C4 Imaging's NOVA Fiducial Marker Offers Advantages in Accurate Radiation and Proton Therapy Treatment

Houston, Texas, (July 9, 2024) – C4 Imaging LLC is pleased to report that an article published in Cancers[1] concluded that NOVA is the first non-metallic, MRI-positive signal fiducial marker that significantly reduces dose perturbation while minimizing artifacts in CT and MR imaging processes, contributing to more accurate treatment planning. These findings demonstrate the potential advantages of NOVA fiducial markers over metallic-based markers for improved radiotherapy in clinical practice.[2]

Image guidance utilizing fiducial markers is an important tool used to reduce margins of uncertainty while planning radiation and proton therapy treatment. This enables treatment to be focused on the cancer, rather than on surrounding healthy anatomy, optimizing cure rates, and minimizing the risk of side effects. Most fiducial markers contain metal which can cause artifacts on MR images. NOVA Fiducial Markers contain a proprietary, patented combination of non-metallic materials that eliminate metallic artifacts.

Radiation Oncologists and their teams often combine MR and CT images, referred to as co-registration or image fusion, to precisely plan where therapy will be targeted. With NOVA they are able to co-register MR and CT images without the concern of metal artifacts, and subsequently utilize NOVA's CT or x-ray imaging properties for alignment throughout the course of each patient's treatment.

"This publication demonstrates the important role MRI plays in managing cancer, ensuring high quality treatment planning, as well as minimizing potential side effects," said Andrew Bright, President of C4 Imaging. "It also re-affirms our goal of developing cutting edge products that eliminate the need for metal fiducials and their MR associated artifacts from radiation and proton therapy."

About C4 IMAGING

C4 imaging creates breakthrough MRI-visible markers designed to optimize cancer treatment by improving tumor localization and reducing reliance on CT, resulting in precise planning and enhanced outcomes.

For further information:
Andrew Bright
abright@c4imaging.com
www.c4imaging.com

Reference:
1 A peer-reviewed open access journal of oncology, published semimonthly online by MDPI.
2 Wang L, et al. A Novel Polymer-Encapsulated Multi-Imaging Modality Fiducial Marker with Positive Signal Contrast for Image-Guided Radiation Therapy. Cancers 2024, 16, 625.