

## Press Release

### **World´s first MR safe and visible micro-guidewire prototype has been developed by MaRVis Technologies GmbH**

*August 29th, 2011 – MaRVis Technologies GmbH has developed a unique platform technology for medical devices to be used in magnetic resonance imaging (MRI) - guided treatments. The newest addition to its series of MR safe and visible guidewire prototypes is a 0.012 inch micro-guidewire. MaRVis guidewires are made from glass fiber – epoxy rods (‘MaRVis rods’) which are doped with metal particles as MR visualization markers. Further development of this new prototype into commercial micro-guidewire products for the first time will enable MRI-guided interventions in small, angular and sensitive peripheral, coronary or neurological vasculature.*

MRI-guidance of interventional medical treatments, instead of X-ray guidance, is of high benefit to the patients and improves working conditions for physicians. This especially applies to interventions where high quality soft tissue visualization, imaging of organs, or precise localization of lesions in small vessels is necessary. These endovascular peripheral, coronary, or neurological applications usually require very thin micro-guidewires. MaRVis Technologies GmbH, a German medical technology development company, has developed world´s first MR safe and visible micro-guidewire based on its proprietary platform technology. MaRVis guidewires are constructed from glass fiber – epoxy rods, so-called ‘MaRVis rods’. They not only possess mechanical properties similar to commercial X-ray guidewires based on metal cores but concurrently deliver illustration in MR images by continuous black stripes as physicians are used to from X-ray guided interventions. Metal cores lead to electric current and heating in MRI and therefore are dangerous. Adapted metal core – free MaRVis prototypes can be developed for e.g. 0.014 and 0.010 inch micro-guidewires.

Dr. Klaus Duering, CEO of MaRVis Technologies GmbH, explained: „Based on the experience from the development of our unique standard and stiff MR guidewire prototypes with 0.032 and 0.035 inch diameter we now were able to reach this next key development milestone for our platform technology. We are proud to be first to have a 0.012 inch diameter MR micro-guidewire prototype devoid of a metal core which possesses valuable mechanical properties. This tremendous progress will allow physicians to perform applications in cardiological or neurological interventions which eventually will strongly support the breakthrough of MRI-guided interventions.“

With this latest addition to its platform technology MaRVis now provides to the medical community and the medical device industry a comprehensive portfolio of MR guidewire prototypes of different diameters and mechanical properties for various applications in endovascular and interstitial interventions. These may be broadly applied in radiology, cardiology, neuroradiology, and interventional oncology.

### **About MaRVis Technologies GmbH**

MaRVis Technologies GmbH is a medical technology development company owning an integrated proprietary platform technology comprising MR safe medical devices with optimized mechanical properties and superior magnetic resonance imaging (MRI) visualization for application in MRI-guided interventional treatments. A portfolio of unique standard, stiff and micro-guidewire prototypes offers first-in-class flexibility and a powerful platform for the design of a large number of individual medical devices. MRI-guided interventions avoid X-ray burden and use of contrast agents and are superior to X-ray imaging for radiological interventions in respect of details of soft tissue images, organ representation and additional physiological information which can be obtained in MRI.

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