Sorrento and Conkwest Announce Exclusive Global Collaboration Developing Next Generation Cancer Immunotherapy with “Off-the-Shelf” Chimeric Antigen Receptor–Tumor Attacking Natural Killer (CAR-taNK™) Cell Lines

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San Diego and Cardiff-by-the-Sea, CA (Dec. 19, 2014) — Sorrento Therapeutics, Inc. (NASDAQ: SRNE; Sorrento), an oncology company developing new treatments for cancer and associated pain, and Conkwest, Inc., a privately-held immuno-oncology company developing proprietary Neukoplast®, a Natural Killer (NK) cell-line based therapy, announced today that the companies have entered into a definitive agreement to jointly develop next generation CAR-taNK™ (pronounced as “Car-Tank”) immunotherapies for the treatment of cancer. The CAR-taNK technology platform combines Conkwest’s proprietary Neukoplast cell line with Sorrento’s proprietary G-MAB ® fully human antibody technology and CAR designs to further enhance the potency and targeting of Neukoplast. Under the terms of the agreement, Sorrento and Conkwest will establish an exclusive global strategic collaboration focused on accelerating the development of CAR-taNKs for the treatment of hematological malignancies as well as solid tumors. Both companies will jointly own and share development costs and revenues from any developed CAR-taNK products. As part of the transaction, Sorrento will make a $9 million strategic equity investment in Conkwest and provide $2 million in research credit payments towards the development of novel CAR-taNK cell lines.

Adoptive immunotherapy is widely regarded as one of the most impactful and innovative anti-cancer therapy breakthroughs. To date, T-cell based therapies, like CAR-T, have shown the most promise in select hematologic cancers, especially B-cell malignancies such as acute lymphoblastic leukemia (ALL) and chronic lymphocytic leukemia (CLL). They have also demonstrated outstanding therapeutic impact, including a high percentage of complete responses (CRs) in leukemia patients using CD19-CAR-T cells. While the clinical results seen have been promising, CAR-T therapies have been associated with some concerning side effects, especially potentially fatal cytokine-release syndrome that is mediated by interleukin-6 (IL-6) released from the T-cells and characterized by high fevers and sudden drops in blood pressure. Afflicted patients often require aggressive support in an intensive care unit setting. Additionally, most current CAR-T approaches rely upon patient derived T-cells, which require individualized processing, and are thus challenging with regard to commercial scalability, quality control, and consistency. Furthermore, this process relies on the ability to obtain sufficient numbers of the patients’ own immune T-cells to make adequate doses of CAR-T cells.

The “off-the-shelf” CAR-taNK approach will utilize Conkwest’s bioreactor-grown Neukoplast cell line, Neukoplast, as the immune effector cells. Among the many features that distinguish Neukoplast from patient derived T-cells are the lack of IL-6 expression (the most common mediator of cytokine release syndrome), an innate capability of destroying a broad range of cancer cells as well as cancer stem cells, and scalability with batch-to-batch consistency. These Neukoplast cells can be re-engineered in a virus-free process to express surface receptors using Sorrento’s G-MAB library to yield a stable line of effector cells that recognize and target specific antigens on tumor cells. The CAR-taNK cells can also be generated and produced in large quantities, thereby obviating the need for expensive, decentralized ‘biologistics’- a critical drawback of current CAR-T and dendritic cell therapies.

"We are extremely pleased with this strategic collaboration with Conkwest”, said Dr. Henry Ji, President and CEO of Sorrento. “With Sorrento’s expertise in antibody technology and diverse portfolio of fully human antibodies obtained from the G-MAB library, we believe we will be able to generate an army of stable CAR-taNK cell-lines, including but not limited to CD19-CAR-taNK™, PDL1-CAR-taNK™, PSMA-CAR-taNK™, and CD123 CAR-taNK™. It is our goal to rapidly move several of our CAR-taNK cell lines into the clinic to offer patients suffering from hematological malignancies and solid tumors an innovative immunotherapy to fight their cancers.”

"Conkwest has made important strides in establishing the safety and anti-cancer activity of Neukoplast in both pre-clinical and clinical phase I trials” said Dr. Barry Simon, President and CEO of Conkwest. “We have also unlocked the potential of CAR-modified Neukoplast cells in preclinical models. By drawing from Sorrento’s treasure trove of CARs derived from their G-MAB library, we believe this partnership will enable us to realize an important part of our vision of designing and commercializing next generation Neukoplast products re-engineered to express one or more proprietary CARs that would matter most to disease outcomes. We are very excited about this opportunity in joining our resources and talent and look forward to working with the Sorrento team on this next generation of cancer immunotherapies.”

About Sorrento Therapeutics, Inc.

Sorrento is an oncology company developing new treatments for cancer and associated pain. Sorrento's most advanced asset Cynviloq™, the next-generation nanoparticle paclitaxel, commenced its registrational trial in March 2014 and is being developed under the abbreviated 505(b)(2) regulatory pathway. Sorrento is also developing RTX, a non-opiate TRPV1 agonist currently in a Phase 1/2 study at the NIH to treat terminal cancer patients suffering from intractable pain. The Company has made significant advances in developing human monoclonal antibodies, complemented by a comprehensive and fully integrated ADC platform that includes proprietary conjugation chemistries, linkers, and toxic payloads. Sorrento's strategy is to enable a multi-pronged approach to combating cancer with small molecules, mono- and bi-specific therapeutic antibodies, ADCs and CAR-taNK cell-lines.

About Conkwest

Conkwest is an innovative immuno-oncology company that is developing and commercializing a portfolio of highly potent and selective cellular therapies for the treatment of cancers and serious viral infections. Conkwest's products are based on its proprietary cancer-killing cell line, Neukoplast – the only known cell line that can be commercialized as a direct, scalable, off-the-shelf, cancer-killing product. Neukoplast recognizes, binds and directly kills cells expressing stress ligands such as LFA-3, Heparin Sulfate, ICAM-1 and other stress induced proteins commonly found on cancers and virally infected cells. It has demonstrated broad anti-cancer activity both in vitro and in human clinical trials while sparing patients from the serious adverse reactions often seen with CAR-T based therapies. Cancer patients have been treated in phase I clinical trials at RUSH University, Frankfurt AM Main, Princess Margaret Hospital and University of Pittsburgh Cancer Institute. Preparations for the first U.S. phase II trial in Merkel Cell Carcinoma are currently underway. Conkwest's universal antibody-targeted CD16-Neukoplast, a re-engineered product which expresses both the high-affinity version of FcgammaR3 (CD16) and ER-IL2 to efficiently target therapeutic monoclonal antibodies such as Rituxan®, Herceptin® and Erbitux®, is presently in the preclinical stage of development. Conkwest also commercializes Neukopanel®, an Neukoplast based bioassay panel for the screening and qualification of therapeutic monoclonal antibody products, with revenue bearing licenses to many well-known large pharma and biotechnology companies.

Forward-Looking Statements

This press release contains forward-looking statements related to Sorrento Therapeutics, Inc. under the safe harbor provisions of Section 21E of the Private Securities Litigation Reform Act of 1995 and subject to risks and uncertainties that could cause actual results to differ materially from those projected. Forward-looking statements include statements about the expected achievements of the joint venture with Conkwest; the ability to develop proprietary stable CAR-taNK cell lines; anticipated timing for moving CAR-taNK cell lines into the clinic; Sorrento's Cynviloq registrational trial; Sorrento's advances made in developing RTX and human monoclonal antibodies using its proprietary G-MAB fully human antibody technology, if any; and other matters that are described in Sorrento's Annual Report on Form 10-K for the year ended December 31, 2013, and subsequent Quarterly Reports on Form 10-Q filed with the Securities and Exchange Commission, including the risk factors set forth in those filings. Investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this release and we undertake no obligation to update any forward-looking statement in this press release except as required by law.

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