**Selecta Biosciences Presents Preclinical Data Regarding SVP-Enabled Peanut Allergy Therapeutic Vaccine and Celiac Disease Treatment**

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**Presentation Today at GTCbio's 5th Immunogenicity & Immunotoxicity Conference**

WATERTOWN, Mass., Feb. 06, 2017 (GLOBE NEWSWIRE) -- Selecta Biosciences, Inc. (NASDAQ:SELB), a clinical-stage biopharmaceutical company developing a novel class of targeted antigen-specific immune therapies, today announced that Selecta Chief Scientific Officer Takashi Kei Kishimoto, Ph.D. is presenting preclinical data from the company's proprietary peanut allergy and celiac disease programs at GTCbio's 5th Immunogenicity & Immunotoxicity Conference in San Diego, CA. Entitled "Synthetic Vaccine Particles (SVP™) to Treat Food Allergy and Celiac Disease and to Mitigate the Formation of Anti-Drug Antibodies," Dr. Kishimoto's presentation takes place at 5:45 p.m. ET/2:45 p.m. PT today.

Peanut and tree nut allergy affects up to 3 million Americans[1]. Selecta's peanut allergy program is focused on the development of a therapeutic vaccine candidate that triggers an immune switch to promote the formation of allergen-specific Immunoglobulin G (IgG) antibodies while reducing Immunoglobulin E (IgE) antibodies that cause allergic reactions. This switch is accomplished by using Selecta's SVP™ technology to encapsulate crude peanut extract (CPE) and an immune stimulating adjuvant.

The preclinical data show that the treatment has the ability to inhibit peanut allergen-specific IgE and thereby prevent systemic anaphylaxis following the introduction of CPE in sensitized mice. Additional data demonstrating the durability of allergy prevention in non-human primates will also be presented. This product candidate is differentiated from others in development due to its use of active immunomodulators, uniquely enabled by SVP technology, that appear to trigger a lasting immune switch away from allergy-inducing IgE following a limited number of treatments. Approaches without active SVP immunomodulation require chronic daily treatment.

Selecta believes that this novel approach could be applied to other food allergies. Affecting 6% to 8% of children younger than four years of age and approximately 4% of individuals older than 10 in the U.S., food allergies are the leading cause of anaphylaxis cases, with an estimated 2,000 hospitalizations and 200 deaths annually in the U.S.[1]

According to the National Institutes of Health, more than 2 million Americans have celiac disease, a digestive disorder that is triggered by eating foods containing gluten and results in immune-mediated damage to the small intestine. Selecta's celiac disease program is focused on inducing immune tolerance to gluten by dosing SVP-encapsulated rapamycin, an immunomodulatory agent, and SVP-encapsulated gliadin, a major component of gluten. The preclinical data show that SVP treatment of mice with gluten-reactive memory T cells has the ability to reduce intestinal histopathology scores in a model of celiac disease, even with continuous exposure of sensitized mice to gluten.

"We believe SVP is a versatile and powerful tool to precisely modulate the immune system in an antigen-specific manner to induce immune switching, immune stimulation or immune tolerance, depending upon the application, and enable new and improved therapies," said Dr. Kishimoto. "Our SVP platform represents a truly novel approach to mitigate life-threatening and debilitating allergies and autoimmune diseases. We are evaluating strategies to advance these programs toward clinical development and to validate the potential of SVP technology in allergies."

Dr. Kishimoto's presentation can be accessed in the Investors & Media section of the company's website, http://selectabio.com.

**About Selecta Biosciences, Inc.**

Selecta Biosciences, Inc. is a clinical-stage biopharmaceutical company developing targeted therapies that use immunomodulators encapsulated in nanoparticles to induce antigen-specific immune responses to prevent and treat

disease. Selecta's proprietary Synthetic Vaccine Particle (SVP) technology is a highly flexible nanoparticle platform, capable of incorporating a wide range of antigens and immunomodulators, allowing the SVP-based products to either induce antigen-specific tolerance or activate the immune system.

Selecta's focus and strategy is to leverage its SVP immune modulating platform to develop and commercialize highly differentiated life-sustaining biologic drugs that are uniquely capable of mitigating the formation of anti-drug antibodies (ADAs). Proprietary programs that use SVP-Rapamycin to enhance efficacy and safety of therapy include SEL-212, Selecta's lead Phase 2 clinical program in chronic refractory gout, and two gene therapies programs for genetic metabolic diseases. Tolerance-inducing SVP biological products also have potential applications in the treatment of allergies and autoimmune diseases.

Selecta is also developing SVP product candidates that activate the immune system to prevent and treat cancer, infections and other diseases.

Selecta is based in Watertown, Massachusetts, USA. 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, statements regarding the development of its pipeline, the progress of the Phase 1/2 clinical program of SEL-212 including the announcement of data, conference presentations, 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 and oncology, any future development of the company's initiatives in peanut allergy and celiac disease, 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 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 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 10, 2016, 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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[1] Lancet 2008; 371: 1538–46 Pediatric Allergy and Immunology, Duke University Medical Center, Durham, NC, USA (Prof A W Burks MD)

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