

Immune Design's GLAAS™ Platform Shown to Modulate the Allergic Immune Response

Establishes Potential for the Treatment of Pollen and Peanut Allergies

Data Presented at American Academy of Allergy, Asthma & Immunology (AAAAI) Annual Meeting

SEATTLE and SOUTH SAN FRANCISCO, March 04, 2016 (GLOBE NEWSWIRE) -- Immune Design (Nasdaq:IMDZ), a clinical-stage immunotherapy company focused on oncology, today announced the presentation of data demonstrating the potential of its GLAAS platform to modify allergic immune responses present in pollen and peanut allergies. Results from these studies were highlighted at the 2016 American Academy of Allergy, Asthma & Immunology (AAAI) Annual Meeting in Los Angeles.

Immune Design presented data highlighting the ability of GLA, a synthetic TLR4 agonist and the core of the GLAAS platform, to modify the abnormal allergic immune response observed in peripheral blood from patients with pollen allergies. Specifically, the research demonstrated that GLA significantly decreased the level of Th2 cytokines, IL-5 and IL-13, and increased the level of Th1 cytokines, IFNy and IL-12, to grass pollen allergen in the peripheral blood mononuclear cells from allergic donors. Th2 cytokines promote the development of an allergic inflammatory response in people with allergies. Th1 cytokines can counterbalance Th2 immune responses and potentially aid in the treatment of allergic diseases.

Abstracts for the 2016 AAAAI Annual Meeting are available online at http://www.jacionline.org/issue/S0091-6749%2815%29X0003-0 (search "GLA" by article title).

"These presentations add to the large and growing body of data supporting the potential of the GLAAS platform for the treatment of chronic diseases beyond cancer, where Immune Design is focused, including allergy," said Jan ter Meulen, MD, PhD, Chief Scientific Officer at Immune Design. "Investigational agents leveraging GLAAS in oncology are currently in clinical development in randomized Phase 2 studies in soft tissue sarcoma and Non-Hodgkin's lymphoma. Via selective external collaborations and licenses, we are expanding its development in other novel diseases such as peanut food allergy and infectious diseases such as respiratory syncytial virus."

About GLAAS

Immune Design's GLAAS platform works *in vivo* and is based on a small synthetic molecule called GLA, or glucopyranosyl lipid adjuvant. GLA selectively binds to the TLR4 receptor and causes potent activation of dendritic cells (DCs) leading to the production of cytokines and chemokines that drive a Th1-type immune response. When GLA is accompanied by an antigen and injected into a patient, the combination is taken up by DCs and leads to the production and expansion of immune cells called CD4 T helper lymphocytes with a Th1 phenotype. These CD4 T cells play a key role in boosting pre-existing CTLs that are specific to the same antigen, neutralize a Th2 phenotype; and provide help to other immune cells and natural killer cells that are also important in the overall immune response. GLA can also be used to induce local and systemic immune responses against cancer by directly injecting it into tumors, where it induces a pro-inflammatory state of the tumor microenvironment. Immune Design believes that GLAAS product candidates have the potential to target multiple types of cancer, as well as infectious, allergic and autoimmune diseases. GLAAS-based product candidates have now been evaluated in over 1400 subjects in Phase 1 and Phase 2 trials demonstrating an acceptable safety profile.

About Immune Design

Immune Design is a clinical-stage immunotherapy company employing next-generation *in vivo* approaches to enable the body's immune system to fight chronic diseases. The company's technologies are engineered to activate the immune system's natural ability to generate and/or expand antigen-specific cytotoxic T cells, while also enhancing other immune effectors, to fight cancer and other chronic diseases. CMB305 and G100, the primary focus of Immune Design's ongoing immuno-oncology clinical programs, are products of its two synergistic discovery platforms, ZVexTM and GLAASTM, the fundamental technologies of which were licensed from the California Institute of Technology and the Infectious Disease Research Institute (IDRI), respectively. Immune Design has offices in Seattle and South San Francisco. For more information, visit www.immunedesign.com.

Cautionary Note on Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of

1995. Words such as "may," "will," "expect," "plan," "anticipate," "estimate," "intend" and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements. These forward-looking statements are based on Immune Design's expectations and assumptions as of the date of this press release. Each of these forward-looking statements involves risks and uncertainties. Actual results may differ materially from these forward-looking statements. Forward-looking statements contained in this press release include, but are not limited to, statements about the timing of initiation, progress, scope and outcome of clinical trials for Immune Design's product candidates and the reporting of clinical data regarding Immune Design's product candidates. Many factors may cause differences between current expectations and actual results including unexpected safety or efficacy data observed during preclinical or clinical studies, clinical trial site activation or enrollment rates that are lower than expected, changes in expected or existing competition, changes in the regulatory environment, failure of Immune Design's collaborators to support or advance collaborations or product candidates and unexpected litigation or other disputes. Other factors that may cause Immune Design's actual results to differ from those expressed or implied in the forward-looking statements in this press release are discussed in Immune Design's filings with the U.S. Securities and Exchange Commission, including the "Risk Factors" sections contained therein. Except as required by law, Immune Design assumes no obligation to update any forward-looking statements contained herein to reflect any change in expectations, even as new information becomes available.

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