Sorrento Therapeutics Logo

STI-1499, A Potent Anti-SARS-CoV-2 Antibody, Demonstrates Ability To Completely Inhibit In Vitro Virus Infection In Preclinical Studies

May 15, 2020

STI-1499 Antibody has demonstrated in preclinical experiments (full results will be submitted to a peer-reviewed publication shortly):
- 100% inhibition of SARS-CoV-2 virus infection of healthy cells after four days incubation
- Specific binding to S1 subunit of the SARS-CoV-2 Spike protein and complete blockade of its interaction with ACE2 receptor

SAN DIEGO, May 15, 2020 /PRNewswire/ -- Sorrento Therapeutics, Inc. (Nasdaq: SRNE, "Sorrento") announced today that its anti-SARS-CoV-2 antibody, STI-1499, demonstrated 100% inhibition of SARS-CoV-2 virus infection in an *in vitro* virus infection experiment at a very low antibody concentration.

As recently announced, Sorrento aims to generate an antibody cocktail product that would act as a "protective shield" against SARS-CoV-2 coronavirus infection and remain effective even if virus mutations render a single antibody therapy less effective over time.

Sorrento has been diligently screening billions of antibodies in its proprietary G-MAB ™fully human antibody library and has so far identified hundreds of antibody candidates that bind the S1 subunit of the SARS-CoV-2 Spike protein. Approximately one dozen of these antibodies have demonstrated the ability to block the S1 protein's interaction with human angiotensin-converting enzyme 2 (ACE2), the receptor used for viral entrance into human cells. These blocking antibodies were further tested for their ability to inhibit SARS-CoV-2 virus infection in an *in vitro* SARS-CoV-2 virus infection model pursuant to a preclinical testing agreement for COVID-19 therapeutic candidates that was previously announced on March 31, 2020 (Sorrento Therapeutics).

Among the antibodies showing neutralizing activity, one antibody stood out for its ability to completely block SARS-CoV-2 infection of healthy cells in the experiments. STI-1499 completely neutralized the virus infectivity at a very low antibody dose, making it a prime candidate for further testing and development. Initial biochemical and biophysical analyses also indicate STI-1499 is a potentially strong antibody drug candidate.

Sorrento has determined STI-1499 will likely be the first antibody in the antibody cocktail (COVI-SHIELD ™) it is developing, as recently announced. STI-1499 is also expected to be developed as a stand-alone therapy, (COVI-GUARD ™) because of the high potency it has exhibited in experiments to date. Sorrento plans to request priority evaluation and accelerated review from regulators to determine the best pathway to make any potential treatment available as soon as possible. Sorrento's existing state-of-the-art cGMP antibody manufacturing facility in San Diego is expected to be able to produce up to two hundred thousand doses per month and the Company intends to produce a million doses at risk while seeking FDA approval for any STI-1499 product candidate. The Company is seeking potential government support and pharmaceutical partners to further scale up STI-1499 manufacturing capacity with a goal of potentially providing tens of millions of doses in a short period of time to meet the vast projected demand.

"Our STI-1499 antibody shows exceptional therapeutic potential and could potentially save lives following receipt of necessary regulatory approvals. We at Sorrento are working day and night to complete the steps necessary to get this product candidate approved and available to the waiting public," stated Dr. Henry Ji, Chairman and CEO of Sorrento.

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", "DAR-T"), antibody-drug conjugates ("ADCs"), and clinical stage oncolytic virus ("Seprehvir®"). Sorrento is also developing potential coronavirus antiviral therapies and vaccines, including COVIDTRAP™, ACE-MAB™, COVI-MAB ™, COVI-GUARD ™, COVI-SHIELD ™and COVI-CELL ™. Sorrento's commitment to life-enhancing therapies for patients is also demonstrated by our effort to advance a first-in-class (TRPV1 agonist) non-opioid pain management small molecule, resiniferatoxin ("RTX"), and ZTlido® (lidocaine topical system) 1.8% for the treatment of post-herpetic neuralgia. RTX is completing a phase IB trial for intractable pain associated with cancer and a phase 1B trial in osteoarthritis patients. ZTlido® was approved by the FDA on February 28, 2018.

For more information, visit www.sorrentotherapeutics.com

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 potency and potential blocking capabilities of STI-1499 and the impact on SARS-CoV-2, the SARS-CoV-2 Spike protein and viral entry; the expected

length of any antiviral protection provided by STI-1499; the potential administration and applications of STI-1499; the potential for STI-1499 to protect against future mutations of coronavirus; the preclinical testing of STI-1499; the safety and efficacy of STI-1499; the readiness of Sorrento's cGMP facilities for large-scale production of STI-1499 for commercialization and Sorrento's expected capacity to produce drug substance; the expected time needed for Sorrento's cGMP facilities to produce doses of STI-1499; the potential inclusion of STI-1499 in the antibody cocktail (COVI-SHIELD™) that Sorrento is developing and its development as a stand-alone therapy; the therapeutic potential of STI-1499 for SARS-CoV-2 and COVID-19 disease and any potential ability to save lives; and Sorrento's potential position in the antiviral industry. 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', affiliates' and partners' technologies and prospects and collaborations with partners, including, but not limited to risks related to conducting pre-clinical studies and seeking IND regulatory approval for STI-1499; conducting and receiving results of clinical trials for STI-1499; the clinical and commercial success of STI-1499 against preventing and treating SARS-CoV-2 virus infections; the viability and success of STI-1499 in anti-viral therapeutic areas, including coronaviruses; clinical development risks, including risks in the progress, timing, cost, and results of clinical trials and product development programs; risk of difficulties or delays in obtaining regulatory approvals; risks that clinical study results may not meet any or all endpoints of a clinical study and that any data generated from such studies may not support a regulatory submission or approval; risks of manufacturing and supplying drug product; risks related to leveraging the expertise of its employees, subsidiaries, affiliates and partners to assist the company in the execution of its COVID-19 therapeutic product candidates strategies; risks related to Sorrento's debt obligations; risks related to the global impact of COVID-19; 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, 2019, 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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