Selecta Biosciences Appoints Carsten Brunn, Ph.D. as President and Chief Executive Officer

Watertown, Mass., September 27, 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, announced today that Carsten Brunn, Ph.D., has been appointed President and Chief Executive Officer (CEO) of Selecta Biosciences, effective December 1, 2018. He will also serve on the company's Board of Directors. Current President and CEO, Werner Cautreels, Ph.D., will continue to lead the company until December, will assist Dr. Brunn during the transition and will remain a member of the Board through December 31, 2018. Dr. Cautreels is expected to serve as an advisor to the company following his retirement.

"Carsten brings a wealth of experience from a successful career as a global leader in the life sciences industry and we're thrilled he is joining Selecta. His exceptional track record and expertise will be invaluable as the company enters its next stage of growth," said Dr. Omid Farokhzad, Chairman of the Board of Directors. "I want to thank Werner for his leadership and vision over the past eight years putting the company on its current growth trajectory with a robust pipeline of product candidates. We look forward to his continued contributions as a member of our Board of Directors through the end of the year and as an advisor after his retirement."

"I look forward to joining the leadership team at Selecta and helping to advance and expand the company's platform of proprietary SVP-enabled enzyme, oncology and gene therapeutic candidates. This year's planned start of the Phase 3 trial for the lead program, SEL-212, for the treatment of severe gout patients is very exciting and in addition, the advancements the company is making in the fields of oncology and gene therapy is extremely promising," said Dr. Brunn. "Selecta has grown tremendously under the leadership of a strong management team and I am excited to be joining the organization at such an important time and maximizing the potential of the platform."

Dr. Brunn joins Selecta Biosciences from Bayer, where he was most recently the President of Pharmaceuticals for the Americas Region and a member of the Global Pharmaceutical Executive Committee. Prior to being appointed to that role in 2017, he was the President of Bayer Pharmaceuticals in Japan, a role he held since 2013. He also served as the Chairman of the European Federation of Pharmaceutical Industries and Associations (EFPIA) Japan, an organization representing 24 R&D based innovative pharmaceutical companies in Japan. He has held a number of senior leadership positions at Eli Lilly, Novartis, Basilea and Bausch and Lomb in Europe, Asia and the United States. Dr. Brunn holds a Ph.D. in Chemistry from the University of Hamburg and a Master of Science in Pharmaceutical Sciences from the University of Freiburg. He also studied at the University of Washington under a research scholarship and completed his executive education at the London Business School. He currently serves on the Board of Directors of the Biotechnology Innovation Organization (BIO).

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 therapeutic candidates. 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. A Phase 1 trial is ongoing for a combination therapeutic candidate consisting of SVP-Rapamycin and LMB-100 (Selecta's SEL-403 product candidate) 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, statements regarding the company's expectations surrounding the transition, timing and roles of Drs. Carsten Brunn and Werner Cautreels, the company's potential for growth and current trajectory, the timing and progress of the Phase 3 trial for SEL-212, the potential of SEL-212 to treat chronic severe gout patients and resolve their debilitating symptoms, the progress of the Phase 1 trial for SEL-403, the company's ability to unlock the full potential of biologic therapies by mitigating unwanted immune responses, the company's plan to apply its SVP platform to a range of biologics for rare and serious diseases, 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 company's gene therapy product candidates to treat rare inborn errors of metabolism and enable repeat administration, the potential of the SVP-Rapamycin 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 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, 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, 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 August 8, 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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