Sorrento Therapeutics Logo

Sorrento Establishes Business Unit to Address Market Opportunity for Proprietary Water Soluble Cannabidiol (CBD) Formulations

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- Cannabidiol (CBD) material from virtually THC-free (<0.3%) hemp plants sources
- Excipients on the FDA approved GRAS (Generally Regarded As Safe) list
- Water soluble formulations with target concentration exceeding 5% (50 mg/mL)
- Development programs for pharmaceutical oral and injectable CBD in multiple disease indications, including but not limited to nervous system, autoimmune or inflammatory diseases and pain management applications
- Consumer Health applications and partnerships for high quality CBD concentrates intended for the growing consumer market needs

SAN DIEGO, April 16, 2019 (GLOBE NEWSWIRE) -- Sorrento Therapeutics, Inc. (NASDAQ: SRNE, "Sorrento") announced today that it has established a new business unit to focus on the market potential for its innovative water soluble cannabidiol (CBD) formulation technology.

Cannabidiol (CBD) has been under consideration within the pharmaceutical side of Sorrento for its interesting pharmacological properties and potential clinical benefits in multiple central nervous system, autoimmune or inflammatory disease and pain related indications.

Current CBD products face the limitations of oil-based formulations. Available oral CBD products, formulated in sesame or olive oil, can be associated with gastro-intestinal intolerance (diarrhea). It is anticipated that aqueous formulations would overcome this inconvenient characteristic. The challenge so far has been to achieve comparable concentrations between oil or water based formulations given the lipophilic properties of CBD.

Sorrento scientists have extensive experience developing innovative drug formulations to solubilize otherwise insoluble pharmaceutical compounds, utilizing GRAS (generally recognized as safe) excipients. Multiple promising water soluble formulations are currently in stability studies for the drug development program. Safety assessment and pharmacokinetic studies in animals are under way to support water soluble human CBD drug development (IND enabling studies). If bioequivalence is confirmed in animal studies, the selected water-based formulation would be eligible for further human studies towards an FDA approval using the 505(b)(2) pathway for any indication currently approved for CBD.

Some Sorrento pharmaceutical formulations have been identified as highly scalable and therefore great candidates for a consumer application. Sorrento scientists have also worked towards achieving formulations that are preservative free and with no known impurities. These pharmaceutical standards are often lacking in CBD consumer business products.

The Sorrento consumer-targeted CBD concentrate could range anywhere from 5% to 10% (50 - 100 mg/ml). This concentration range is believed to be among the highest in the industry, and potentially the highest concentration achieved for a water soluble formulation.

The Company has initiated discussions with global food and beverage producers that have a strong interest in non-oil based CBD concentrate products. Sorrento is also in the process of securing exclusive supply agreements with hemp growers and CBD purification facilities in preparation for significant demand of high quality hemp plant materials and water soluble and purified CBD.

“Without distracting from our pharmaceutical business, we have the ability to leverage another Sorrento innovative technology – this time from our formulation experts – and make it available to the broader consumer market” stated Dr. Henry Ji, CEO and Chairman of Sorrento Therapeutics. “Longer-term, we may consider spinning off our CBD consumer business into an independently operated company if appropriate, while our research and clinical development team continues to explore the potential pharmaceutical applications of cannabidiol (CBD) for the medical markets”.

About Sorrento Therapeutics, Inc.

Sorrento is a clinical stage, antibody-centric, biopharmaceutical company developing new therapies to turn malignant cancers into manageable and possibly curable diseases. Sorrento's multimodal multipronged approach to fighting cancer is made possible by its extensive immuno-oncology platforms, including key assets such as fully human antibodies (“G-MAB™ library”), clinical stage immuno-cellular therapies (“CAR-T”), intracellular targeting antibodies (“iTAbs”), antibody-drug conjugates (“ADC”), and clinical stage oncolytic virus (“Seprehvir®”).

Sorrento's commitment to life-enhancing therapies for cancer patients and Osteoarthritis (OA) patients is also demonstrated by its effort to advance Resiniferatoxin (“RTX”), a first-in-class (TRPV1 agonist) non-opioid pain management small molecule, ZTlido® and SP-102, a non-opioid corticosteroid gel. Resiniferatoxin is completing a Phase 1b trial in terminal cancer patients and a Phase 1b trial for OA. ZTlido was approved by US FDA on 02/28/18. SP-102 (Semdexa™) is in Phase 3 pivotal study for the treatment of lumbar radicular pain/sciatica.

For more information visit www.sorrentotherapeutics.com

More information on Sorrento clinical trials can be found at www.clinicaltrials.gov

Forward-Looking Statements

This press release and any statements made for and during any presentation or meeting contain 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 regarding the expectations for Sorrento's and its subsidiaries' technologies and product candidates, including, but, not limited to, Cannabidiol (CBD), the potential markets for CBD, expected concentration ranges, Sorrento’s discussions with global food and beverage producers, hemp growers and CBD purification facilities and any spinoff of Sorrento’s CBD consumer business unit. Risks and uncertainties that could cause our actual results to differ materially and adversely from those expressed in our forward-looking statements, include, but are not limited to: risks related to Sorrento's and its subsidiaries' technologies and prospects, including, but not limited to, CBD consumer business and potential spinoffs; risks related to securing

exclusive supply arrangements with Hemp growers and CBD production facilities, regulatory approvals for pharmaceutical CBD and conducting and obtaining results of clinical trials, the clinical and commercial success of CBD, including water soluble formulations; the viability and success of using CBD for consumers and other risks that are described in Sorrento's most recent periodic reports filed with the Securities and Exchange Commission, including Sorrento's Annual Report on Form 10-K for the year ended December 31, 2018, 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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