



“Breast Cancer Research” Publishes Key Study; Cancer-Sensing Technology Is Radiation-Free

Technology Developed By The Senior Scientific Unit Of Manhattan Scientifics

October 31, 2011

ALBUQUERQUE, N.M.--Manhattan Scientifics (OTCBB: MHTX) announced today that “Breast Cancer Research,” an international, peer-reviewed online journal, has published results of a study using Senior Scientific’s nanomagnetic technology. Performed in conjunction with the University of New Mexico Health Sciences Center (UNMHSC), the study showed the technology was 100 times more sensitive than mammography x-ray imaging, enabling detection of cancer significantly earlier than is currently possible.

The nanomagnetic technology was developed at Senior Scientific with funding from the Small Business Innovative Research Grant program from the National Institutes of Health.

Senior Scientific was recently acquired by Manhattan Scientifics to pursue commercial and clinical applications of the technology. Gerald Grafe, president of Senior Scientific, explained, “We have seen very promising results in locating and measuring breast cancer, ovarian cancer and prostate cancer, and in monitoring of the immune system. We are privileged to work with excellent collaborators at UNMHSC and at the Center for Integrated Nanotechnologies at Sandia National Laboratories. We are pleased that this collaboration and the expertise provided by Dr. Helen Hathaway have demonstrated the power of our technology as applied to breast cancer.”

Highlights of the “Breast Cancer Research” Release follow:

High Tech Detection of Breast Cancer Using Nanoprobes and SQUID

Mammography saves lives by detecting very small tumors. However, it fails to find 10-25% of tumors and is unable to distinguish between benign and malignant disease. New research published in BioMed Central’s open access journal Breast Cancer Research has highlighted a new and more sensitive method using tumor-targeted magnetic nanoprobes and superconducting quantum interference device (SQUID) sensors, the core of Senior Scientific’s technology.

A team of researchers from the University of New Mexico School of Medicine and Cancer Research and Treatment Center, Senior Scientific LLC, and the Center for Integrated Nanotechnologies facility at Sandia National Laboratories created nanoprobes by attaching iron-oxide magnetic particles to antibodies against HER-2, a protein expressed in 30% of breast cancer cases. Using these tiny protein-iron particles the team was able to distinguish between cells with HER-2 and those without and were able to find HER-2 cancer cells in biopsies from mice. In their final test the team used a synthetic breast to determine the potential sensitivity of their system.

Dr Hathaway explained, “We were able to accurately pinpoint 1 million cells at a depth of 4.5 cm. This is about 1000x fewer cells than the size at which a tumor can be felt in the breast and 100x more sensitive than mammographic x-ray imaging. While we do not expect the same level of nanoparticle uptake in the clinic, our system has an advantage in that dense breast tissue, which can mask traditional mammography results, is transparent to the low-frequency magnetic fields detected by the SQUID sensors.”



Future refining of the system could allow not only tumors to be found but to be classified according to protein expression (rather than waiting for biopsy results). This in turn could be used to predict disease progression and refine treatment plans and so improve patient survival.

A copy of the abstract can be found at this link:

<http://breast-cancer-research.com/content/pdf/bcr3050.pdf>

Recently cancer-detecting nanotechnology developed by Manhattan Scientifics (MHTX) subsidiary Senior Scientific was accepted into the GE Healthymagination challenge to find new innovative ways to fight cancer. Please visit this page and recommend Senior Scientific's work to the judges by becoming a supporter

<http://challenge.healthymagination.com/health/Nanomagnetic-technology-finds-and-counts>

About Manhattan Scientifics

Manhattan Scientifics Inc. (www.mhtx.com) is located in New Mexico, New York and Montreal. It is focused on technology transfer and commercialization of disruptive technologies in the nano medicine space. The company is presently developing commercial medical prosthetics applications for its ultra-fine grain metals and plans to commercialize the cancer research work and nano medical applications developed by Senior Scientific LLC, a unit of the Company.

Forward-looking statement

This press release contains forward-looking statements. Such forward-looking statements are subject to a number of risks, assumptions and uncertainties that could cause the Company's actual results to differ materially from those projected in such forward-looking statements. Forward-looking statements speak only as of the date made and are not guarantees of future performance. We undertake no obligation to publicly update or revise any forward-looking statements.

Contacts

Manhattan Scientifics, Inc.

Marvin Maslow, 917-923-3300

Email: marvin@mhtx.com

U.S. & Canada Investor Relations:

Hawk Associates Frank Hawkins, 305-451-1888

Email: f.hawkins@hawkassociates.com