















BiomarC® Fiducial Marker Product Line

The Mark of Distinction

Carbon Medical Technologies manufactures various fiducial markers to meet the specific needs of our customers to enhance accuracy and efficiency during radiation therapy. Our unique pyrolytic carbon coating technology provides exceptional biocompatibility for permanent medical implants.

The unique carbon coating and composition of the core material is compatible with all forms of radiation therapy and provides maximum versatility for modalities and treatments such as IGRT/IMRT, Proton Therapy, CT, CBCT, MRI and portal imaging.

Areas marked with BiomarC fiducial markers provide clear, visual landmarks with no uncertainty between healthy tissue and the target area.

Product	BiomarC	BiomarC Enh	BiomarC Secure	BiomarC PRO	BiomarC EX	Carbon Bright	BiomarC Gold
Logo							
							
Product Code	040109 – 1x3mm marker 18g x 20cm Needle	040119 – 1x5mm marker 18g x 20cm Needle 040122 – 1x3mm marker 18g x 20cm Needle 040132 – 1x5mm marker 19g x 13cm Needle 040101 – 1x5mm marker Individually Pouched	040147 – 1.7x4.6mm marker Individually Pouched	040137 – 1x10mm marker 18g x 20cm Needle 040139 – 1x5mm marker 18g x 20cm Needle	040140 – 1x5mm marker 18g x 20cm Needle 040142 – 1x5mm marker Individually Pouched	040154 – 0.7x5mm marker 18g x 20cm Needle 040152 – 1x5mm marker 18g x 20cm Needle	040120 – 0.9x3mm marker 18g x 20cm Needle 040115 – 1.2x3mm marker 17g x 20cm Needle 040126 – 1.2x3mm marker 17g x 30cm Needle 040133 – 0.9x3mm marker Individually Pouched
Patient Contact Material	Carbon	Carbon	Carbon	Carbon	Carbon	Carbon	Gold
Visibility	kV X-ray CT CBCT Ultrasound MRI	kV X-ray CT CBCT Ultrasound MRI	kV X-ray CT CBCT Ultrasound MRI	kV X-ray CT CBCT Ultrasound MRI	kV & MV X-ray CT CBCT Ultrasound MRI	kV & MV X-ray CT CBCT Ultrasound MRI	kV & MV X-ray CT CBCT
Attributes	<p>Our legacy marker is manufactured with our least dense nonmetallic material. It is ideal for Proton therapy producing minimal perturbation of the radiation beam.</p> <ul style="list-style-type: none"> Minimal artifact on CT & MRI Minimal distortion of delivered dose Low perturbation Excellent biocompatibility 	<p>This enhanced marker is designed for customers who like the attributes of our legacy maker with enhanced visibility on MRI. It provides a superior reference for MRI image fusion. BiomarC Enh is manufactured with a low-density nonmetallic material.</p> <ul style="list-style-type: none"> Ideal for Proton therapy Minimal artifact on CT MRI visibility enhanced for more accurate identification Minimal distortion of delivered dose Low perturbation Excellent biocompatibility 	<p>This suture-type marker is designed for unsurpassed accuracy of tumor localization. The precise nature of this marker sutured to the affected tissue allows for the ultimate benefit in precision radiation therapy. BiomarC Secure is manufactured with a low-density nonmetallic material.</p> <ul style="list-style-type: none"> Ideal for Proton or Photon therapy Minimal artifact assists by decreased processing time with more precise contouring Minimal distortion of delivered dose Low perturbation Excellent biocompatibility 	<p>BiomarC PRO was designed for the specific needs of a proton center. This marker exhibits a balanced tradeoff between contract and artifact along with low perturbation.</p> <ul style="list-style-type: none"> Exclusive material compatible with proton center use Precise localization Balanced MRI visibility Minimal artifact assists by decreased processing time with more precise contouring Available in multiple lengths for versatility Excellent biocompatibility 	<p>BiomarC EX provides excellent visibility on both kV and MV imaging systems. This precisely sized marker is ideal for localization software systems that rely on soft tissue tracking. BiomarC EX is manufactured with a higher density material for situations where a complex fiducial contrast is preferable.</p> <ul style="list-style-type: none"> Ideal for Photon therapy Versatile, visible on both kV and MV systems Visible in hard to image tissue like prostate and liver Good for Cyberknife – high density for consistent strong signal during treatment Excellent biocompatibility 	<p>Carbon Bright is our newest addition to our line of Carbon Coated Fiducial Markers. Due to its high versatility and superior visibility this marker is an excellent cost-effective alternative to gold markers. It provides an outstanding reference for image fusion. Carbon Bright is the first carbon coated biocompatible marker to compete with solid gold.</p> <ul style="list-style-type: none"> Ideal for Photon therapy Versatile, visible on both kV and MV systems Visible in hard to image tissue Good for localization software systems Carbon coating decrease artifact compared to sold gold markers Excellent biocompatibility 	<p>Fiducial markers made of pure gold knurled to minimize migration. Gold is high density marker providing good visibility on both MV and kV images.</p> <ul style="list-style-type: none"> Ideal for Photon therapy Versatile, visible on both kV and MV systems Visible in hard to image tissue like prostate and liver