Sona's Therapy Shows Significant Preclinical Efficacy in Second Cancer

Halifax, Nova Scotia--(Newsfile Corp. - June 20, 2024) - Sona Nanotech Inc. (CSE: SONA) (OTCQB: SNANF) (the "Company" or "Sona") is pleased to announce that its targeted hyperthermia therapy ("THT") demonstrated positive results in a second preclinical cancer model. Findings just presented at the 2024 STING & TLR Targeted Therapies Summit for immunotherapies in San Diego, California, show that Sona's THT achieved responses in a preclinical melanoma model equal to that which was recently reported from its triple negative breast cancer study. THT effectively treated melanoma tumors in all animals when administered on its own. Further, when THT was combined with doses of interleukin-2 ("IL-2"), a standard immunotherapy, a synergistic effect was shown whereby greater treatment response, measured by tumor volume reduction, was achieved in comparison to either approach alone.

This second cancer model portion of the Study has documented that, in a cohort of seven animals, 7/7 of treated melanoma cancer 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 first graph below. 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. When a cohort of three mice were administered only THT but with a second dose of near infrared light, a further pronounced reduction in tumor size was demonstrated (See second graph below). Work continues to assess the extent to which the therapy caused a systemic change to each animal's innate immune system which could portend longer term benefits.

Sona's Chief Medical Officer and the study's principal investigator, Dr. Carman Giacomantonio, comments, "Again, we are encouraged by the strength of the results of Sona's THT therapy alone and when combined with a standard cancer immunotherapy, this time in a B16 murine melanoma model, where this combination therapy significantly outperformed either approach on its own, suggesting a true synergistic effect. What also stands out in this newdata, however, is that when treated with an additional, second dose of light energy, Sona's THT therapy alone resulted in near clearance of the tumors, highlighting its potential value as a monotherapy."

Sona CEO, David Regan, commented, "Demonstrating the efficacy of our therapy in a second type of solid cancer in our preclinical efficacy study highlights the potential for Sona's therapy to be applied to multiple solid cancer types in humans. Our initial indication in humans is intended to be for late stage, irresectable melanoma - a type of cancer for which few current therapies have any effect - so these most recent data are important and very encouraging to our efforts to get Sona's therapy into the clinic."

Once the full biomarker analysis and interpretation for the melanoma model has been received, the Company will assess the next steps to be taken for the development towards a first-in-human clinical study.

Any regulatory permission to conduct human trials would require certain satisfactory additional studies, not necessarily limited to pre-clinical safety and biocompatibility studies. 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) 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.





To view an enhanced version of this graphic, please visit: <u>https://images.newsfilecorp.com/files/5500/213714_170f009274478b36_001full.jpg</u>



Tumor Volume - B16

THT Melanoma Preclinical Study - Different Laser Doses

To view an enhanced version of this graphic, please visit: <u>https://images.newsfilecorp.com/files/5500/213714_170f009274478b36_002full.jpg</u>

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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 reemitted 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 and potential opportunities of Targeted Hyperthermia Therapy, Sona's preclinical and clinical study plans, future patent filings 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.

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