Sona Nanotech Provides Interim Results of Dalhousie Efficacy Study

April 12, 2024 8:35 AM EDT | Source: Sona Nanotech Inc. (/company/5500/Sona-Nanotech-Inc.)

Halifax, Nova Scotia--(Newsfile Corp. - April 12, 2024) - Sona Nanotech Inc. (CSE: SONA) (OTCQB: SNANF) (the "Company" or "Sona") is pleased to announce further positive interim results from its study with The Giacomantonio Immuno-Oncology Research Group at Dalhousie University (the "Study"). The Company was provided with data from the Study that indicates the response in a pre-clinical triple negative breast cancer model treated with the combination of Sona's targeted hyperthermia therapy ("THT") and interleukin-2 ("IL-2"), a standard immunotherapy, is statistically significantly superior to results observed from treatment with either agent individually or the control group. This second phase of the Study has documented that, in a cohort of six animals, 6/6 of treated triple negative breast cancer, the most aggressive and therapy resistant form, mouse tumors bearing gold nanorods and IL-2 responded to the combination therapy, resulting in a flattening of the tumor growth curves, as shown in the below graph. The generation of hyperthermia involved exposing tumors previously injected intratumorally with Sona's gold nanorods and IL-2 to a single dose of near infrared light.

Study Principal Investigator and Sona Advisory Board member, Dr. Carman Giacomantonio, comments, "*To date, this study demonstrates that Sona's THT therapy shrinks tumors, but early data also suggests that it may increase the efficacy of established therapies based on the synergistic effect it had when combined with IL-2, with results that went well beyond our expectations. Also, as with our first phase of study, in all cases in this second phase we observed tumor shrinkage in distant, untreated tumors consistent with an abscopal response, supporting the hypothesis that THT promotes a systemic immunogenic response which we will continue to study.*

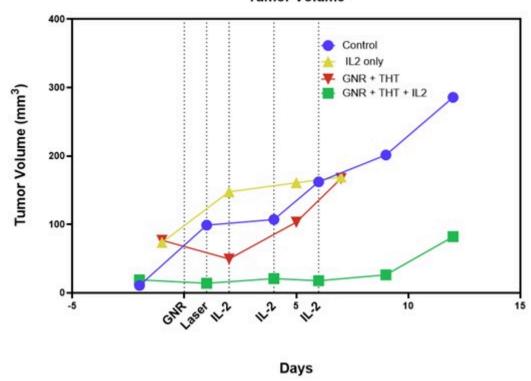
In these encouraging initial results, Sona's THT therapy appears to cause cancer cell death in this pre-clinical mouse model, changing the tumor microenvironment and initiating novel, and more effective, tumor-specific immunity."

Sona CEO, David Regan, commented, "We are very encouraged by the evidence indicating that Sona's THT therapy significantly enhances the efficacy of a standard immuno-oncology agent in this mouse model. We look forward to continuing the pre-clinical work necessary to move this into human trials. While current standards of care involving immune therapy can achieve extraordinary results in treating cancer, they work in fewer than half of patients. Sona aims to help these immuno-oncology drugs to work better, enabling them to improve response rates with a view to ultimately increasing survivability for those suffering from cancer."

The Study's next step is to assess the therapy's ability to generate similar results in melanoma and colorectal cancer mouse models and determine the extent to which it serves as an immune modulator for distant, untreated tumors in these cancers. Next, regulatory permission to conduct human trials requires certain satisfactory pre-clinical safety and biocompatibility studies, amongst other potential work. The Company has received guidance on its pre-clinical study plan from both the Food and Drug Administration and its EXCITE International (see press release dated September 5, 2023 (https://api.newsfilecorp.com/redirect/JgX7OtBY3n)) panel of senior physicians and payor organization representatives in the United States.

The results discussed in this release are preliminary and have not been subject to peer review. Upon completion, the Company expects that the full Study will be submitted for peer review and scientific journal publication.

Tumor Volume



(https://images.newsfilecorp.com/files/5500/205242_b303a8e754ed0853_001full.jpg)

Dalhousie Study Interim Results - Tumor Growth in Triple Negative Breast Cancer Mouse Model (N = 6)

To view an enhanced version of this graphic, please visit: https://images.newsfilecorp.com/files/5500/205242_b303a8e754ed0853_001full.jpg (https://images.newsfilecorp.com/files/5500/205242_b303a8e754ed0853_001full.jpg)

Contact:

David Regan, CEO

+1-902-536-1932

david@sonanano.com (mailto:david@sonanano.com)

About Sona Nanotech Inc.

Sona Nanotech, a nanotechnology life sciences company, is developing Targeted Hyperthermia™, a photothermal cancer therapy, which uses therapeutic heat to treat solid cancer tumors. The heat is delivered to tumors by infrared light that is absorbed by Sona's gold nanorods in the tumor and re-emitted as heat. Therapeutic heat (41-48°C) stimulates the immune system, shrinks tumors, inactivates cancer stem cells, and increases tumor perfusion - thus enabling drugs to reach all tumor compartments more effectively. The size, shape, and surface chemistry of the nanorods target the leaky vasculature of solid tumors, and the selective thermal sensitivity of tumor tissue enables the therapy to deliver clean margins. Targeted Hyperthermia promises to be safe, effective, minimally invasive, competitive in cost, and a valuable adjunct to drug therapy and other cancer treatments.

Sona has developed multiple proprietary methods for the manufacture of gold nanoparticles which it uses for the development of both cancer therapies and diagnostic testing platforms. Sona Nanotech's gold nanorod particles are cetyltrimethylammonium ("CTAB") free, eliminating the toxicity risks associated with the use of other gold nanorod technologies in medical applications. It is expected that Sona's gold nanotechnologies may be adapted for use in applications, as a safe and effective delivery system for multiple medical treatments, subject to the approval of various regulatory boards, including Health Canada and the FDA.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION: This press release includes certain "forward-looking statements" under applicable Canadian securities legislation, including statements regarding the anticipated applications of Targeted Hyperthermia Therapy, the Dalhousie study, future publication of study results, Sona's preclinical study plans, the potential impact of the planned studies and its product development plans. Forward-looking statements are necessarily based upon a number of assumptions or estimates that, while considered reasonable, are subject to known and unknown risks, uncertainties, and other factors which may cause the actual results and future events to differ materially from those expressed or implied by such forward-looking statements, including the risk that Sona may not be able to successfully obtain sufficient clinical and other data to submit regulatory submissions, raise sufficient additional capital, secure patents or develop the envisioned therapy, and the risk that THT may not prove to have the benefits currently anticipated. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. Sona disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Not for distribution to United States newswire services or for dissemination in the United States



To view the source version of this press release, please visit https://www.newsfilecorp.com/release/205242 (https://api.newsfilecorp.com/redirect/Gmxg5U2WX8)

SOURCE: Sona Nanotech Inc. (/company/5500/Sona-Nanotech-Inc.)

Learn more about Bill C-18 (/BillC18.php) and how it will affect Canadian users when viewing news online.