SonaCare Medical to Integrate SmartTarget Image Registration and Fusion Software from University College London into Industry Leading Prostate HIFU System

The Associated Press

SonaCare Medical, a global leader in minimally invasive High-Intensity Focused Ultrasound (HIFU) technologies, and UCL Business PLC (UCLB), a leading technology transfer company that supports and commercializes research and innovations from UCL (University College London), today announced a partnership to integrate SmartTarget image registration and fusion software into SonaCare Medical's innovative HIFU systems.

"SmartTarget software technology combines advanced soft-tissue modeling and multimodal image registration techniques to compensate for prostate deformation and provide a clinically practical solution to MR-ultrasound fusion for high-accuracy targeted therapy," said Dean Barratt, PhD, Senior Lecturer at the UCL Centre for Medical Image Computing. "Working with SonaCare Medical is an important development since it provides an exciting opportunity to rapidly integrate SmartTarget into a market-leading commercial product, Sonablate@500, and leverage UCL's clinical expertise in tissue-preserving focal HIFU therapy." Enabling image-guided targeting of prostate tumors, SmartTarget combines and displays diagnostic information from ultrasound, magnetic resonance imaging (MRI), and previous biopsies to enable targeted prostate biopsy and treatment. SmartTarget is based on breakthrough image analysis algorithms developed at the UCL Centre for Medical Image Computing and has undergone extensive clinical evaluation as part of clinical research studies led by Professor Mark Emberton, MD, Professor of Interventional Oncology and Director of the Division of Surgery and Interventional Science at UCL. More than 40 prostate cancer patients have been successfully treated using Sonablate500 with the aid of SmartTarget as part of the INDEX Trial. The system is also used within other UCL-led clinical trials that focus on targeted prostate biopsy.

"While tissue preserving strategies have been used successfully in other solid organ cancers, adoption in prostate cancer has been hampered by limitations in diagnosing and localizing clinically significant prostate cancers," said Mark Carol, M.D., Chief Development Officer for SonaCare Medical. "Designed to enable targeted treatment of clinically significant prostate cancers and to reduce treatment-related side effects, the development of SmartTarget image registration and fusion technology is a tremendous breakthrough that may truly transform prostate cancer care." The SmartTarget project, led by Dr. Barratt and Professor Emberton, and funded by the UK Department of Health and Wellcome Trust's Health Innovation Challenge Fund, focuses on translating technology which combines state-of-the-art diagnostic imaging with advanced image guidance technology to provide doctors

with information on cancer location, size and shape automatically so that it can be used to direct and guide prostate biopsy and minimally-invasive cancer treatments. In particular, the SmartTarget system exploits MRI, which can detect and characterize clinically important cancers very accurately.

Published results from UCL demonstrate that MRI-US registration can localize lesions on the Sonablate500 system without interfering with the standard surgical workflow. This not only has potential for improved accuracy of focal treatments, but may also improve diagnostic sampling strategies for prostate cancer. According to UCL researchers, fewer, and better, biopsies could be performed on suspicious lesions seen on pre-biopsy, with potentially increased diagnostic rates of clinically significant cancer, and reduced rates for over-diagnosis of clinically insignificant disease.

"Over the past five years, UCL has performed pioneering research in image registration and fusion technology that has led to significant advances in the clinical validation and adoption of focal HIFU," said Mike Klein, CEO for SonaCare Medical. "We are proud to work together to expand access to targeted treatment for prostate cancer through the integration of SmartTarget software into SonaCare Medical's HIFU industry-leading HIFU systems." About UCL Business PLC UCLB is a leading technology transfer company that supports and commercialises research and innovations arising from UCL, one of the UK's top research-led universities. UCLB has a successful track record and a strong reputation for identifying and protecting promising new technologies and innovations from UCL academics. UCLB has a strong track record in commercialising medical technologies and provides technology transfer services to UCL's associated hospitals; University College London Hospitals, Moorfields Eye Hospital, Great Ormond Street Hospital for Children and the Royal Free London Hospital. It invests directly in development projects to maximise the potential of the research and manages the commercialisation process of technologies from laboratory to market.

UCLB supports UCL's Grand Challenges of increasing UCL's positive impact on and contribution to Global Health, Sustainable Cities, Intercultural Interaction and Human Wellbeing.

For further information, please visit www.uclb.com

About UCL (University College London)
Founded in 1826, UCL was the first English university established after Oxford and Cambridge, the first to admit students regardless of race, class, religion or gender, and the first to provide systematic teaching of law, architecture and medicine. We are among the world's top universities, as reflected by performance in a range of international rankings and tables. UCL currently has 24,000 students from almost 140 countries, and more than 9,500 employees. Our annual income is over >800 million. www.ucl.ac.uk | Follow us on Twitter @uclnews

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minds in biomedical research and the medical humanities. The Trust's breadth of support includes public engagement, education and the application of research to improve health. It is independent of both political and commercial interests. For more information, visit www.wellcome.ac.uk.

About SonaCare Medical
SonaCare Medical, a privately held, venture-backed healthcare company is a world leader in minimally invasive high intensity focused ultrasound (HIFU) technologies. SonaCare Medical is committed to developing technologies for urological indications that offer precise and innovative procedures that can control cancer and reduce potential quality of life altering side effects. SonaCare Medical, with its subsidiary Focus Surgery, Inc., designs and manufactures high intensity focused ultrasound (HIFU) medical devices, including the following: Sonablate@ 450 which is investigational in the U.S. and being studied in a pivotal FDA clinical trial as a possible treatment for recurrent prostate cancer in patients treated previously with external beam radiation therapy; Sonablate@ 500 which has CE Marking and is, or has been, approved for use to treat prostate cancer in more than 30 countries outside the U.S.; and Sonatherm@ laparoscopic HIFU surgical ablation system which is 510(k) cleared in the U.S. The FDA has made no decision as to the safety or efficacy of Sonablate@ 450 or 500. In the event Sonablate@ 450 is approved by the FDA for use in the U.S., there is no assurance that instructions for use or the specifications of the device will be the same for treatment approved or authorized in other countries outside of the U.S.

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