Point, has voting and investment power with respect to the shares owned by each of the Great Point Selling Stockholders. Each of Great Point, Dr. Jay and Mr. Kroin disclaims beneficial ownership of such shares except to the extent of their respective pecuniary interest therein. The address for the Great Point Selling Stockholders is 165 Mason Street, 3rd Floor, Greenwich, CT 06830.

Relationship with the Selling Stockholders

In addition to the Securities Purchase Agreements, on June 27, 2017, in connection with the 2017 Private Placement, we entered into a Registration Rights Agreement with the selling stockholders and a Common Stock Purchase Warrant, or the Warrant, with one such selling stockholder.

Registration Rights Agreement

Pursuant to the Registration Rights Agreement with each of the selling stockholders, we agreed to prepare and file with the SEC a registration statement that permits the resale of the selling stockholders’ shares and, subject to certain exceptions, use reasonable best efforts to keep the registration statement of which this prospectus forms a part effective under the Securities Act until the earlier of (i) such time as all of the securities registered for resale hereunder have been disposed of pursuant to and in accordance with the registration statement; (ii) such time as all of the securities registered for resale hereunder have been sold in accordance with Rule 144 under the Securities Act; (iii) the date on which the shares of common stock registered for resale hereunder become eligible for resale without volume or manner-of-sale restrictions and without current public information pursuant to Rule 144; and (iv) June 27, 2020.

We have also agreed, among other things, to indemnify the selling stockholders and their officers, directors, members, employees and agents, successors and assigns under the registration statement from certain liabilities and to pay all fees and expenses (excluding any legal fees of the selling holder(s), and any underwriting discounts and selling commissions) incident to our obligations under the Registration Rights Agreement.

Warrant

The Warrant is exercisable at any time on or after June 27, 2017 and entitles the selling stockholder to purchase shares of our common stock until June 27, 2022 at a price per share equal to \$17.71 per share, subject to certain adjustments.

PLAN OF DISTRIBUTION

The selling stockholders and any of their pledgees, donees, transferees, assignees or other successors-in-interest may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. The selling stockholders may use one or more of the following methods when disposing of the shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- through brokers, dealers or underwriters that may act solely as agents;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- through the writing or settlement of options or other hedging transactions entered into after the effective date of the registration statement of which this prospectus is a part, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of disposition; and
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 or Rule 904 under the Securities Act of 1933, as amended, or Securities Act, if available, or Section 4(a)(1) under the Securities Act, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The selling stockholders do not expect these commissions and discounts to exceed what is customary in the types of transactions involved.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell shares of common stock from time to time under this prospectus, or under a supplement or amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus.

Upon being notified in writing by a selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of common stock through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, we will file a supplement to this prospectus, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (i) the name of each such selling stockholder and of the participating broker-dealer(s), (ii) the number of shares involved, (iii) the price at which such shares of common stock were sold, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where

applicable, (v) that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and (vi) other facts material to the transaction. In addition, upon being notified in writing by a selling stockholder that a donee or pledge intends to sell more than 500 shares of common stock, we will file a supplement to this prospectus if then required in accordance with applicable securities law.

The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of the shares of common stock or interests in shares of common stock, the selling stockholders may enter into hedging transactions after the effective date of the registration statement of which this prospectus is a part with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of common stock short after the effective date of the registration statement of which this prospectus is a part and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions after the effective date of the registration statement of which this prospectus is a part with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholders, including Dr. Springer, and any broker-dealers or agents that are involved in selling the shares may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. The maximum commission or discount to be received by any member of the Financial Industry Regulatory Authority (FINRA) or independent broker-dealer will not be greater than 8% of the initial gross proceeds from the sale of any security being sold.

We have advised the selling stockholders that they are required to comply with Regulation M promulgated under the Securities Exchange Act of 1934, as amended, during such time as they may be engaged in a distribution of the shares. The foregoing may affect the marketability of the common stock.

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering.

We are required to pay all fees and expenses incident to the registration of the shares. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act or otherwise.

We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until the earlier of (a) such time as all of the shares registered for resale hereunder have been disposed of pursuant to and in accordance with the registration statement, (b) such time as all of the shares registered for resale hereunder have been previously sold or transferred in accordance with Rule 144 of the Securities Act, (c) the date on which the shares of common stock registered for resale hereunder may be sold or transferred by non-affiliates without any volume or manner-of-sale restrictions and without current public information limitations pursuant to Rule 144 of the Securities Act, and (d) June 27, 2020.

VALIDITY OF THE COMMON STOCK

The validity of the common stock being offered by this prospectus has been passed upon for us by Latham & Watkins LLP, Boston, Massachusetts.

EXPERTS

The consolidated financial statements of Selecta Biosciences, Inc. incorporated by reference in Selecta Biosciences, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2016, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon incorporated by reference therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the Public Reference Room. You can request copies of these documents by writing to the SEC and paying a fee for the copying costs. Our SEC filings are also available at the SEC's website at www.sec.gov. In addition, we maintain a website that contains information about us at www.selectabio.com. The information found on, or otherwise accessible through, our website is not incorporated into, and does not form a part of, this prospectus or any other report or document we file with or furnish to the SEC.

This prospectus is part of a registration statement that we filed with the SEC. The registration statement contains more information than this prospectus regarding us and our common stock, including certain exhibits and schedules. With respect to the statements contained in this prospectus regarding the contents of any agreement or any other document, in each instance, the statement is qualified in all respects by the complete text of the agreement or document, a copy of which has been filed as an exhibit to, or incorporated by reference in, the registration statement. You can obtain a copy of the registration statement from the SEC at the address listed above or from the SEC's website.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate” into this prospectus information that we file with the SEC in other documents. This means that we can disclose important information to you by referring to other documents that contain that information. The information incorporated by reference is considered to be part of this prospectus. We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 (other than portions of these documents deemed to be “furnished” or not deemed to be “filed,” including the portions of these documents that are either (1) described in paragraphs (d)(1), (d)(2), (d)(3) or (e)(5) of Item 407 of Regulation S-K promulgated by the SEC or (2) furnished under Item 2.02 or Item 7.01 of a Current Report on Form 8-K, including any exhibits included with such Items) after the date of this prospectus and prior to the sale of all the shares covered by this prospectus, including all such documents we may file with the SEC after the date hereof and prior to the effectiveness of the registration statement.

This prospectus and any accompanying prospectus supplement incorporate by reference the documents set forth below that have previously been filed with the SEC:

- our Annual Report on Form 10-K for the year ended December 31, 2016, filed with the SEC on March 28, 2017;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, filed with the SEC on May 11, 2017;
- our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 25, 2017;
- our Current Reports on Form 8-K and Amended Current Reports on Form 8-K/A filed with the SEC on February 14, 2017, May 2, 2017, June 15, 2017, June 20, 2017, June 21, 2017 and June 28, 2017; and
- the description of our Common Stock contained in our Registration Statement on Form 8-A, filed with the SEC on June 8, 2016, and any amendment or report filed with the SEC for the purpose of updating the description.

These documents may also be accessed on our website at www.selectabio.com. Except as otherwise specifically incorporated by reference in this prospectus, information contained in, or accessible through, our website is not a part of this prospectus.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents.

You may request a free copy of any of the documents incorporated by reference in this prospectus (other than exhibits, unless they are specifically incorporated by reference in the documents) by writing or telephoning us at the following address:

Selecta Biosciences, Inc.
480 Arsenal Way
Watertown, MA 02472
(617) 923-1400

Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference in this prospectus and any accompanying prospectus supplement.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following is an estimate of the expenses (all of which are to be paid by the registrant) that we may incur in connection with the securities being registered hereby, other than the Securities and Exchange Commission registration fee.

SEC registration fee	\$ 7,035
Legal fees and expenses	75,000
Accounting fees and expenses	20,000
Printing and miscellaneous expenses	10,000
Total	<u>\$ 112,035</u>

Item 15. Indemnification of Directors and Officers.

Subsection (a) of Section 145 of the General Corporation Law of the State of Delaware, or the DGCL, empowers a corporation to indemnify any person who was or is a party or who is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful.

Subsection (b) of Section 145 empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person acted in any of the capacities set forth above, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 145 further provides that to the extent a director or officer of a corporation has been successful on the merits or otherwise in the defense of any action, suit or proceeding referred to in subsections (a) and (b) of Section 145, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith; that indemnification provided for by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and the indemnification provided for by Section 145 shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of such person's heirs, executors and administrators. Section 145 also empowers the corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his status as such, whether or not the corporation would have the power to indemnify such person against such liabilities under Section 145.

Section 102(b)(7) of the DGCL provides that a corporation's certificate of incorporation may contain a provision eliminating or limiting the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.

Our restated certificate of incorporation provides that to the fullest extent permitted by the DGCL, none of our directors shall be liable to our company or our stockholders for monetary damages arising from a breach of fiduciary duty owed to our company or our stockholders. In addition, our amended and restated bylaws provide that we must indemnify our directors and officers to the fullest extent authorized by the DGCL and must also pay expenses incurred in defending any such proceeding in advance of its final disposition upon delivery of an undertaking, by or on behalf of an indemnified person, to repay all amounts so advanced if it should be determined ultimately that such person is not entitled to be indemnified under this section or otherwise.

We have entered into indemnification agreements with each of our directors and executive officers in which we have agreed to indemnify, defend and hold harmless, and also advance expenses as incurred, to the fullest extent permitted under applicable law, from damage arising from the fact that such person is or was an officer or director of our company or our subsidiaries.

The indemnification rights set forth above shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any statute, our restated certificate of incorporation, our amended and restated bylaws, any agreement, any vote of stockholders or disinterested directors or otherwise.

We expect to maintain standard policies of insurance that provide coverage (1) to our directors and officers against loss arising from claims made by reason of breach of duty or other wrongful act and (2) to us with respect to indemnification payments that we may make to such directors and officers.

We have purchased and intend to maintain insurance on behalf of Selecta Biosciences and any person who is or was a director or officer against any loss arising from any claim asserted against him or her and incurred by him or her in that capacity, subject to certain exclusions and limits of the amount of coverage.

Item 16. Exhibits.

(a) *Exhibits*

A list of exhibits filed with this registration statement on Form S-3 is set forth on the exhibit index, which appears elsewhere herein and is incorporated herein by reference.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

(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 of 1933, as amended, or 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. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered)

and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission, or the Commission, pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective 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 (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended, or the Securities Exchange Act, that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is a part of 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.

(5) That, for the purpose of determining liability under the Securities Act to any purchaser:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(6) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities 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.

(h) Insofar as indemnification for liabilities arising under the Securities Act of 1933 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 Securities 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 Securities Act and will be governed by the final adjudication of such issue.

/s/ Timothy Springer, Ph.D.

Timothy Springer, Ph.D.

Director

July 12, 2017

/s/ Patrick Zenner

Patrick Zenner

Director

July 12, 2017

EXHIBIT INDEX

Exhibit Number	Description
3.1	Restated Certificate of Incorporation of Selecta Biosciences, Inc., dated June 27, 2016 (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K (File No. 001-37798), filed with the SEC on June 29, 2016).
3.2	Amended and Restated Bylaws of Selecta Biosciences, Inc. (incorporated by reference to Exhibit 3.2 of the Company's Current Report on Form 8-K (File No. 001-37798), filed with the SEC on June 29, 2016).
4.1	Form of Specimen Certificate Representing Common Stock (incorporated by reference to Exhibit 4.2 of the Company's Registration Statement on Form S-1 (Reg. No. 333-211555), filed with the SEC on May 24, 2016).
5.1	Opinion of Latham & Watkins LLP.
23.1	Consent of Latham & Watkins LLP (included in Exhibit 5.1).
23.2	Consent of Ernst & Young LLP, independent registered public accounting firm.
24.1	Powers of Attorney (incorporated by reference to the signature page hereto).
99.1	Registration Rights Agreement, dated June 27, 2017, by and among Selecta Biosciences, Inc. and the Investors named therein (incorporated by reference to Exhibit 10.3 of the Current Report on Form 8-K (File No. 001-37798), filed with the SEC on June 28, 2017).
99.2	Common Stock Purchase Warrant, dated June 27, 2017, by and between Selecta Biosciences, Inc. and Timothy Springer, Ph.D. (incorporated by reference to Exhibit 4.1 of the Current Report on Form 8-K (File No. 001-37798), filed with the SEC on June 28, 2017).

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 Boston, Massachusetts 02116
 Tel: +1.617.948.6000 Fax: +1.617.948.6001
 www.lw.com

LATHAM & WATKINS LLP

July 12, 2017

Selecta Biosciences, Inc.
 480 Arsenal Way
 Watertown, MA 02472

FIRM / AFFILIATE OFFICES

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

Re: Registration Statement on Form S-3; 3,167,921
shares of common stock, par value \$0.0001 per share

Ladies and Gentlemen:

We have acted as special counsel to Selecta Biosciences, Inc., a Delaware corporation (the "**Company**"), in connection with the resale from time to time by the selling stockholders (the "**Selling Stockholders**") named in the Registration Statement (as defined below) of 3,167,921 shares (the "**Shares**") of the Company's common stock, par value \$0.0001 per share (the "**Common Stock**"). The Shares include (i) 3,088,791 shares of Common Stock issued by the Company to the Selling Stockholders on June 27, 2017 (the "**Common Shares**") and (ii) 79,130 shares of Common Stock issuable upon the exercise of a warrant issued by the Company to one of the Selling Stockholders (the "**Warrant Holder**") on June 27, 2017 (the "**Warrant**," and the shares of Common Stock issuable upon exercise of the Warrant, the "**Warrant Shares**"). The Shares are included in a registration statement on Form S-3 under the Securities Act of 1933, as amended (the "**Act**"), filed with the Securities and Exchange Commission on July 12, 2017 (the "**Registration Statement**"). 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 contained therein, 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 General Corporation Law of the State of Delaware, 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:

1. The issue and sale of the Common Shares have been duly authorized by all necessary corporate action of the Company, and the Common Shares are validly issued, fully paid and non-assessable.

2. The issue of the Warrant Shares has been duly authorized by all necessary corporate action of the Company, and when the Warrant Shares have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the Warrant Holder, and have been issued by the Company upon exercise of the Warrant, the Warrant Shares will be validly issued, fully paid and nonassessable.

In rendering the foregoing opinion 2, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the General Corporation Law of the State of Delaware.

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 and to the reference to our firm in the Prospectus under the heading "Validity of the Common Stock." 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 reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of Selecta Biosciences, Inc. for the registration of 3,167,921 shares of its common stock and to the incorporation by reference therein of our report dated March 27, 2017 with respect to the consolidated financial statements of Selecta Biosciences, Inc. incorporated by reference 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
July 12, 2017
