

# ***MRI Devices***

Instruments for Interventional Magnetic Resonance Imaging (MRI)



**SOMATEX**<sup>®</sup>  
MEDICAL TECHNOLOGIES GMBH

[www.somatex.com](http://www.somatex.com)

## MRI Devices

### Optimal visibility and maximum strength

Magnetic resonance imaging (MRI) is a future oriented imaging procedure in modern diagnostics and minimal invasive therapy. Its advantages include better visualization of structures and extremely high detail recognition – without harmful ionizing radiation. Additionally MRI is adopted for minimally invasive treatments of patients. Instruments for MRI have to meet a very high standard.

SOMATEX® has been active for years in the development of instruments made from non-magnetic material for different applications. In accordance with the high demands and new developments in MRI, our products are continually improved or newly designed.

The SOMATEX® MRI Instruments find the optimal balance of MRI visibility, artefact management, and material strength. Thanks to special design capabilities and the use of a unique material, SOMATEX® is now setting the standard within the interventional MRI sector for instrumentation. Minimal artifact, optimum visibility and superior strength make the SOMATEX® MRI devices safe and reliable while maintaining remarkable quality and integrity.

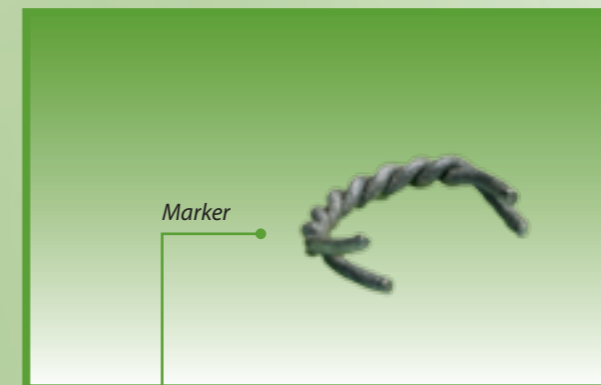
#### MRI Devices at a glance

- Tumark MRI
- MRI Tuloc
- MRI DUO-System
- MRI Biopsy-Handy
- MRI Coaxial Puncture Needle
- MRI Chiba Needle

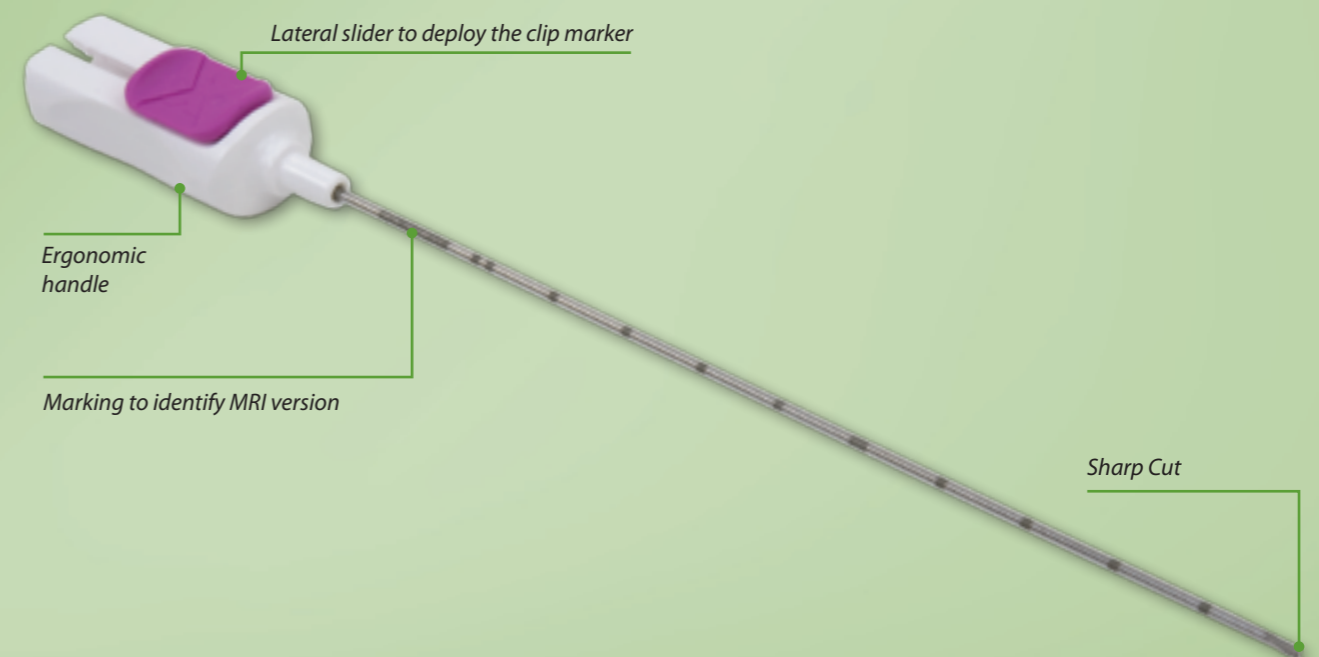
## Tumark MRI

### High visibility

The **Tumark MRI** allows for precise tissue marking under MRI control. The Tumark MRI is adapted in shape and size for the application within the MRI gantry. The placement of the clip marker can easily be performed inside the MRI system. The ergonomic handle with slide button furthermore allows for easy, single-handed deployment. Approved 3D marker design ensures firm anchoring in the tissue with optimal visibility in all positions. For the follow-up, the marker will be clearly visible in magnetic resonance, ultrasound, stereotaxy or X-Ray.



Improved visibility for ultrasound



#### Application

- Marking after removal of tumor
- Marking of suspicious lesions
- Tumor marking during neoadjuvant chemotherapy
- For marking the biopsy site
- Orientation for planning radiation therapy

#### Advantages at a glance

- Shape and size adapted for the application within the MRI gantry
- 3D marker design ensures firm anchoring in the tissue
- Optimal visibility in all positions
- Cannula is MRI compatible up to 3 Tesla
- Marker is MRI compatible up to 3 Tesla
- Marker is approved as implantable material (Nitinol)
- Ergonomic handle for single-handed operation
- The marker is supplied preloaded

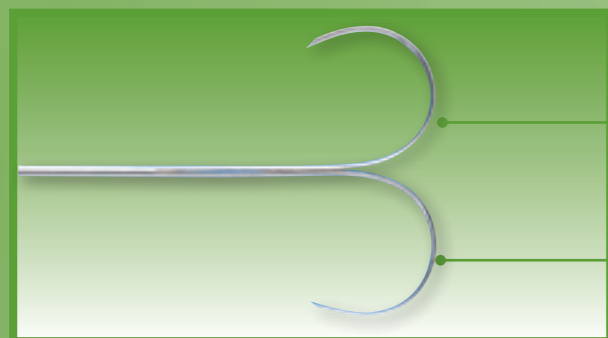
Product	Order No.	Cannula size
Tumark MRI	601 570	18G/1,2 x 120 mm

# MRI Tuloc Stability

The MRI Tuloc Localization System serves for the marking of suspicious tissue which ensures high visibility using MRI techniques and therefore easy lesion localization. After reaching target point with the puncture needle, the wire can be placed into a tumor area. Thanks to increased pressure stability and an extremely sharp bevelling of the cannula and the wire tips, MRI Tuloc even allows for an easy and safe penetration of solid tumor tissue. If a repositioning is required, the wire can be easily pulled back into the cannula for a correction of the position. The wire of MRI Tuloc has markings for secure location for the user. Two proximal markings indicate whether the arches of the wire are inside or outside of the cannula. The distal markings at distances of 2 cm give information on the distance to the tumor.

### Advantages at a glance

- Wire and cannula are MRI compatible
- Repositionable localization wire
- High rigidity and stability of the cannula
- Monofilament wire provides for best possible form and pressure stability
- Distal depth markings show information on the distance to the tumor
- Extreme sharpness for precise and atraumatic puncture
- Optimal visibility in the MRI and good palpability during the operation

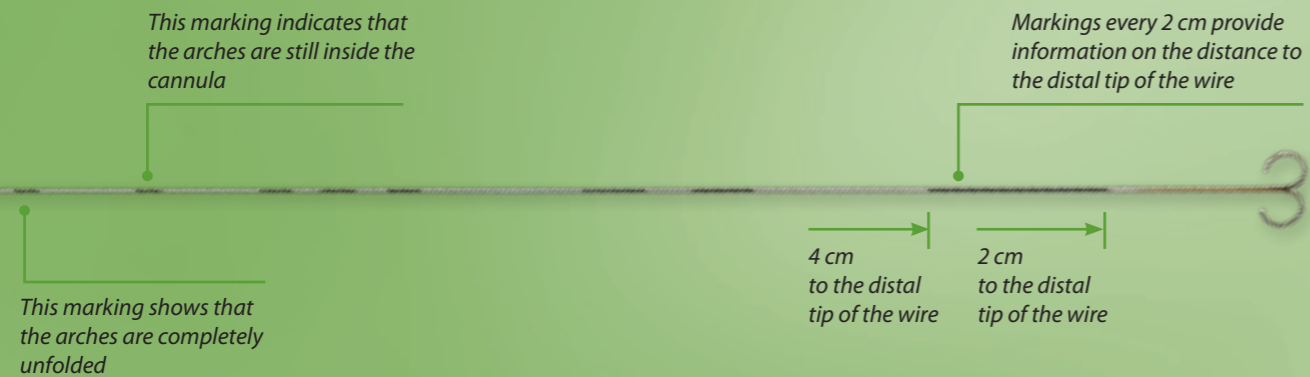


Laser-cut double arch

Monofilament wire provides for best possible form and pressure stability



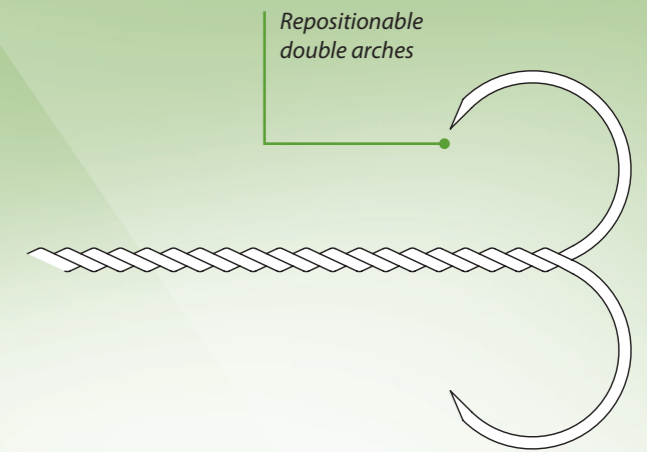
Beveled arches facilitate penetration



MRI Tuloc			
Order No.	Gauge	Diameter	Length
601 649	20 G	0,95 mm	90 mm
601 651	20 G	0,95 mm	120 mm

# MRI Duo-System Flexible

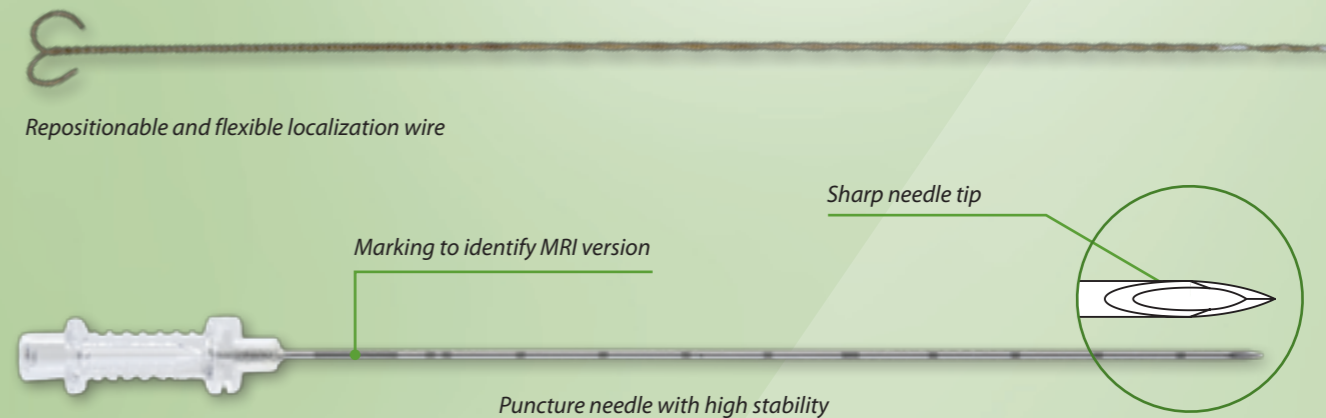
The SOMATEX® MRI DUO System is a correctable localization system for the pre-operative marking of non-palpable, suspicious mammary lesions under MRI control. If a repositioning is required, the localization wire can be easily pulled back into the cannula and reused for a correction of the position.



Fixation piece provides for secure pre-operative fixation of the wire to skin level without tape.

### Advantages at a glance

- Wire and cannula are MRI compatible
- High rigidity and stability of the cannula
- Correctable and flexible marking wire
- Sharp wire tips for firm lesions



MRI Duo-System			
Order No.	Gauge	Diameter	Length
601 607	20 G	0,95 mm	50 mm
601 609	20 G	0,95 mm	90 mm
601 611	20 G	0,95 mm	120 mm

# MRI Biopsy Handy Lightweight

SOMATEX® MRI Biopsy Handy is a semi-automatic device for obtaining valuable histologic tissue from a variety of soft tissue organs in MRI environment. The novel material and special alloy ensures high visibility using MRI techniques and the exact positioning of the specimen notch. The tissue material is separated by means of an extremely fast forward movement of the exterior cutting cannula. When complemented with the MRI coaxial up to 3 Tesla puncture needle, one Biopsy Handy can be reused for multiple tissue sampling.

MRI Biopsy Handy			
Order No.	Gauge	Diameter	Length
603 108	18 G	1,20 mm	100 mm
603 110	18 G	1,20 mm	150 mm
603 112	18 G	1,20 mm	200 mm
603 118	16 G	1,60 mm	100 mm
603 120	16 G	1,60 mm	150 mm
603 122	16 G	1,60 mm	200 mm
603 128	14 G	2,00 mm	100 mm
603 130	14 G	2,00 mm	150 mm
603 132	14 G	2,00 mm	200 mm

Matching MRI coaxial puncture needle

Matching MRI Biopsy-Handy

MRI Coaxial Puncture Needle			
Order No.	Gauge	Diameter	Length
601 400	18 G	1,20 mm	100 mm
601 405	18 G	1,20 mm	150 mm
601 408	16 G	1,60 mm	45 mm
601 410	16 G	1,60 mm	95 mm
601 412	16 G	1,60 mm	145 mm
601 418	15 G	2,00 mm	43 mm
601 420	15 G	2,00 mm	93 mm
601 422	15 G	2,00 mm	143 mm
601 428	13 G	2,40 mm	41 mm
601 430	13 G	2,40 mm	91 mm
601 432	13 G	2,40 mm	141 mm

# MRI Coaxial Puncture Needle One for all

The MRI coaxial puncture needle is a multipurpose needle and is used for initial percutaneous puncturing using magnetic resonance imaging (MRI) techniques to facilitate localization of the target area. Once the needle has been positioned it can be used as a channel for compatible guidewires or biopsy needles and for the injection of medical drugs. The novel material special alloy, and particularly sharp trocar tip ensures high visibility using MRI techniques, at maximum stability, and minimum puncture trauma.



## Application

- Initial puncture
- Coaxial cannula for biopsy instruments
- Guide needle for catheter and guide wires
- Injection and drainage cannula

# MRI Chiba Needle Universal

The SOMATEX® MRI Chiba Needle is a multipurpose cannula. It is used for the injection of drugs and for fine needle aspiration biopsies. The novel material, special alloy, and the particularly sharp ultra cut allow for optimal visibility in the MRI, at maximum stability, and minimal puncture trauma.

## Application

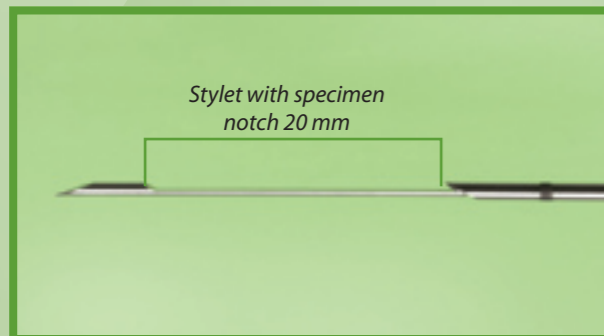
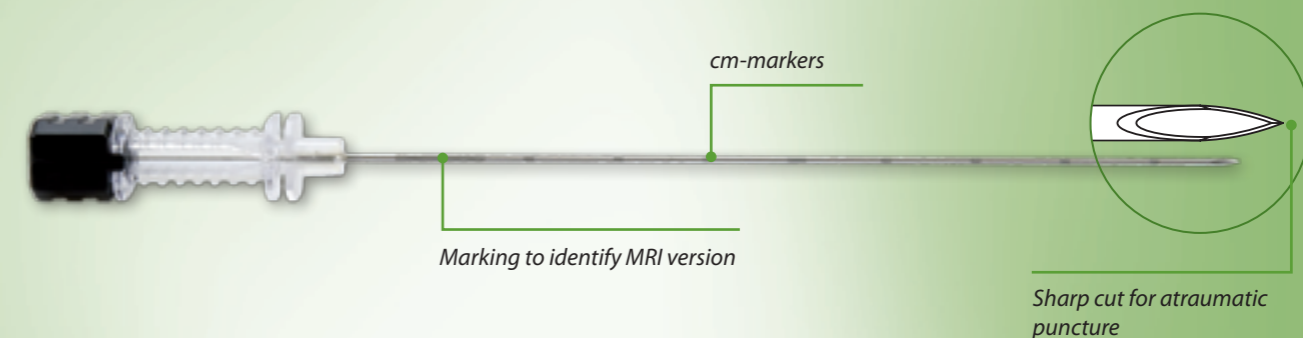
- Pain therapy
- Fine needle aspiration biopsy

## Advantages at a glance

- MRI compatible
- High rigidity and stability
- Minimal puncture trauma due to particularly sharp cut
- Depth stopper

## MRI Chiba Needle

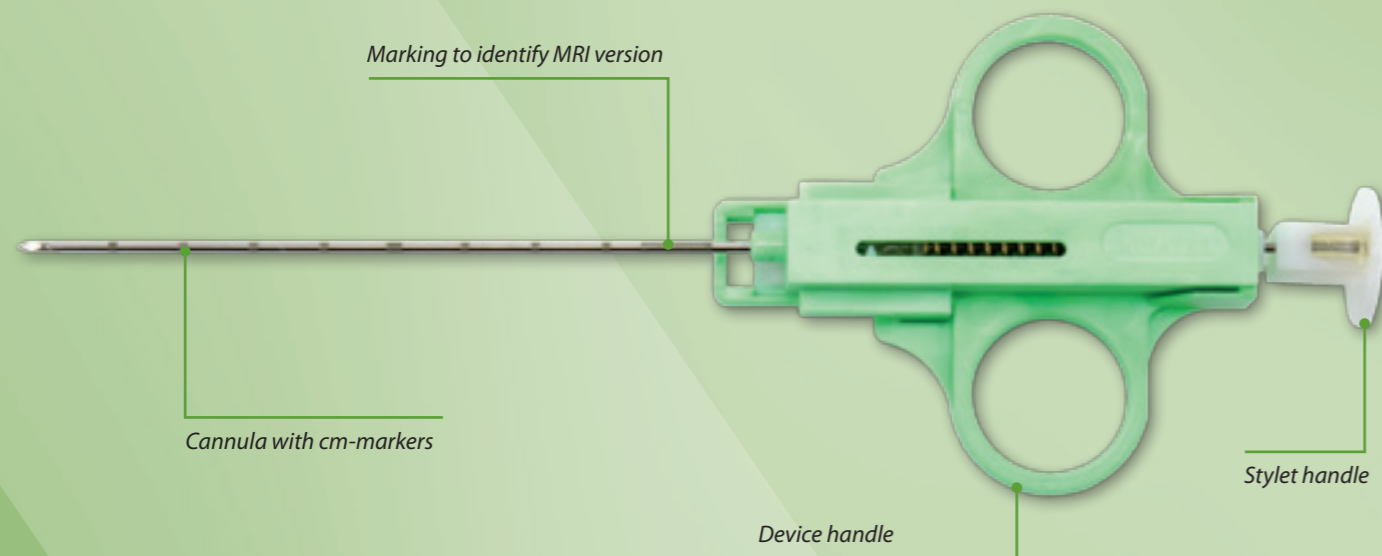
Order No.	Gauge	Diameter	Length
601 250	22 G	0,70 mm	100 mm
601 255	22 G	0,70 mm	150 mm
601 260	20 G	0,95 mm	100 mm
601 265	20 G	0,95 mm	150 mm



## Advantages at a glance

- MRI compatible
- High strength and stability
- Optimum visibility for MRI
- Single-handed operation
- Light weight
- Sharp cut of stylet and cannula tip
- Optionally available with MRI compatible coaxial sheath

Marking to identify MRI version



Cannula with cm-markers

Device handle

Stylet handle

**SOMATEX<sup>®</sup>**

MEDICAL TECHNOLOGIES GMBH

Rheinstr. 7d  
D-14513 Teltow  
Germany

Tel. +49 (0) 3328 30 76-0  
Fax +49 (0) 3328 30 76-99  
info@somatex.com  
www.somatex.com