Selecta Biosciences Presents Data from Ongoing Phase 2 Trial of SEL-212, in Development for Chronic Severe Gout, at EULAR 2018

- *3-month Phase 2 data continue to show SEL-212 (SVP-Rapamycin + pegsiticase) may present a superior product profile over current FDA-approved chronic severe gout therapy with serum uric acid (SUA) control of 81%, reduced treatment related flares and convenient monthly dosing*
- *Data from patients receiving five monthly doses of SEL-212 expected to be presented at Q3 medical conference*
- *Phase 3 program planned to begin in 2018*
- *Company to host conference call and live webcast today at 8:00 a.m. ET*

Watertown, Mass., June 15, 2018 – Selecta Biosciences, Inc. (Nasdaq: SELB), a clinical-stage biopharmaceutical company focused on unlocking the full potential of biologic therapies by mitigating unwanted immune responses, today presented expanded data from patients receiving up to 0.15 mg/kg of SVP Rapamycin with 0.2 or 0.4 mg/kg of pegsiticase from its ongoing Phase 2 trial of SEL-212 for the treatment of chronic severe gout, designed to be the first non-immunogenic version of uricase, at the 2018 European League Against Rheumatism (EULAR) Annual European Congress of Rheumatology in Amsterdam, Netherlands. The poster was presented on June 15th at 11:45 a.m. CET.

The data reported today at EULAR expand upon the data recently presented at PANLAR and consist of patients receiving three monthly doses of SEL-212, up to 0.15 mg/kg of SVP-Rapamycin in combination with 0.2 or 0.4 mg/kg of pegsiticase, followed by two monthly doses of pegsiticase alone. Approximately 81% of evaluable patients (n=27) had serum uric acid control below 6 mg/dl at week 12. In a separately conducted and designed study of the only FDA-approved uricase therapy, 44% of evaluable patients had serum uric acid control below 6 mg/dl at week 16. 33% of the patient population represented by the EULAR data, and only 27% of all current patients in the SEL-212 Phase 2 trial, experienced gout flares during the first month after treatment with continued reduction of gout flare rates over months two to five. This reduced rate of gout flares appears to be substantially lower than the incidence of gout flares reported in clinical trials involving the current FDA-approved uricase.

“We are very pleased with this continued improvement in clinical activity observed in this expanded patient data set presented today at EULAR, and believe it further demonstrates SEL-212’s potential ability to change the chronic severe gout treatment paradigm by providing better and more sustained serum uric acid control, fewer flares, and less frequent dosing compared retrospectively to Krystexxa,” said Werner Cautreels, Ph.D., President and CEO of Selecta. “We are now in the fourth treatment cycle of patients receiving five monthly doses of the combination treatment of SEL-212 and plan to report data from those patients at an upcoming medical meeting in the third quarter of this year. Those data have the potential to demonstrate the extended benefit of SEL-212 in chronic severe gout patients with high medical need and position us to execute on our Phase 3 program, which we plan to start later this year.”

SEL-212 has been generally well tolerated at clinically active doses following repeated administrations in the trial. There have been 17 serious adverse events (SAEs) reported, of which nine were reported to be not related or unlikely to be related to study drug, eight were infusion reactions that were previously reported by the company in its April 2018 data readout, and one was an infusion reaction in the most recent cohorts. No infusion reactions have been reported after the second treatment cycle. All SAEs were successfully treated without further issues.

Conference Call Reminder

The company will host a conference call via live webcast today at 8:00 a.m. ET. The live webcast of the presentation can be accessed via the Investors & Media section of the company's website, http://selectabio.com. Individuals may also participate in the live call via telephone by dialing (844)-845-4170 (domestic) or (412) 717-9621 (international) and may access a teleconference replay for one week by dialing (877) 344-7529 (domestic) or (412) 317-0088 (international) using replay access code 10120131.

About Selecta Biosciences, Inc.

Selecta Biosciences, Inc. is a clinical-stage biopharmaceutical company that is focused on unlocking the full potential of biologic therapies by mitigating unwanted immune responses. Selecta plans to combine its tolerogenic Synthetic Vaccine Particles (SVP™) to a range of biologics for rare and serious diseases that require new treatment options. The company's current proprietary pipeline includes SVP-enabled enzyme, oncology and gene therapies. SEL-212, the company's lead candidate in Phase 2, is being developed to treat severe gout patients and resolve their debilitating symptoms, including flares and gouty arthritis. Selecta's SEL-403 product candidate, a combination therapy consisting of SVP-Rapamycin and LMB-100, recently entered a Phase 1 trial in 2018 for the treatment of patients with malignant pleural or peritoneal mesothelioma. Selecta's proprietary gene therapy product candidates are being developed for rare inborn errors of metabolism and have the potential to enable repeat administration. The use of SVP also holds potential in the development of vaccines and treatments for allergies and autoimmune diseases. Selecta is based in Watertown, Massachusetts. For more information, please visit http://selectabio.com and follow @SelectaBio on Twitter.

Forward-Looking Statements

Any statements in this press release 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 ability of SVP-Rapamycin to mitigate unwanted immunogenicity and unlock the full potential of biologic therapies, when the company will advance to Phase 3 for SEL-212 (if at all), whether SEL-212 has a superior product profile over the current FDA-approved chronic severe gout therapy, the ability of SEL-212 to provide better and more sustained serum uric acid control, fewer flares, and less frequent dosing compared with recent data reported with the current FDA-approved chronic severe gout therapy, the ability of SEL-212 to change the chronic severe gout treatment paradigm, whether patient data from the SEL-212 trial will continue to show improved clinical activity, the ability of the company's SVP platform, including SVP-Rapamycin, to enable new therapies or to improve the efficacy or safety of existing biologics by mitigating immune response, when the company will conduct an End-of-Phase 2 meeting for SEL-212 if at all, the potential of SEL-212 to treat severe gout patients and resolve their debilitating symptoms, whether the FDA approves the company's plan to provide combination therapy of SEL-212 for the entire treatment period, whether the company will determine an appropriate dose regimen of SEL-212 for the Phase 3, whether SEL-212 has the potential to address the

unmet needs of gout patients, whether patients receiving SEL-212 will be able to complete full therapy cycles over 6 months, whether SEL-212 data will continue to show low incidence of gout flares, whether SEL-212 will continue to be generally well-tolerated following repeat administrations, when the company will report further data from the Phase 2 trial, whether the data from patients receiving five monthly combination doses of SEL-212 have the potential to demonstrate the extended benefit of SEL-212 in chronic severe gout patients and position the company to execute on its plans for its Phase 3 trial, 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 the SVP-Rapamycin platform, generally, statements regarding progress of the Phase 1 trial for SEL-403, whether mesothelioma patients would benefit from a combination therapy consisting of LMB-100 and SVP-Rapamycin 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, 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 May 9, 2018, and in other filings that the company makes with the SEC. In addition, any forward-looking statements included in this press release 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 press release.

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