Immune Design Reports Increased Overall Response Rate and Longer Progression Free Survival of Patients with Follicular Lymphoma Treated in a Randomized Trial with a Combination Regimen of G100 and Pembrolizumab

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- **Overall Response Rate (ORR) of 46% in Patients Receiving the Combination**
- **TLR4 Biomarker Continued to Show Higher Response Rate for Patients with High TLR4 Expression (71% ORR)**
- **Long-term Follow Up Shows 11.1 Months Progression Free Survival**

SEATTLE and SOUTH SAN FRANCISCO, Calif. and SAN DIEGO, Dec. 02, 2018 (GLOBE NEWSWIRE) -- Immune Design (Nasdaq: IMDZ), an immunotherapy company focused on next-generation therapies in oncology, today announced long-term follow up results from a randomized Phase 2 clinical trial of 10 ug intratumoral G100, a TLR4 agonist, with or without pembrolizumab, in follicular lymphoma patients.

In the 26 naïve and relapsed/refractory patients in the randomized trial, the data continue to support the clinical activity of G100, with overall response rates of 46% and 23% in patients receiving a G100 regimen that includes low-dose radiation, with or without pembrolizumab, respectively. Also, disease control was shown in 92% and 85% of patients treated with the G100 regimen with or without pembrolizumab, respectively. In addition, responses appeared to be durable, with overall progression free survival at 11.1 or 7.4 months in patients treated with the G100 regimen with or without pembrolizumab, respectively. The data were presented today at the American Society of Hematology Annual Meeting being held in San Diego.

“Follicular lymphoma continues to be a difficult-to-treat malignancy, particularly in the relapsed setting, and to date immunotherapy has not been successful and the current standard of care is associated with a number of serious adverse events,” said Carlos Paya, M.D., chief executive officer of Immune Design. “We are encouraged by the potential for lymphoma patients with G100, a first in class immuno-modulatory agent that leads to systemic anti-lymphoma benefit when injected intratumorally. The high response rates, favorable durability and excellent safety profile we’re seeing for G100 has prompted us to embark on a potentially pivotal clinical trial in the relapsed refractory setting, as well as pursue additional trials in earlier lines of therapy in follicular lymphoma and other malignancies.”

Additional data presented in the poster:

- Increases in immunogenicity markers of CD8+ T-cells and CD8/CD4 ratio in the tumor microenvironment correlated with clinical response (p= .0858 and .0357 respectively). Similarly, a decrease in C20-expressing tumor cells correlated with improved clinical outcomes (p=.0221).
- G100 was well tolerated and the combination with pembrolizumab did not cause unexpected or worsening toxicity.

About G100

G100 is Immune Design’s lead product candidate and contains a potent synthetic small molecule toll-like receptor-4 (TLR-4) agonist called Glucopyranosyl Lipid A (GLA). G100 activates innate and adaptive immunity in the tumor microenvironment to generate an immune response against the tumor's pre-existing diverse set of antigens. A growing set of clinical and preclinical data have demonstrated the ability of G100 to activate tumor-infiltrating lymphocytes, macrophages and dendritic cells, and promote antigen-presentation and the recruitment of T cells to the tumor. The induction of local and systemic immune responses has been shown to result in local and abscopal (shrinking of tumors outside the scope of the localized treatment) tumor control. G100 is currently in development to treat patients with relapsed follicular lymphoma (FL), a sub-type of Non-Hodgkin lymphoma. Immune Design intends to start a study in earlier-stage lymphoma patients in combination with rituximab, a standard treatment for lymphomas, and is evaluating studies in other B-cell malignancies beyond FL, as well as potential solid tumor indications.

About Immune Design

Immune Design is a late-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 immune cells to fight cancer and other chronic diseases. G100, the company’s lead product candidate, is a potent intratumoral TLR4 agonist that has shown clinical benefit in multiple tumor types. Building upon these data, including from a randomized Phase 2 study, Immune Design plans to further develop G100 with a potential first approval path in follicular lymphoma patients, a type of Non-Hodgkin lymphoma that affects thousands of patients annually. Immune Design’s technologies, the fundamental components of which were licensed from the California Institute of Technology and the Infectious Disease Research Institute (IDRI), also have potential application in infectious disease and allergy indications, which are being developed through ongoing pharmaceutical collaborations. Immune Design has offices in Seattle and South San Francisco. For more information, please 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,” “target,” “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 Immune Design’s clinical development programs, future results or performance to differ significantly from those

expressed or implied by the forward-looking 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.

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