



NOVA™

FIDUCIAL MARKER



NOVA™ — Illuminates the Void

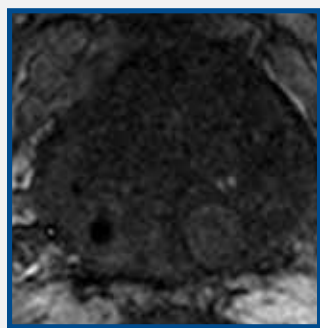
True MRI Visibility – Stop Relying on Signal Voids

Stop relying on hard to identify “black holes” (signal voids or artifacts) created by metallic fiducial markers when imaged with MRI.

Allows precise MRI and CT co-image registration for radiotherapy and proton therapy planning

EXCELLENT IMAGING

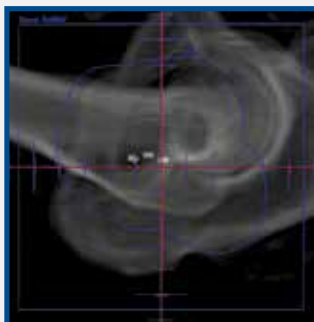
- Does not depend on an MRI signal void as is common with metal fiducial markers
- Minimal artifacts, enabling physicians to contour small lesions
- Positive image clearly visible on CT, kV, CBCT, and MRI



MR



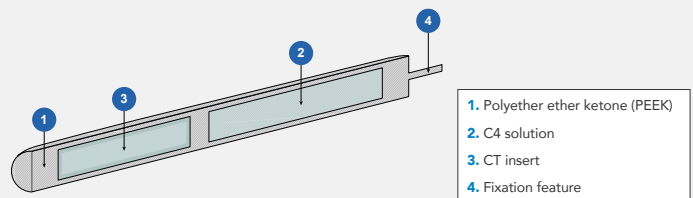
CT



kV

CONVENIENT AND EASY TO USE

- Easy to use for imaging of soft tissue sites
- MRI and CT for multi-modality co-image registration and treatment planning
- One marker suitable for multiple treatment paths
- Low proton beam dose perturbation
- Use at the time of MR/Ultrasound fusion biopsy for tumor localization
- Maximizes MRI utility for radiotherapy and proton therapy





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NOVA Proton Beam Dose Perturbation¹

Orientation	Perturbation Appearing Depth		Maximum Perturbation and Depth		Total Perturbation Depth	
	Perpendicular	Parallel	Perpendicular	Parallel	Perpendicular	Parallel
	-1.0% at 2 mm	-6.7% at 0 mm	-2.6% at 5 mm	-7.8% at 2 mm	10 mm	10 mm

NOVA vs Traditional Metallic Markers

	NOVA	Metallic
MARKS OF EXCELLENCE		
Positive MRI signal	●	
No metal artifacts	●	
Minimal streak artifacts in CT	●	
Minimal streak artifacts in CBCT	●	
X-ray imaging	●	●
Designed with synthetic CT in mind	●	
Minimal proton beam perturbation	●	



C4 Imaging develops medical devices that enable clinicians to perform image-guided procedures more accurately. The company's proprietary technology, C4, has been developed as Sirius®, a positive MRI signal radioactive seed location marker designed to improve quality assessment after prostate cancer treatment with brachytherapy, as well as Orion™, an MRI localization device that enables accurate MRI-based pre-treatment confirmation of radiation delivery targets for all cancer patients being treated with high dose rate (HDR) brachytherapy. Sirius and Orion enable the adoption of MARS – MRI-Assisted RadioSurgery. C4's multimodality fiducial marker, Nova, allows the benefits of positive-signal MRI treatment management to be offered to the hundreds of thousands of patients who receive radiotherapy or proton therapy each year.

Reference: 1. Wang L, et al. The Dosimetric Effect of MRI Positive-Contrast Markers vs. Negative-Contrast Fiducial Markers on Proton Radiation. *ASTRO Poster Library*. 10/24/21; 335599; 2227

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Learn more at:
www.c4imaging.com