Selecta Biosciences Obtains License for Recombinant Immunotoxin LMB-100 from National Cancer Institute (NCI) for Pancreatic Cancer, Mesothelioma and Other Cancers

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- *NCI Currently Conducting Clinical Trials with LMB-100*
- *LMB-100 and SVP-Rapamycin Combination Treatment Enhances Anti-Tumor Activity in Preclinical Models*
- *Selecta and NCI in Discussions Regarding Phase 1b Trial of Combination Treatment*

WATERTOWN, Mass., May 02, 2017 (GLOBE NEWSWIRE) -- Selecta Biosciences, Inc. (NASDAQ:SELB), a clinical-stage biopharmaceutical company focused on unlocking the full potential of biologic therapies by avoiding unwanted immune responses, today announced that it has licensed LMB-100, a next-generation immunotoxin, from the Center for Cancer Research (CCR) at the NCI, part of the National Institutes of Health. LMB-100 contains a potent bacterial toxin that binds to mesothelin, a protein expressed in all mesotheliomas, pancreatic adenocarcinomas and a high percentage of other malignancies, including lung, breast and ovarian cancers.

“This marks yet another major milestone for Selecta as we execute on our strategy to enable a range of proprietary, non-immunogenic biologic therapies using our proprietary immune tolerance platform,” said Werner Cautreels, Ph.D., President, CEO and Chairman of Selecta. “By in-licensing this promising clinical-stage product candidate, we are extending our footprint to include oncology, where the efficacy of many biologic treatments is hampered by immunogenicity. Based on our preclinical work with NCI, we believe a combination treatment of LMB-100 and our proprietary SVP-Rapamycin may allow patients with rare, serious and aggressive forms of cancer to tolerate and benefit from multiple immunotoxin treatment cycles.”

CCR is in the process of completing two clinical trials of LMB-100 in patients with mesothelioma and pancreatic cancer that are intended, in part, to help define the maximum tolerated dose. For more information about these trials, call 1-800-4-Cancer (1-800-422-6237) (TTY: 1-800-332-8615) and/or visit https://www.cancer.gov/about-cancer/treatment/clinical-trials/search. Initial data indicate that undesired antibody responses to the immunotoxin prevented most patients from receiving the intended four treatment cycles. While a precursor to LMB-100 was similarly restricted by immunogenicity despite the concurrent use of potent immunosuppressive drugs, tumor regression was observed in the only two patients who were able to receive more than two cycles of treatment. These results suggest that the mitigation of immunogenicity may enable more patients to benefit from LMB-100 therapy.

In 2016, preclinical research under a Cooperative Research and Development Agreement between Selecta and NCI demonstrated that the co-administration of SVP-Rapamycin and LMB-100 has the potential to enable extended treatment with LMB-100 and, therefore, enhance its anti-tumor activity. Selecta’s immune tolerance Synthetic Vaccine Particles (SVP™) prevented the formation of anti-LMB-100 antibodies, allowing for the administration of repeat treatment cycles in mouse models and enabling the full beneficial effect of LMB-100 on tumors in a tumor model. Selecta and NCI are currently in discussions regarding a planned Phase 1b clinical trial to evaluate multiple cycles of this combination treatment.

Under the terms of the license agreement, NCI will receive an upfront payment of $50,000 from Selecta. NCI also is entitled to up to $9.25 million in payments for milestones and low single-digit royalties on worldwide annual net sales of any resulting commercialized treatment.

About Pancreatic Cancer and Mesothelioma

Pancreatic cancer is among the most commonly diagnosed cancers and it is one of the few that is increasing in incidence and mortality. This type of cancer virtually always expresses mesothelin and has been linked to smoking, obesity and diabetes. For the year 2016, the National Cancer Institute (NCI) estimates that more than 53,000 new U.S. cases of pancreatic cancer were reported and that there were nearly 42,000 deaths in the U.S. from this disease. The prognosis for

pancreatic cancer is poor, with approximately five percent of patients surviving five or more years following diagnosis.

Mesothelioma is a mesothelin-expressing cancer predominantly affecting the layer of tissue lining the lungs and chest wall. This type of cancer has been linked to asbestos exposure. According to the American Cancer Society, approximately 3,000 people are diagnosed with this disease each year in the United States. The prognosis for mesothelioma is poor, with an average life expectancy of 12-18 months following diagnosis.

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 avoiding 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 clinical oncology candidate, LMB-100, is in a Phase 1 program targeting pancreatic cancer and mesothelioma. Its two 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 is also being explored 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.

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, whether the company and NCI commence a Phase 1b trial combining LMB-100 and SVP-Rapamycin, whether the co-administration of SVP-Rapamycin and LMB-100 has the potential to enable extended treatment with LMB-100 and improve its anti-tumor activity, statements regarding the development of its pipeline, the ability of the company's SVP platform, including SVP-Rapamycin, to mitigate immune response and create better therapeutic outcomes, the potential treatment applications for products utilizing the SVP platform in areas such as gene therapy, immuno-oncology, allergies, autoimmune diseases and vaccines, 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 unproven approach of the company's SVP technology, 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, 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 Annual Report on Form 10-K filed with the Securities and Exchange Commission, or SEC, on March 28, 2017, 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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