Oncternal Therapeutics Presents New Preclinical Data from its anti-ROR1 Cell Therapy Collaboration with the Karolinska Institutet at the EHA2022 Congress

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SAN DIEGO, June 10, 2022 (GLOBE NEWSWIRE) -- Oncternal Therapeutics, Inc. (Nasdaq: ONCT), a clinical-stage biopharmaceutical company focused on the development of novel oncology therapies, today announced that preclinical data from its ROR1-targeting cell therapy programs will be highlighted in a poster presentation at the European Hematology Association (EHA) 2022 Hybrid Congress. Oncternal's collaborators from the Karolinska Institutet in Stockholm, Sweden, have conducted a series of preclinical studies evaluating T cells as well as Natural Killer cells expressing Oncternal's ROR1 CAR containing the antigen binding region of zilovertamab. The ROR1 CAR mediated target recognition and cell activation when expressed in either T cells or NK cells. Also, ROR1 CAR-T cells demonstrated dose-dependent anti-tumor activity in a mantle cell lymphoma mouse model.

- **Poster Title:** Preclinical Evaluation of Zilovertamab-Based Anti-ROR1 Chimeric Antigen Receptors in NK and T Cells
- **Abstract Number:** P1435
  Session Title: Gene therapy, cellular immunotherapy and vaccination - Biology & Translational Research
- **Session Date and Time:** June 11, 2022 from 9:00am CEST

"Despite recent significant advances in treating hematological malignancies with current CAR-based cell therapies, certain limitations remain, such as treatment failures due to tumor antigen escape, and toxicities including induction of immunodeficiencies like B-cell aplasia. Patients are in need of more effective treatment options" said Evren Alici, M.D., Ph.D., Associate Professor and group leader of the Cell and Gene Therapy Group, HERM, Department of Medicine, Karolinska Institutet. "The ROR1-targeting cell therapies have shown strong activity in our lymphoma models. We are now working with our Oncternal colleagues to evaluate the therapies in models of other tumor indications. With our strong focus on NK cells, we are excited to further study ROR1 CAR-NK cells within our NextGenNK competence center."

"Based on the wide expression of ROR1 across tumor indications and its underlying importance in cancer biology as well as the safety and efficacy shown by zilovertamab in our clinical studies, we believe that targeting ROR1 using zilovertamab-based CAR cell therapy might offer a potentially effective treatment option for patients suffering from unmet medical needs, including heme malignancies and solid tumors" said James Breitmeyer, M.D., Ph.D., Oncternal's President and CEO. "In preclinical research, our zilovertamab-derived ROR1 cell therapies have demonstrated anti-tumor activity in a series of studies, including these presented here by our colleagues from the Karolinska Institutet. We are working closely with Professor Evren Alici and his team to evaluate our ROR1 cell therapies using T cells and NK cells, thus potentially laying the foundation for an off-the-shelf cell therapy program. Oncternal is proud to be an industry partner of the NextGenNK competence center located at the Karolinska Institutet. Near-term, we are looking forward to dosing the first patient with our autologous ROR1 CAR-T cell therapy, ONCT-808, in the coming months."

ONCT-808 is the Company's lead autologous ROR1-targeted CAR-T cell therapy program candidate. The program is advancing towards an Investigational New Drug (IND) application submission expected in mid-2022.

About Oncternal Therapeutics

Oncternal Therapeutics is a clinical-stage biopharmaceutical company focused on the development of novel oncology therapies for the treatment of patients with cancers that have critical unmet medical need. Oncternal pursues drug development targeting promising, yet untapped biological pathways implicated in cancer generation or progression, focusing on hematological malignancies and prostate cancer. The clinical pipeline includes zilovertamab an investigational monoclonal antibody designed to inhibit ROR1, a type I tyrosine kinase-like orphan receptor. Zilovertamab is being evaluated in a Phase 1/2 clinical trial in combination with ibrutinib for the treatment of patients with mantle cell lymphoma (MCL) and chronic lymphocytic leukemia (CLL), in investigator-initiated studies, including a Phase 1b clinical trial in combination with paclitaxel for the treatment of women with HER2-negative metastatic or locally advanced, unresectable breast cancer, in a Phase 2 clinical trial of zilovertamab in combination with venetoclax, a Bcl-2 inhibitor, in patients with relapsed/refractory CLL, and in a Phase 1b study of zilovertamab in combination with docetaxel in patients with metastatic castration-resistant prostate cancer (mCRPC). Oncternal is also developing ONCT-808, a chimeric antigen receptor T cell (CAR-T) therapy that targets ROR1, which is currently in preclinical development as a potential treatment for hematologic cancers and solid tumors. The early-stage pipeline also includes ONCT-534, a dual-action androgen receptor inhibitor (DAARI), that is in preclinical development as a potential treatment for castration resistant prostate cancers, including those with clinically important resistance to approved androgen receptor inhibitors. More information is available at https://oncternal.com/.

Forward-Looking Information

Oncternal cautions you that statements included in this press release that are not a description of historical facts are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplates," "believes," "estimates," "predicts," "potential" or "continue" or the negatives of these terms or other similar expressions. These statements are based on Oncternal's current beliefs and expectations. Forward-looking statements include statements regarding Oncternal's development programs, the evaluation of ROR1 cell therapies, and the timing of a potential IND submission and first patient dosed for ONCT-808. Forward-looking statements are subject to risks and uncertainties inherent in Oncternal's business, including risks associated with the clinical development and process for obtaining regulatory approval of Oncternal's product candidates, such as potential delays in the commencement, enrollment and completion of clinical trials; and other risks described in Oncternal's filings with the U.S. Securities and Exchange Commission. All forward-looking statements in this press release are current only as of the date hereof and, except as required by applicable law, Oncternal undertakes no obligation to revise or update any forward-looking statement, or to make any other forward-looking statements, whether as a result of new

information, future events or otherwise. All forward-looking statements are qualified in their entirety by this cautionary statement. This caution is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

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