Sona Nanotech Updates on Dalhousie Efficacy Study and New NCL Results

Halifax, Nova Scotia--(Newsfile Corp. - March 25, 2024) - Sona Nanotech Inc. (CSE: SONA) (OTCQB: SNANF) (the "Company" or "Sona") announces positive interim results from its study with The Giacomantonio Immuno-Oncology Research Group at Dalhousie University (the "Study"). An update received by the Company indicates that all tumors treated within the Study to date with a single Targeted Hyperthermia Therapy ("THT") treatment shrunk within the first 24 hours, with an average reduction in size of 80% compared to matched controls.

Study Principal Investigator, Dr. Carman Giacomantonio, comments, "*Our initial assessment documented that in cohorts of seven animals, 7/7 of treated triple negative breast cancer mouse tumors bearing gold nanorods responded with an average reduction in tumor volume of 80% following a single treatment with near infrared light in comparison with untreated 'control' tumors. Interestingly, in all cases we observed responses (tumor shrinkage) in distant, untreated tumors supporting the hypothesis that our observations are consistent with systemic immunogenic responses. This observation will be a significant focus of our research going forward. While we are encouraged by these initial results, there is still significant work to be completed. The studies are designed to enable and identify statistical significance which will be achieved with the completion of the full Study*."

The current study assesses the THT efficacy of using Sona's gold nanorods for their combined effect both in generating Targeted Hyperthermia in tumors exposed to near infrared light and as an immune modulator locally and in distant, untreated tumors. This portion of the study will continue to look for elevated immune activation and anti-tumor responses within the mouse models of breast cancer, melanoma and colorectal cancer, using THT alone and in combination with selected immunological agents commonly used in current cancer treatment protocols.

Also, the Company recently received its final report from the U.S. National Cancer Institute's ("NCI") Nanotechnology Characterization Laboratory ("NCL") of its polymer-coated gold nanorods, which included a third assessment of material from Sona, bringing the number of batches of Sona material validated by the NCL to a total of seven. The most recent assessment found improved physical uniformity (with all three batches measuring within 2.1 nanometers in length of each other) and greater purity when compared to past batches. These improvements have been achieved via certain manufacturing process improvements developed with the support of the NCL, and which, in addition to improving purity, may result in reduced costs of scaled manufacturing. This final report also confirmed that the data between all lots of the material that have been assessed are in general agreement.

The studies conducted by NCL included endotoxin testing, hydrodynamic size by DLS, size and shape distribution by TEM, zeta potential, total gold concentration by inductively coupled plasma mass spectrometry (ICP-MS), total and free PEG and total surfactant concentration using RP-HPLC-CAD, and total gold concentration using ICP-MS.

The NCL was established by the National Cancer Institute ("NCI") to accelerate the progress of nanomedicine by providing preclinical characterization and safety testing of nanoparticles. The NCL is a collaborative effort between NCI, the U.S. Food and Drug Administration ("FDA"), and the National Institute of Standards and Technology ("NIST"). It is anticipated that the NCL report could be used in a future potential regulatory application for an investigational device exemption ("IDE") to support the biocompatibility of Sona's gold nanorods.

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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 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, 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.

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