

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): November 14, 2017

SELECTA BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

001-37798
(Commission
File Number)

26-1622110
(I.R.S. Employer
Identification No.)

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

(617) 923-1400
(Registrant's telephone number, include 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

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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. The Company is now furnishing a copy of its current corporate slide presentation 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

Exhibit No.	Description
99.1	Corporate presentation of Selecta Biosciences, Inc. dated November 14, 2017

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: November 14, 2017

By: /s/ Werner Cautreels, Ph.D.
Werner Cautreels, Ph.D.
President and Chief Executive Officer



Stifel 2017 Healthcare Conference

Nasdaq: SELB

November 14, 2017



Safe Harbor / Disclaimer

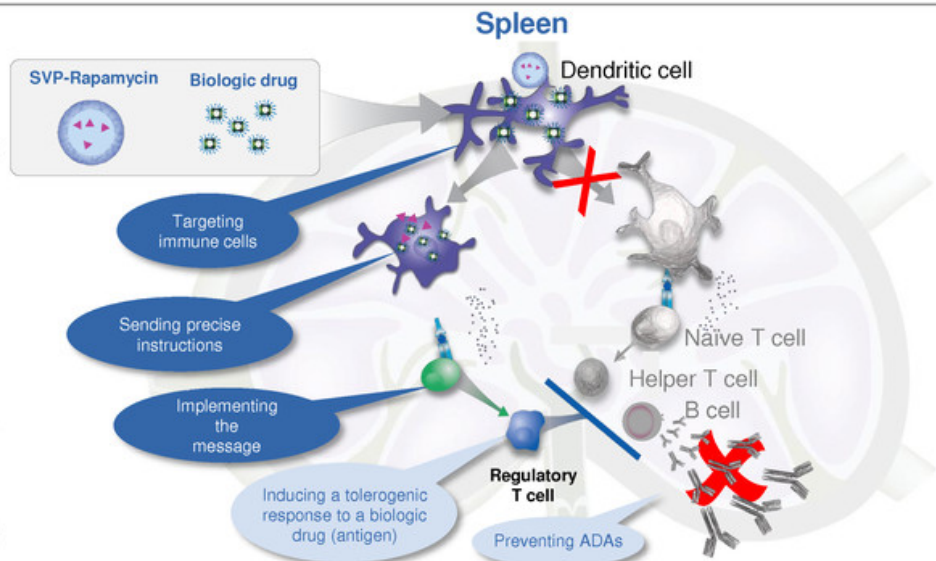
Any statements in this presentation about the future expectations, plans and prospects of Selecta Biosciences, Inc. (*“the company”*), including without limitation, the progress of the Phase 1/2 clinical program of SEL-212, the potential of SEL-212 to treat severe gout patients and resolve their debilitating symptoms, the ability of SVP-Rapamycin to induce immune tolerance against peptidase or otherwise reduce immunogenicity, the ability of SEL-212 to improve acute symptoms during a short induction cycle, the ability of SEL-212 to be re-administered if severe gout symptoms recur, the *company’s* plans to add additional cohorts to the Phase 2 trial for SEL-212, whether higher level doses of SVP-Rapamycin or SEL-212 will show increased clinical activity and durability in line with the Phase 1b, whether the company will determine an appropriate dose of SEL-212 for the Phase 3, whether the patient population for a Phase 3 for SEL-212 has a rapid enrollment potential, when the company will advance to a Phase 3 for SEL-212 (if at all), whether SEL-212 has the potential to address the unmet needs of gout patients, whether SEL-212 holds billion dollar potential, the ability of the *company’s* SVP platform, including SVP-Rapamycin, to mitigate immune response and create better therapeutic outcomes or to improve the efficacy or safety of existing biologics, the potential treatment applications for products utilizing the SVP platform in areas such as enzyme therapy, gene therapy, oncology therapy, vaccines and treatments for allergies and autoimmune diseases, the potential of future collaborations, partnerships or licenses based on the ability of SVP-Rapamycin, the potential of the SVP-Rapamycin platform generally, the *company’s* expectations about receiving additional payments from Spark Therapeutics, Inc. under the license agreement and/or the stock purchase agreement, the sufficiency of the *company’s* cash, cash equivalents, investments, and restricted cash 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 within the 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 factors, 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 from 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* SVP technology, potential delays in enrollment of patients, undesirable side effects of 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 or licenses, 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, substantial fluctuation in the price of its common stock, a significant portion of the *company’s* total outstanding shares have recently become eligible to be sold into the market, and other important factors discussed in the *“Risk Factors”* section of the *company’s* Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission, or SEC, on November 7, 2017, and in other filings that the company makes with the SEC. 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.

Corporate Overview

- Clinical-stage company applying proprietary Synthetic Vaccine Particle (SVP™) platform to avoid unwanted immunogenicity and unlock the full potential of biologic therapies.
- Focused on SEL-212 (pegsiticase administered with SVP-Rapamycin); designed to be the first non-immunogenic uricase treatment for chronic severe gout
 - Phase 2 dose/regimen-finding study: SEL-212 is clinically active and generally well tolerated at 0.08 and 0.1 mg/kg doses of SVP-Rapamycin
 - Cohorts receiving 0.125 and 0.15 mg/kg doses of SVP-Rapamycin ongoing; expect increased clinical activity and durability in line with Phase 1b; plan to report initial data in Q1 2018
 - Additional patient cohorts to test combination therapy for the entire treatment period planned for Q1 2018
 - Plan to enter Phase 3 in 2018, consistent with previous guidance
- Advancing other proprietary product candidates utilizing SVP technology platform
- Potential for additional partnerships and licenses in a range of therapeutic areas

Preventing Unwanted Immunogenicity via Selecta's SVP-Rapamycin Technology Platform

- By dosing "free biologic" separate from SVP-Rapamycin, it distributes broadly to desired sites of action
- Some of the biologic co-localizes with dendritic cells that have taken up SVP-Rapamycin
- The dendritic cells then induce regulatory T cells that circulate throughout the body and suppress immune responses against the biologic (i.e. ADAs)



Potential to enable new therapies and improve efficacy/safety of existing biologics





SEL-212 for Chronic Severe Gout



SEL-212: Advancing a Potential New Treatment Option for Chronic Severe Gout Patients Toward Phase 3



Ownership

- In-licensed pegsiticase in 2014; combined with SVP-Rapamycin to form SEL-212



Rare and Serious Disease

- ~160,000 adults with chronic severe gout treated by U.S. rheumatologists
- Debilitating flares and joint-damaging arthritis caused by uric acid deposits; risk of renal and cardiovascular disease



Immunogenicity Barrier

- Uricases are highly effective in breaking down uric acid deposits, but are foreign to the human immune system, causing immunogenicity that can negate efficacy and present safety risks



Clear Clinical Path

- Serum uric acid level reduction – a robust FDA/EMA primary endpoint for approval – can be seen rapidly upon dosing, easy to measure, maintenance strongly correlated with low/negative ADA titers
- Adult patient population with rapid enrollment potential

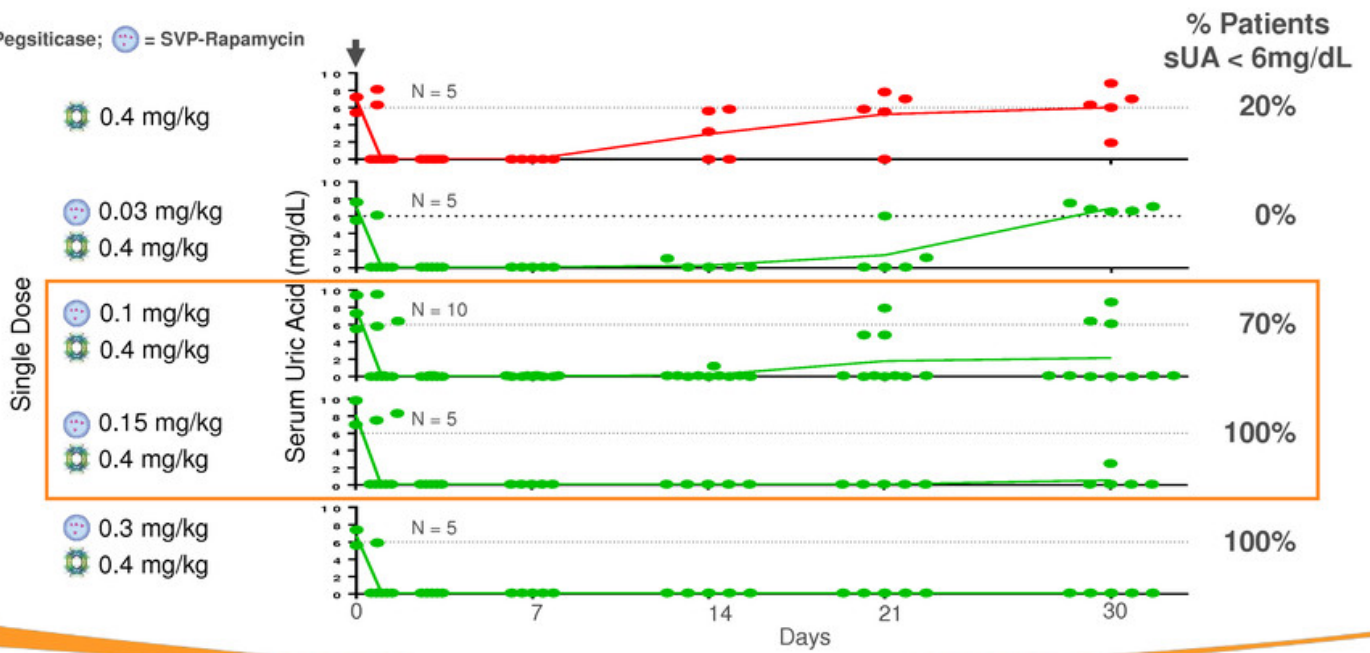
High Unmet Need in Chronic Severe Gout

- Rapid onset of action
 - Persistent reduction in SUA
 - Elimination of tophi
- Monthly dosing
- Reduced incidence of gout flares
- Ability to complete full therapy cycles
- Lower incidence of infusion reactions

We believe SEL-212 has the potential to address these unmet needs and holds billion-dollar potential

Phase 1b Single Dose Patient Cohorts

🟢 = Pegsiticase; 🟡 = SVP-Rapamycin



Phase 2 Trial Overview

Enrollment Criteria

- Patients with symptomatic gout and SUA levels >6 mg/dL

Primary/Secondary Endpoints

- Safety, tolerability and pharmacokinetics of multiple doses of SEL-212 and pegsiticase alone
- Reduction of SUA levels
- Reduction of ADA levels

Design

- Multiple ascending dose cohorts

Dosing

- Control cohorts: pegsiticase alone every 28 days for up to five doses
- Other cohorts: currently testing three combination doses of SEL-212 every 28 days followed by 2 doses of pegsiticase alone
- Preparations underway to enable additional combination doses

Stopping Rules

- Dosing stopped upon loss of SUA control at Day 21 after a dose



As of October 23

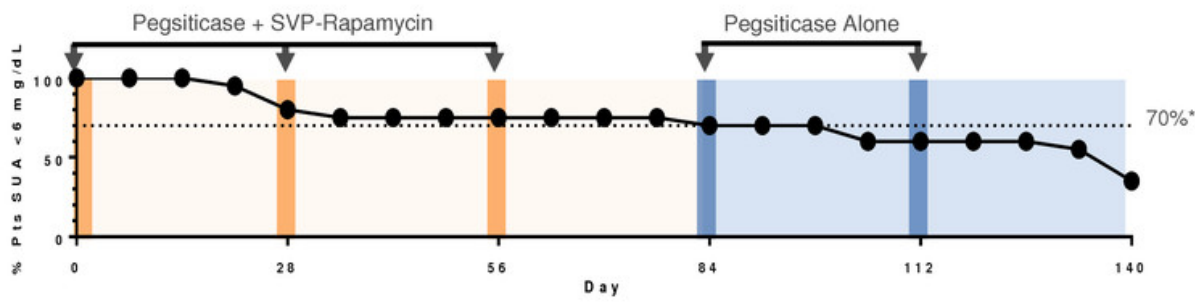
- 79 patients dosed at 15 active U.S. clinical sites



Clinical Activity in Mid-Dose Cohorts

% of Patients With SUA <6 mg/dL

SEL-212
Cohorts 7 & 8**

-  0.2 or 0.4 mg/kg
-  0.1 mg/kg



 = Pegsiticase;  = SVP-Rapamycin

* Ph1b Day 30 @ 0.1 mg/kg SVP-Rapamycin + 0.4 mg/kg pegsiticase
 ** Patients who received a full first dose and completed treatment cycle 1

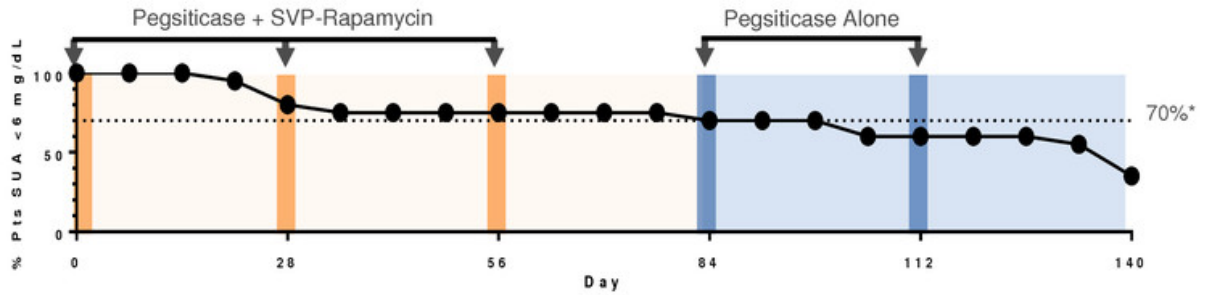


Unaudited data reported as of October 23, 2017 | Clinicaltrials.gov NCT02959918

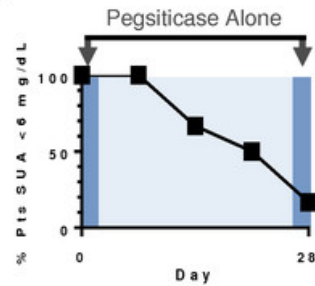
Comparison With Control Cohorts Indicates Immune Tolerance

% of Patients With SUA <6 mg/dL

SEL-212 Cohorts 7 & 8**
 ● 0.2 or 0.4 mg/kg
 ● 0.1 mg/kg



Pegsiticase alone Cohorts 1 & 2
 ● 0.2 or 0.4 mg/kg



● = Pegsiticase; ● = SVP-Rapamycin

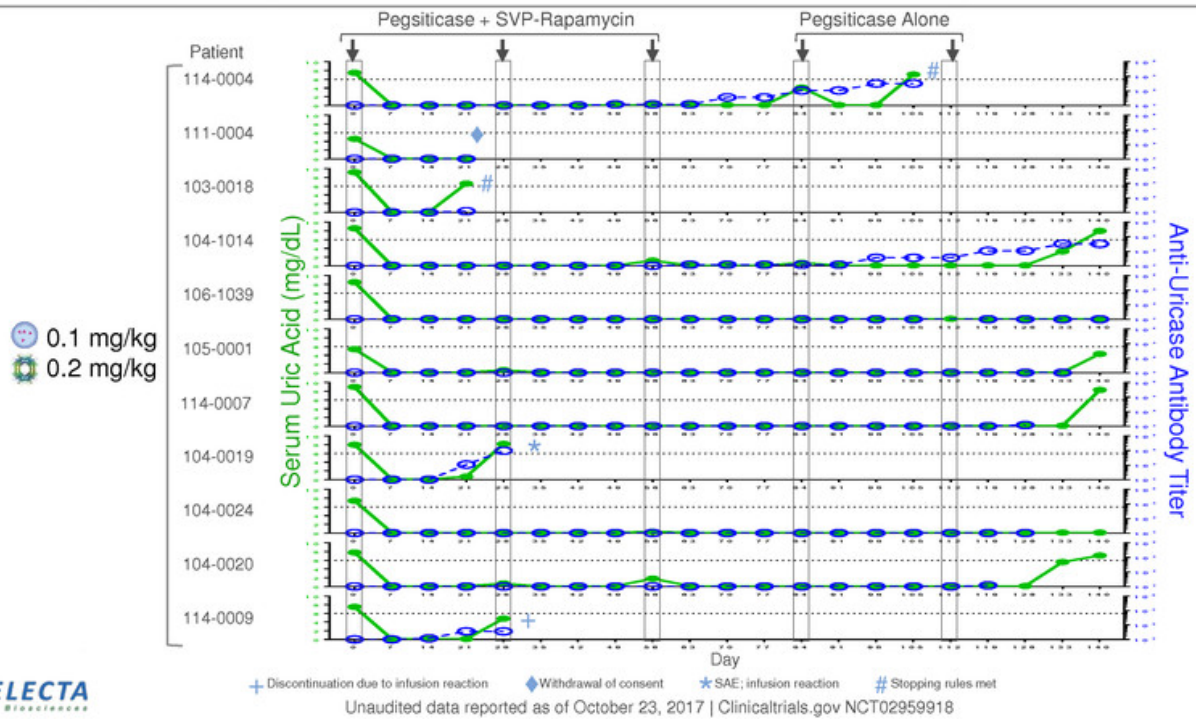
* Ph1b Day 30 @ 0.1 mg/kg SVP-Rapamycin + 0.4 mg/kg pegsiticase
 ** Patients who received a full first dose and completed treatment cycle 1



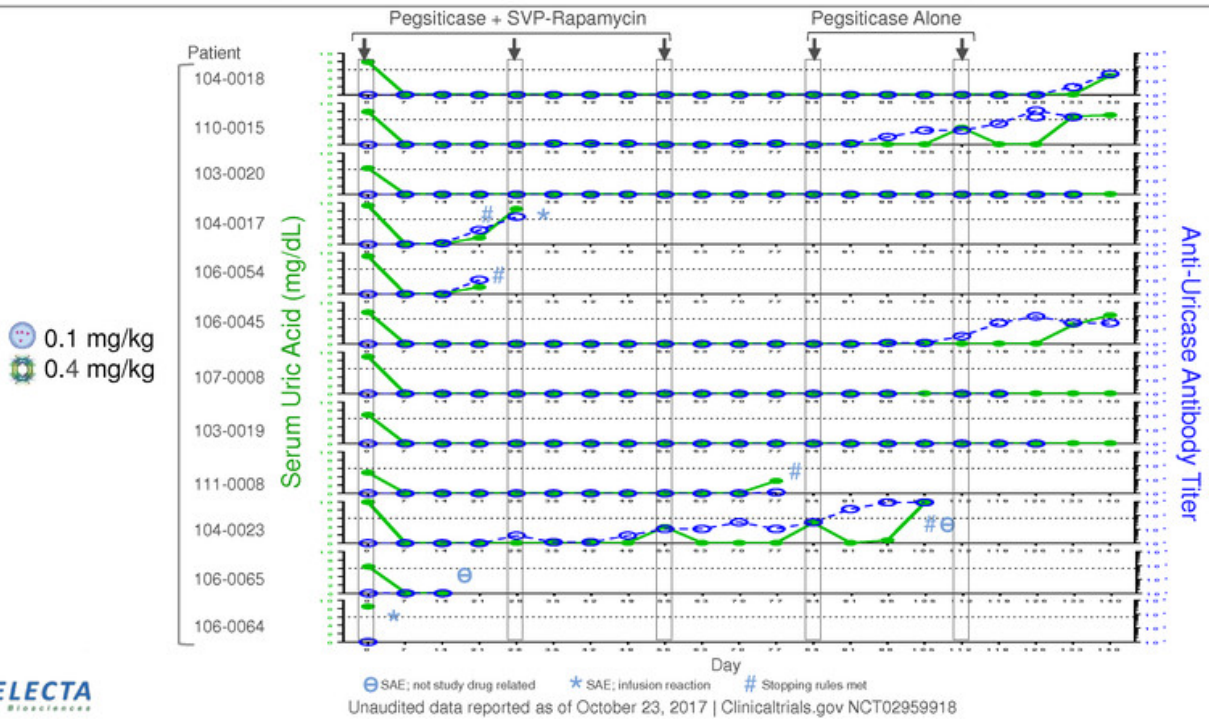
Unaudited data reported as of October 23, 2017 | Clinicaltrials.gov NCT02959918

Cohort 7

0.2 mg/kg Pegsiticase + 0.1 mg/kg SVP-Rapamycin

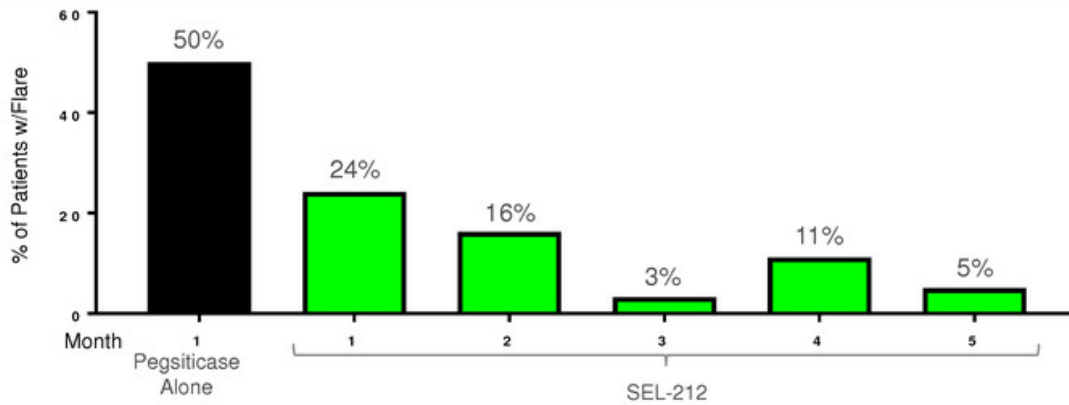


Cohort 8 0.4 mg/kg Pegsiticase + 0.1 mg/kg SVP-Rapamycin



Low Frequency of Gout Flares Observed with SEL-212 Treatment

% of Patients Experiencing Flares by Month



- Data indicate SEL-212 lowers flares initially and over time during treatment
- Urate lowering therapies typically increase the incidence of flares at the beginning of therapy

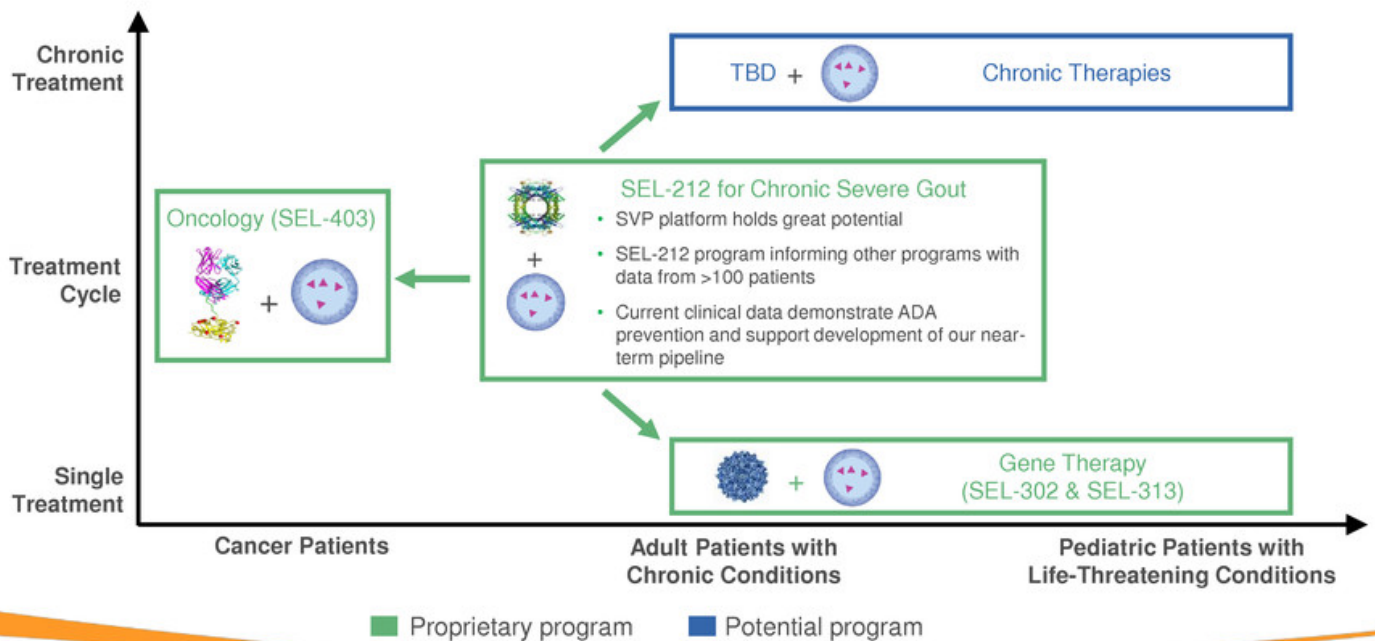
SEL-212 Generally Well Tolerated at Clinically Active Doses

- SEL-212 has been generally well tolerated at clinically active doses following >200 administrations
- SAEs reported in the Phase 2 trial:
 - Four were reported not to be or unlikely to be related to study drug:
 - Seven infusion reactions:
 - Four in cohorts receiving pegsiticase alone or pegsiticase in combination with the lowest dose of SVP-Rapamycin, as anticipated
 - Two due to protocol deviations related to dosing errors
 - One during a repeat dose of SEL-212 in a higher dose cohort
 - Each of these SAEs occurred prior to Selecta's June data report
 - None occurred after treatment period 2
- All SAEs were successfully treated and resolved without further issues

SEL-212 Expected to Enter Phase 3 in 2018

- Focused on SEL-212 (pegsitricase administered with SVP-Rapamycin); designed to be the first non-immunogenic uricase treatment for chronic severe gout
 - Phase 2 dose/regimen-finding study: SEL-212 is clinically active and generally well tolerated at 0.08 and 0.1 mg/kg doses of SVP-Rapamycin
 - Cohorts receiving 0.125 and 0.15 mg/kg doses of SVP-Rapamycin ongoing; expect increased clinical activity and durability in line with Phase 1b; plan to report initial data in Q1 2018
 - Additional patient cohorts to test combination therapy for the entire treatment period planned for Q1 2018
 - Plan to enter Phase 3 in 2018, consistent with previous guidance

SEL-212 Program is Informing the Development of Other Product Candidates



Spark Therapeutics License Agreement

- December 2016 agreement provides Spark Therapeutics with exclusive worldwide rights to Selecta's SVP technology for up to five gene therapy targets
- Initial focus on combination of SVP with Spark's Hemophilia A gene therapy
- Among the largest gene therapy and SMID-cap to SMID-cap biotech deals announced to date
- Subject to the terms of the license agreement, Spark agreed to pay to Selecta:
 - \$30 million of initial cash payments and investments in Selecta equity; final \$7.5 million received on Oct. 31, 2017
 - Up to \$430 million in milestone payments for each target
 - Mid-single to low-double-digit royalties on worldwide annual net sales of any resulting commercialized gene therapy



3Q17 Financial Overview

	For the Quarter Ended	
	September 30, 2017	September 30, 2016
(In thousands, except share and per share data)		
Grant & Collaboration Revenue	\$27	\$1,048
Research & Development Expenses	9,504	6,021
General & Administrative Expenses	4,377	2,495
Net Loss Attributable to Common Stockholders	\$(14,676)	\$(7,728)
Net Loss Per Basic & Diluted Share	\$(0.66)	\$(0.43)
Wtd. Avg. Common Shares Outstanding – Basic & Diluted	22,082,207	18,108,014
	As of	
	September 30, 2017	June 30, 2017
(In thousands)		
Cash, Cash Equivalents, Marketable Securities, Restricted Cash	\$104,780	\$113,045

Cash runway into mid-2019

Thank You



