UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of
the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): September 30, 2019

SELECTA BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware	**001-37798**	**26-1622110**
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

480 Arsenal Way
Watertown, MA 02472
(Address of principal executive offices) (Zip Code)

(617) 923-1400
Registrant's telephone number, including area code

N/A
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.0001 par value per share	SELB	Nasdaq Global Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

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. ☒

Item 7.01. Regulation FD Disclosure.

Selecta Biosciences, Inc. (the "Company") from time to time presents and/or distributes to the investment community at various industry and other conferences slide presentations to provide updates and summaries of its business. A copy of its current corporate slide presentation is attached to this Current Report on Form 8-K as Exhibit 99.1. The Company undertakes no obligation to update, supplement or amend the materials attached hereto as Exhibit 99.1.

The information in Item 7.01 of this Form 8-K, including Exhibit 99.1 attached hereto, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

The following exhibit relating to Item 7.01 shall be deemed to be furnished, and not filed.

Exhibit No.	Description
99.1	Corporate slide presentation of Selecta Biosciences, Inc. dated October 2019

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

SELECTA BIOSCIENCES, INC.

Date: September 30, 2019

By: /s/ Carsten Brunn, Ph.D.
Carsten Brunn, Ph.D.
President and Chief Executive Officer

Selecta™ Biosciences

Corporate Presentation

October 2019

Nasdaq | SE

Safe harbor/disclaimer

Any statements in this presentation about the future expectations, plans and prospects of Selecta Biosciences, Inc. ("the company"), including without limitation, statements regarding the progr of the clinical development of SEL-212, the anticipated timing of the head-to-head trial comparing SEL-212 and Krystexxa® and related data readouts, whether the head-to-head trial with Kryst will demonstrate superiority, provide rapid results or de-risk the Phase 3 trials for SEL-*212, the company's ability to enroll p*atients in its clinical trials, the potential of ImmTOR™ *to reduce AAV* vector immunogenicity and enable re-dosing of AAV gene therapy without neutralizing antibody formation or loss of therapy expression, the anticipated timing of preclinical toxicology studies in gene therapy and initiation of a clinical trial related thereto, the potential of SEL-212 to serve unmet needs in chronic refractory gout patients including sustained sUA reduction, reduced flares, once monthly dosing, whether interim data related to the SEL-212 clinical program will be predictive of future data, the anticipated timing for advancing into Phase 3 (if at all), the ability of the *company's* ImmTOR technology to induce immune tolerance and mitigate antigen-specific neutralizing antibody formation, the scalability of the com*pany's manufacturing processes, the potenti* ImmTOR to enable sustained therapeutic activity of biologic therapies, whether current evaluable SEL-212 patients will be predictive of future evaluable SEL-212 patients, the potential of SEL-2 to significantly reduce tophi/heavy urate burden and/or rapidly eliminate tissue urate burden, whether SEL-212 has the ability to reduce gout flares frequency initially and over time during SEL-2 *therapy, anticipated achievement of key milestones for the company's chronic refractory gout and gene therapy programs, the* compa*ny's ability to execute on its strategic priorities, advance its* ImmTOR *platform, and grow its strategic partnerships, the potential of the company's partnership with* Asklepios Biopharmaceutical, Inc. to address unmet medical need in patients with rare *diseases, the timing of advancing the company's collaboration with* CureCN, *the impact of the restructuring on the company's ability to achieve its new priorities, the company's ability to reduce annual cash burn rate in connection with the restructuring, the company's expected cash position and runway, the billion doll*ar market potential of the chronic refractory gout market, the ability *the company's* ImmTOR platform to unlock the full potential of biologic therapies, the potential of SEL-212 to enable sustained efficacy in chronic refractory gout patients and resolve their debilitating symptoms, the potential treatment applications for products utilizing the ImmTOR platform in areas such as enzyme therapy and gene therapy, the potential of AAV gene therapy to transform the future in a variety of inherited and acquired diseases, the potential of the ImmTOR *platform generally, and other statements containing the words "anticipate," "believe," "continue, "could," "estimate," "expect," "hypothesize," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "would," and similar expressions, constitute forward*-looking statements withi meaning of The Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important fac including, but not limited to, the following: the uncertainties inherent in the initiation, completion and cost of clinical trials including their uncertain outcomes, the availability and timing of data fro ongoing and future clinical trials and the results of such trials, whether preliminary results from a particular clinical trial will be predictive of the final results of that trial or whether results of early *clinical trials will be indicative of the results of later clinical trials, the unproven approach of the company's* ImmTOR technology, potential delays in enrollment of patients, undesirable side effec *the company's product candidates, its reliance on third parties to manufacture its product candidates and to conduct its clinical trials, the company's inability to maintain its existing or future* collaborations, licenses or contractual relationships, its inability to protect its proprietary technology and intellectual property, potential delays in regulatory approvals, the availability of funding *sufficient for its foreseeable and unforeseeable operating expenses and capital expenditure requirements, the company's recurr*ing losses from operations and negative cash flows from operati raise substantial doubt regarding its ability to continue as a going concern, substantial fluctuation in the price of its common *stock, the company's strategy may change, and the company may n able to effectively implement its current strategic plan, the size of the company's workforce following the restructuring may* not be sufficient, and the company may not be able to effectively attra retain new employees, risks associated with the restructuring, such as employee claims and the risk that the actual financial and other impacts of the reduction could vary materially from the *outcomes anticipated, and other important factors discussed in the "Risk Factors" section of the company's Annual Report on F*orm 10-K filed with the Securities and Exchange Commission, or SEC, on March 15, 2019, and in other filings that the company makes with the Securities and Exchange Commission. In addition, any forward-looking statements included in this presentation *represent the company's views only as of the date of its publication and should not be relied upon as representing its views* as of any subsequent date. The company specifically disclaims any obligation to update any forward-looking statements included in this presentation.

Selecta Biosciences

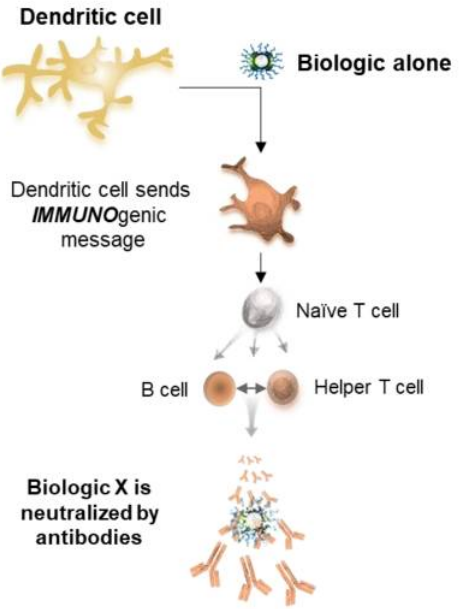
Selecta well-positioned for success

- ImmTOR™ **(SVP-Rapamycin), Selecta's immune tolerance technology platform, could unlock the full** potential of biologic therapies by mitigating Neutralizing Antibody (Nab) formation
  - Focused on therapeutic biologics/enzymes and AAV gene therapies
- Lead program addressing a $1B+ chronic refractory gout market with high unmet need
  - COMPARE trial ongoing to evaluate efficacy and safety of SEL-212 vs. KRYSTEXXA ®
    - Interim data projected for Q4 19
    - Full 6-month top-line data analysis, including statistical superiority, planned for Q2 20
  - Ongoing preparation to initiate Phase 3 clinical trial in SEL-212
- Partnership strategy for clinical POC of ImmTOR technology in gene therapy
  - Preclinical results suggest high relevance to diseases which may require re-dosing gene therapies to maintain efficacy
  - Currently have collaborations & licensing agreements with AskBio, Spark, and Genethon / CureCN Consortium
- Purpose-built organization aligned to priorities
  - Recently appointed Alison Schecter, M.D., as CMO and Brad Dahms as CFO

Selecta Biosciences


ImmTOR
Immune
Tolerance
Platform

Biologic therapies may trigger NAbs that negate their therapeutic benefit

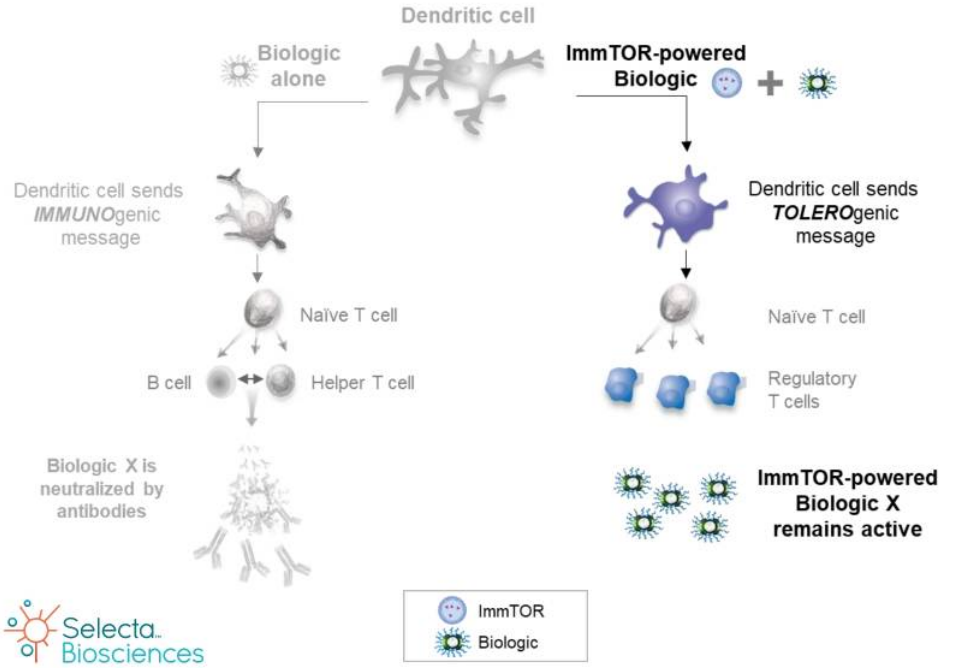


- There is a significant unmet need for a technology that selectively induces immune tolerance
- Dendritic cells play a key role in immune tolerance, providing a promising targ to mitigate unwanted and antigen-specific immune responses

Inducing selective immune tolerance for biologic therapi
considered the "Holy Grail"

Selecta Biosciences

ImmTOR has the ability to enable sustained therapeutic activity of biologic therapies and unlock their potential



Selecta Biosciences

- Co-administer with biologic therapies to mitigate antigen-specific NAb formation
- Induce a tolerogenic message from the dendritic cell to naïve T cells to develop into T regulatory cells

Promote selective immune tolerance of the biologic therap

SEL-212
(ImmTOR+pegadricase) for Chronic Refractory Gout

Chronic refractory gout is a severe form of inflammatory arthritis with a significant impact on patients

How chronic refractory gout patients describe their flare pain

How long chronic refractory gout flares can last

Annual lost productivity (pts<65)

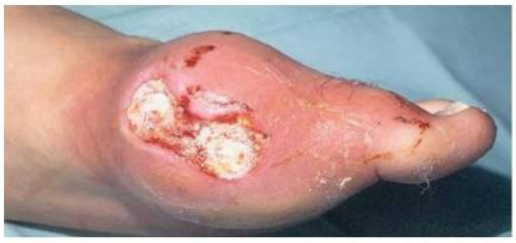
~25 days

Estimated # of patients diagnosed in US with chronic refractory gout

~160,000

Chronic disease can lead to sequelae including:

- Bone erosions
- Tophi
- Chronic pain
- Joint deformities
- Loss of function
- Disability



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Significant need for improved therapies in chronic refractory gout

- Improved efficacy, allowing patients to complete full 6-month therapy cycle
  - Persistent reduction in Serum Uric Acid (SUA) levels
  - Elimination of tophi
- Monthly dosing
- Gout flare reduction
- **Avoidance of "off-label" and global immunosuppressive therapies**

SEL-212 has the potential to address these unmet needs and holds $1B+ market potenti

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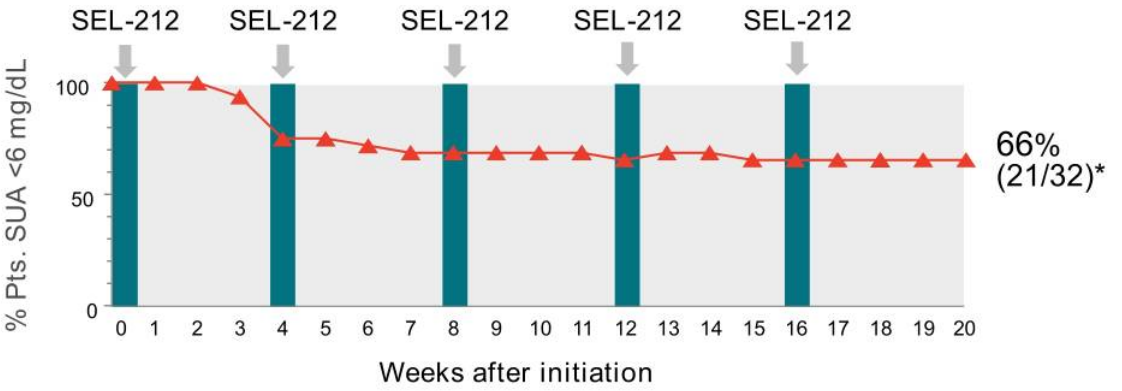
Sustained reduction of SUA with monthly dosing of SEL-212 was observed in Phase 2 dose ranging study

Phase 2 results after 20 weeks of once-monthly SEL-212 treatment:



66% of evaluable patients completed the 20-week period with an SUA level <6 mg/d

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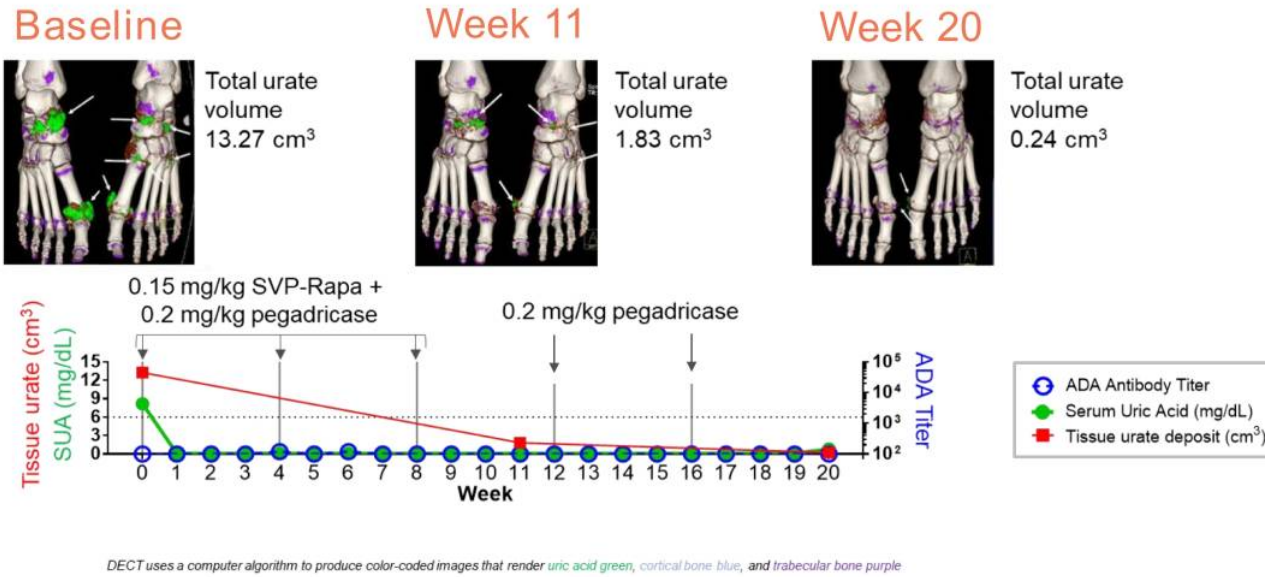
*Week 20 Evaluable patients = patients who received a full first dose and did not discontinue due to any measure other than drug effectiveness or drug related safety

Dual energy computed tomography (DECT) scan images show reduction of tissue urate burden



DECT uses a computer algorithm to produce color-coded images that render uric acid green, cortical bone blue, and trabecular bone purple

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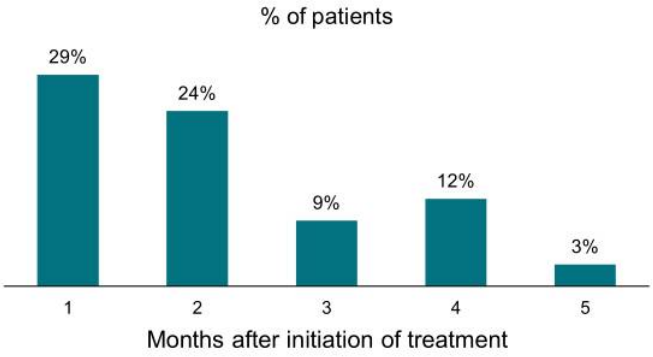
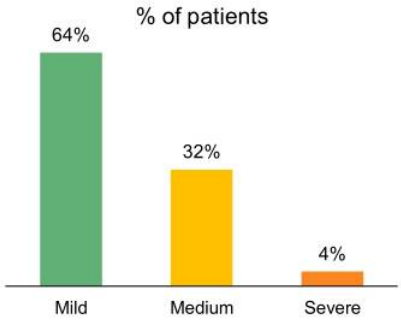
https://selectabio.com/wp-content/uploads/2018/10/ACR-poster-DECT-2018-FINAL-.pdf

Phase 2 data showed reduced frequency and severity of flares during SEL-212 therapy

Percent of SEL-212 patients who had flares



Severity of flares



- Majority of flares occurred in months 1 & 2, with no new patients who flared after month 2
- 96% of flares were mild or moderate in severity
- No gout flares were classified as SAEs nor resulted in study drug discontinuations

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Unaudited data reported as of October 09, 2018 | Clinicaltrials.gov NCT02959918

SEL-212 has been generally well tolerated

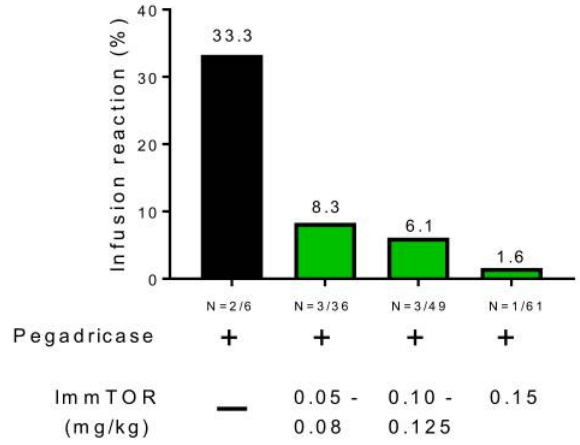
SEL-212 was generally well tolerated at clinically active doses following >470 administrations

23 SAEs reported in the Phase 2 trial

- 14 were reported not to be or unlikely to be related to study drug
- 9 were infusion reactions which decreased in incidence with increasing doses of ImmTOR

All SAEs were successfully treated without further issues

Serious infusion reactions (%)



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Unaudited data reported as of February 25, 2019 | Clinicaltrials.gov NCT02959918

Comparing the efficacy of SEL-212 to KRYSTEXXA® in gout patients refractory to conventional therapy

COMPARE

~150 Refractory Chronic Gout Patients

Randomized

SEL-212 (N=~75)
6 Infusions
Once Monthly
0.15 mg/kg ImmTOR + 0.2 mg/kg of pegadricase

- Primary Endpoint: Statistical superiority for SUA level < 6mg/dL at 6 months
- Multiple Secondary Endpoints: Flares, QoL, HAQ, tophi resolution
- Safety Assessment

KRYSTEXXA® (N=~75)
12 Infusions
Every 2 weeks
8mg

Head-to-head trial is designed to provide objective, comparative results

- SUA level reduction, a robust primary endpoint for approval, can be seen soon after dosing
  - Easy to measure
  - Maintenance strongly correlated with low/negative drug-specific antibody titers
- Adult patient population with two active arms
- Opportunity to test revised stopping rules and de-risk Phase 3 trials

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ImmTOR
in Gene Therapy

The ability to re-dose AAV gene therapy is a key goal to unlocking the full therapeutic potential of this treatment paradigm

Dose titration

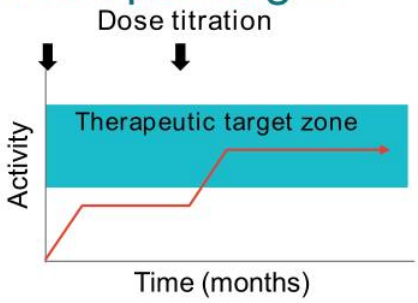
- Potential to increase proportion of patients who achieve therapeutic benefit without risk of overdosing
- Goal of improving enrollment in clinical trials

Multiple vector administrations

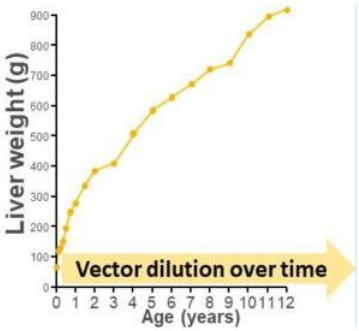
- Provide potential to target systemic diseases in which multiple vector administrations are likely needed to achieve full therapeutic efficacy

Rescue of expression

- Allows for potential rescue in patients with organ damage
- Potential to restore therapeutic expression in pediatric patients as they grow



Rescue of expression



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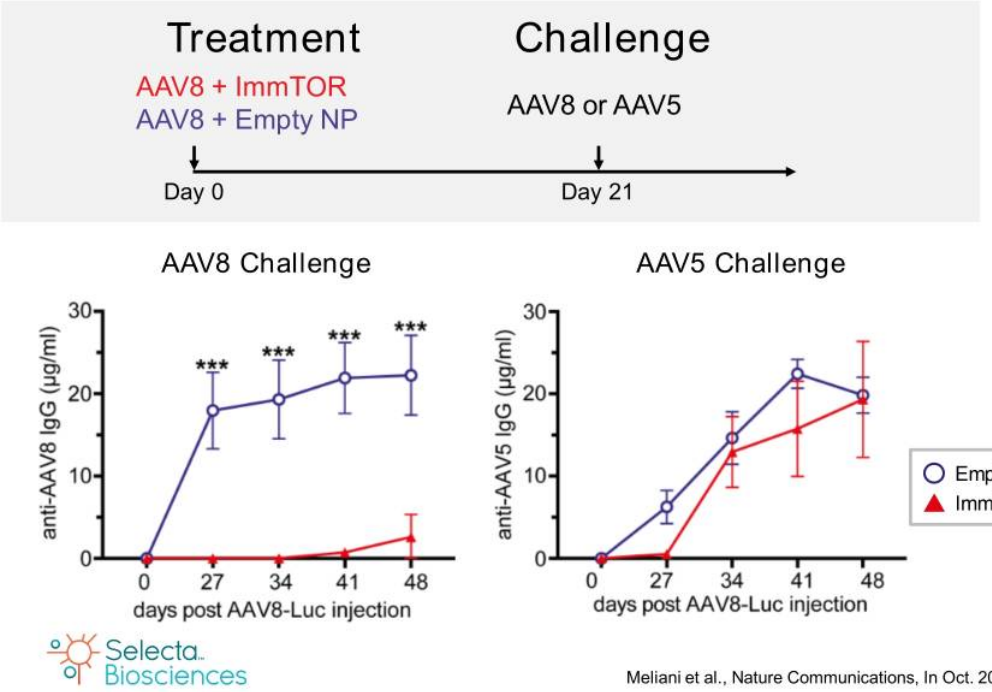
In preclinical studies, ImmTOR induced antigen-specific immune tolerance



ImmTOR provided AAV-specific immune tolerance

- NAbs did not develop in mice treated with ImmTOR+AAV vector
- Mice treated with empty nanoparticle (NP) + AAV vector developed significant IgG respo
- When challenged with a different AAV vecto both arms mounted an immune response, suggesting antigen-specific immune toleran rather than broad immunosuppression was achieved

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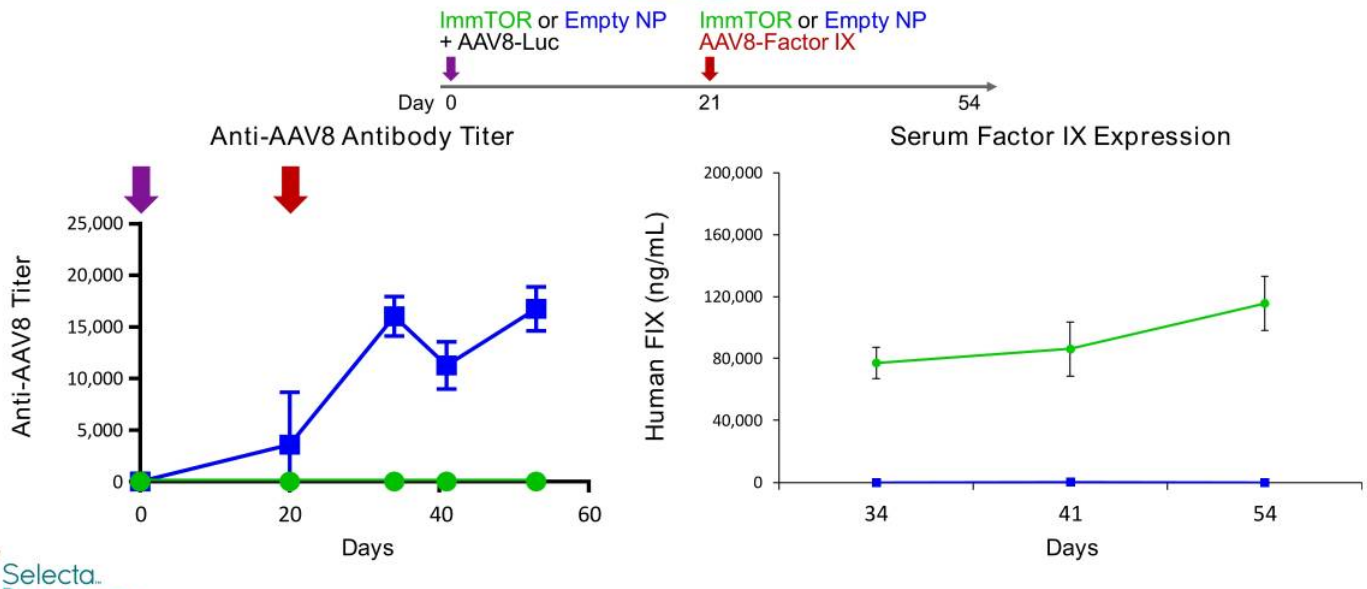
Meliani et al., Nature Communications, In Oct. 2018

Preclinical data indicates potential of ImmTOR-powered re-dosing in gene therapy

ImmTOR-powered AAV8 gene therapy has potential to be re-dosed without NAb formation or loss of therapy expression



Selecta Biosciences

Meliani et al., Nature Communications, In Oct. 2018

Opportunities for clinical POC in gene therapy

Collaborations

- AskBio
  - Development pipeline and human trials planned for repeat dosing of AAV-based gene therapies to address the unmet medical need for patients with rare and orphan genetic diseases
- Genethon and the CureCN consortium
  - AAV gene therapy–sponsored program for treatment of Crigler Najjar Syndrome
  - Obtain scientific advice from the German Health Regulators in the 2H 2019

Proprietary Programs

- MMA (MethylMalonic Acidemia)
- OTC (Ornithine TransCarbamylase deficiency)

License Agreement

- Spark Therapeutics
  - Licensed ImmTOR for hemophilia as well as exclusive options for up four additional undisclosed genetic targets

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Projected upcoming milestones

- Report interim data from SEL-212 vs. KRYSTEXXA® COMPARE trial in chronic refractory gout (Q4 19)
- COMPARE full 6-month top-line data analysis, including statistical superiority (Q2 20)
- Ongoing preparation to initiate SEL-212 Phase 3 program
- Planning to commence clinical trial of ImmTOR in gene therapy (2020)

Selecta Biosciences

Financial Overview

Financial snapshot

(In thousands, except share and per share data)	For the Quarter Ended June 30, 2019
Grant & Collaboration Revenue	$13
Research & Development Expenses	$12,134
General & Administrative Expenses	$4,114
Net Loss Attributable to Common Stockholders	$(16,394)
Net Loss Per Basic & Diluted Share	$(0.37)
Wtd. Avg. Common Shares Outstanding – Basic & Diluted	44,855,083

(In thousands)	As of June 30, 2019
Cash, Cash Equivalents, Marketable Securities, Restricted Cash	$41,959

Selecta Biosciences

Relentlessly committed to overcoming
IMMUNOGENICITY with
our pioneering ImmTOR immune toler
platform to transform the lives of patie
and their families

October 2019

Nasdaq | SE