May 17, 2017

New Clinical and Biomarker Data Validate Immune Design's Lead Programs and Discovery Platforms

Data from CMB305 and G100 to be Presented at ASCO Annual Meeting in June 2017

SEATTLE and SOUTH SAN FRANCISCO, May 17, 2017 (GLOBE NEWSWIRE) -- Immune Design (Nasdaq:IMDZ), a clinicalstage immunotherapy company focused on oncology, reported new clinical and biomarker data today from CMB305 and G100 monotherapy studies. The American Society of Clinical Oncology (ASCO) is publishing three abstracts today relating to these new data. A broader set of data will be presented at the ASCO 2017 Annual Meeting, providing further clinical validation of the company's lead product candidates and discovery platforms.

CMB305 Monotherapy in Patients with Soft Tissue Sarcoma

- Most recent patient survival data meaningfully exceed published survival outcomes for standard of care therapy in comparable soft tissue sarcoma (STS) patients with recurrent metastatic disease.
 - With a median follow up exceeding 18 and 11 months for LV305 and CMB305, respectively, median overall survival (mOS) has not yet been reached in recurrent metastatic STS patients.
- Durable disease control was observed in more than half of STS patients, including durable tumor growth arrest in patients who had evidence of disease progression prior to CMB305 therapy.
- CMB305's safety profile consisted mostly of mild to moderate adverse events, with therapy being well tolerated by patients.
- Anti-NY-ESO-1 immune biomarkers identify cancer patients who may be more likely to have prolonged survival following therapy with CMB305
 - Anti-NY-ESO-1 immune responses were observed in more than half of the patients who received CMB305 therapy.
 - i Induction of anti-NY-ESO-1 immunity in patients treated with CMB305 or LV305 was associated with better clinical outcomes, including survival.
 - Immune biomarkers pre-treatment may guide regulatory strategy via the selection of patients more likely to respond to CMB305 therapy.

G100 Intratumoral Monotherapy with Radiation in Patients with Low-grade Follicular NHL (FL)

- More than 40% of the FL patients experienced objective responses based on WHO criteria (at least a 50% tumor reduction), including substantial tumor shrinkage in untreated, unirradiated distal (abscopal) lesions.
- Safety profile remains favorable at higher doses than those previously reported in Merkel cell carcinoma patients.
 G100 resulted in favorable tumor microenvironment changes.
 - An increased intratumoral expression of inflammatory cytokines/chemokines, T cell infiltration, and an increased frequency of clonal tumor infiltrating lymphocytes, were observed.

"The ability to identify patients who are likely to benefit from antigen-targeted immunotherapy has been an elusive goal. We believe the results highlighted here should be considered as we aim to maximize the chance of success of these novel modalities, including CMB305 and future product candidates from our ZVex platform." said Carlos Paya, M.D., Ph.D., President and Chief Executive Officer of Immune Design. "During the second half of the year, we hope to have the opportunity to build on these positive clinical and biomarker data for CMB305 and G100 monotherapy with the results from ongoing trials evaluating each agent in combination with anti-PD-1/PD-L1 inhibitors."

Presentations at American Society of Clinical Oncology Annual Meeting

Data underlying the topline releases above were published online today by the American Society of Clinical Oncology (ASCO) in abstracts accepted for presentation at ASCO's 2017 Annual Meeting in June (presentation information set forth below). The abstracts reflect an analysis performed on or before February 2017; additional data will be presented at the Annual Meeting.

ORAL PRESENTATION

Immune response, safety, and survival impact from CMB305 in NY-ESO-1+ recurrent soft tissue sarcomas (STS)

Abstract # 11006 Session Title: Sarcoma Date: Friday, June 2, 2017 Time: 3 p.m. — 6 p.m. CT (oral session) Location: S100bc Presenter: Neeta Somaiah, M.D., Department of Sarcoma Medical Oncology, The University of Texas MD Anderson Cancer Center

POSTER PRESENTATIONS

The Association of CMB305 or LV305-induced and baseline anti-NY-ESO-1 immunity with survival in recurrent cancer patients

Abstract # 3090 Session Title: Developmental Therapeutics—Immunotherapy Date: Monday, June 5, 2017 Time: 8 a.m. — 11:30 a.m. CT Location: Hall A Presenter: Seth M. Pollack, M.D., Fred Hutchinson Cancer Research Center

Intratumoral G100 to induce systemic immune responses and abscopal tumor regression in patients with follicular lymphoma

Abstract # 7537 Session Title: Hematologic Malignancies — Lymphoma and Chronic Lymphocytic Leukemia Date: Monday, June 5, 2017 Time: 8 a.m. — 11:30 a.m. CT Location: Hall A Presenter: Christopher Flowers, M.D., Department of Hematology and Medical Oncology, Emory University School of Medicine

About CMB305

CMB305 is a prime-boost vaccine approach against NY-ESO-1-expressing tumors, designed to generate an integrated, anti-NY-ESO-1 immune response *in vivo* via a targeted, specific interaction with dendritic cells, a mechanism of action Immune Design believes differs from traditional cancer vaccines. CMB305 is being evaluated in STS patients in ongoing

Phase 1 monotherapy and 2 combination studies with the anti-PD-L1 antibody, Tecentriq[®] (atezolizumab), pursuant to a collaboration with Genentech. Immune Design has received Orphan Drug Designation for CMB305 from the U.S. Food and Drug Administration (FDA) for the treatment of soft tissue sarcoma, as well as from the FDA and European Medicines Agency for each of the components of CMB305 for the treatment of soft tissue sarcoma.

About G100

G100 contains a potent synthetic small molecule toll-like receptor-4 (TLR-4) agonist, Glucopyranosyl Lipid A (GLA), and is the lead product candidate in Immune Design's Antigen Agnostic approach. It leverages the activation of both innate and adaptive immunity, including dendritic cells, in the tumor microenvironment to create an immune response against the tumor's preexisting diverse set of antigens. G100 is being evaluated as both a monotherapy (with XRT) and in combination with Merck's anti-PD-1 agent, Keytruda[®] (pembrolizumab), pursuant to a clinical collaboration with Merck, in a randomized Phase 1/2 trial in patients with follicular non-Hodgkin's lymphoma. The FDA has granted Orphan Drug Designation for G100 for the treatment of follicular non-Hodgkin's lymphoma.

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 disease. 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 two leading product candidates focused in cancer

immunotherapy, are the first products from its two separate discovery platforms targeting dendritic cells in vivo, ZVex[®] and

GLAAS[®]. Both ZVex and GLAAS also have potential applications in infectious disease and allergy as demonstrated by ongoing pharmaceutical collaborations. Immune Design has offices in Seattle and South San Francisco. For more information, visit <u>www.immunedesign.com</u>.

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 that could cause our clinical development programs, future results or performance to differ significantly from those expressed or implied by the forwardlooking statements. Forward-looking statements contained in this press release include, but are not limited to, statements about the progress, timing, scope and results of clinical trials, the association of data with treatment outcomes, and the timing and likelihood of obtaining regulatory approval of 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 enrolment rates that are lower than expected, changes in expected or existing competition, changes in the regulatory environment, the uncertainties and timing of the regulatory approval process, 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.

Media Contact Julie Rathbun Rathbun Communications julie@rathbuncomm.com 206-769-9219

Investor Contact Shari Annes Annes Associates Shari.Annes@immunedesign.com 650-888-0902