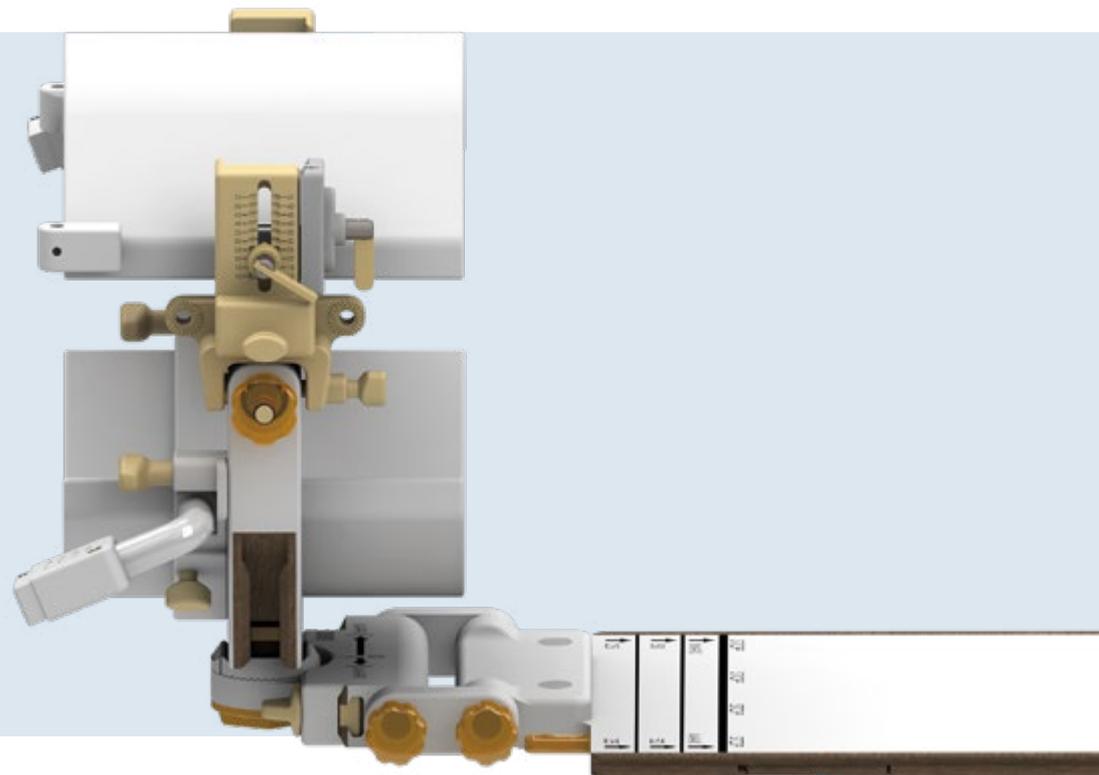


NORAS iMRI NEUROSURGERY SOLUTION

OR Head Holder LUCY & OR Head Coil 1.5T / 3T

MR and X-ray compatible for multi-modal applications



LUCY is an innovative neurosurgery solution that combines the functions of a head holder for secure fixation of the skull during interventions and an MR coil for intra-operative imaging.

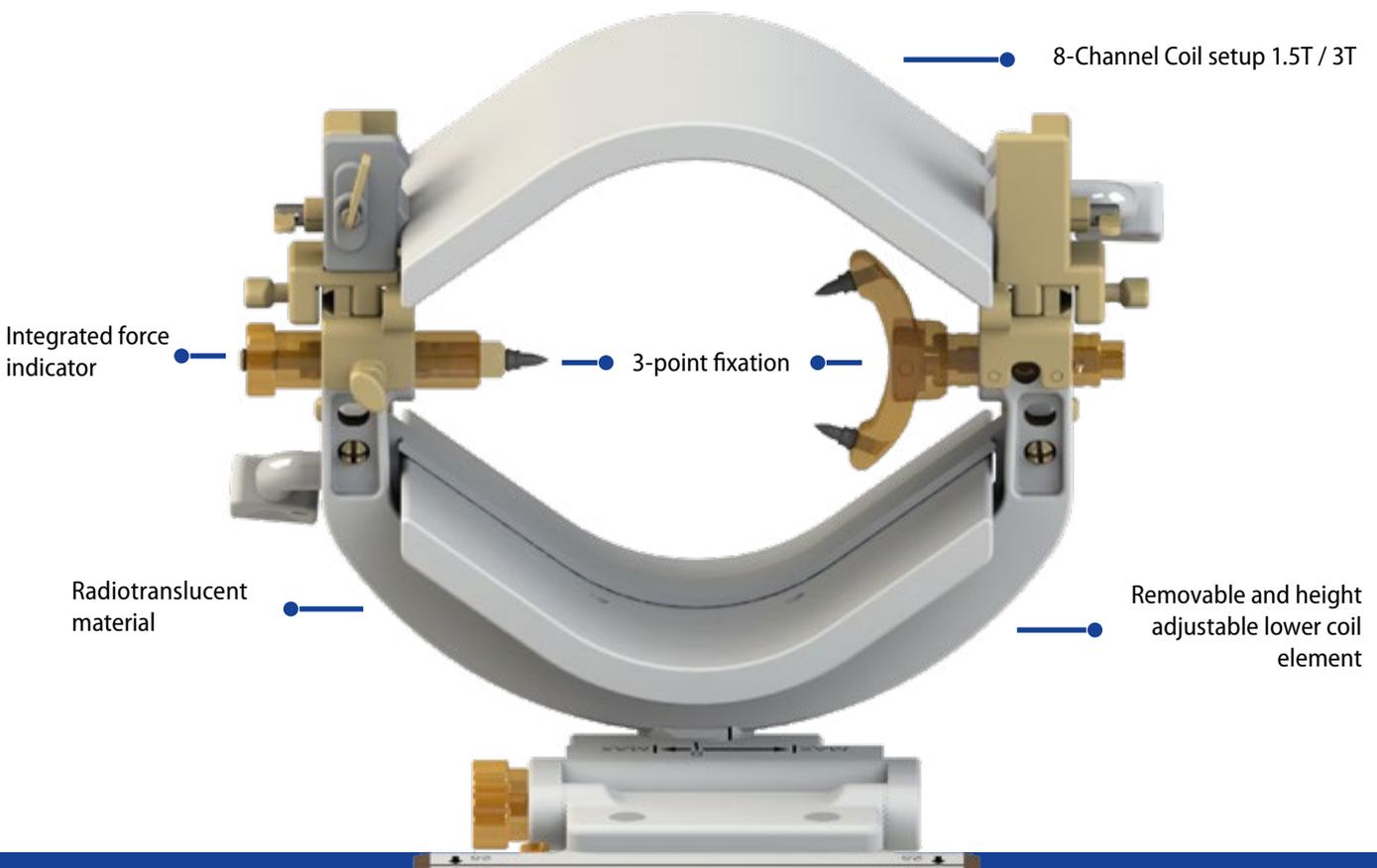
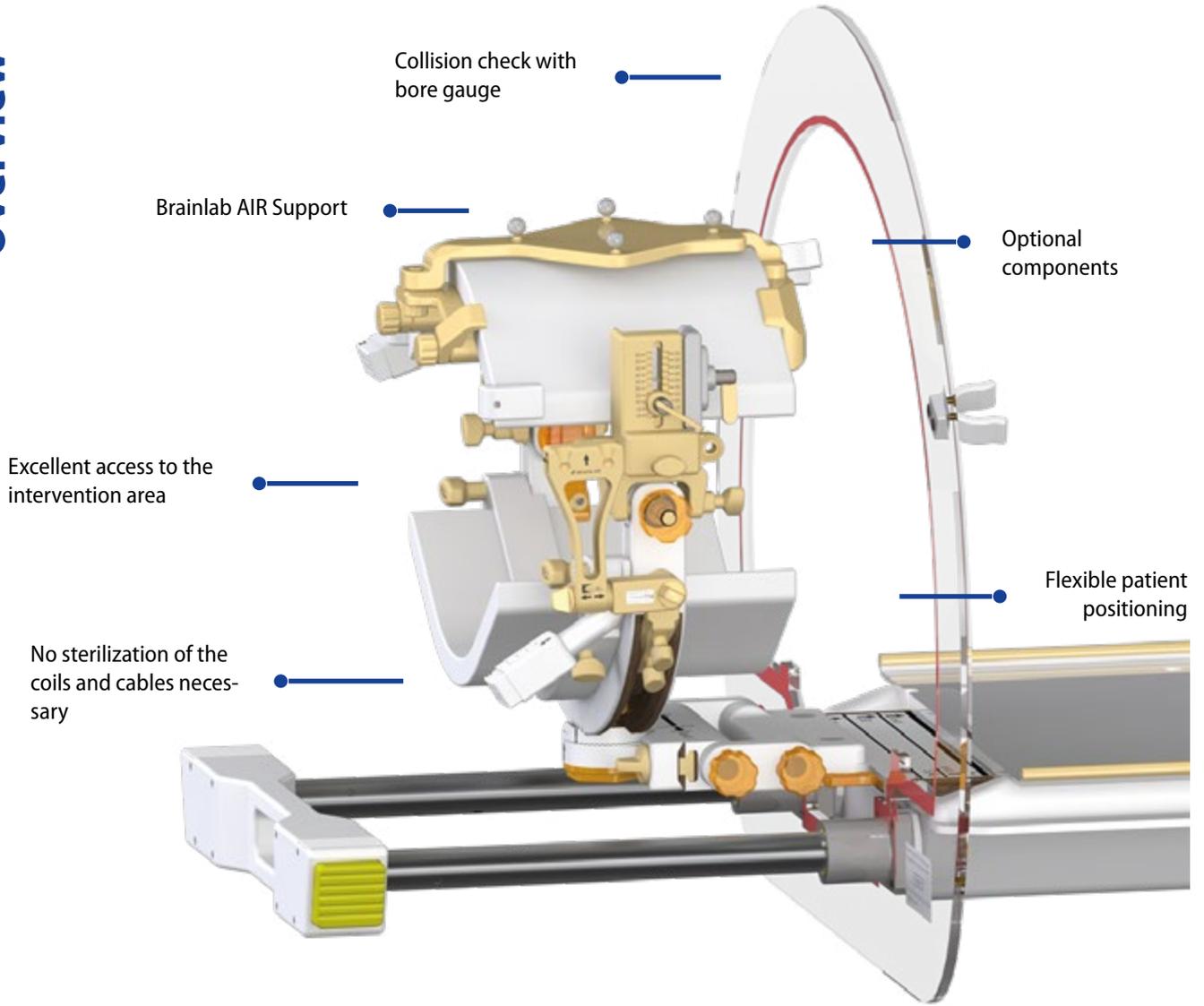
The head holder is compatible with the established 8-Channel NORAS Head Coil setup. Thanks to the radiotranslucent material, the OR Head Holder LUCY (without the NORAS OR Head Coils) can also be used in the X-ray environment – CT and angiographie – for intra-operative imaging.

Besides tumor resections, „deep brain stimulations“ (DBS) and minimally invasive pituitary surgery, the system also supports awake craniotomies.

The NORAS OR Head Holder LUCY and the NORAS OR Head Coil 1.5T / 3T can be used with the MR systems [Siemens Magnetom Aera / Skyra](#) together with the [Combi Dockable Table](#). Due to the compatibility to the new [transferboard from Maquet](#) our solution can be combined with the [nexaris Angio-MR-CT](#) and the [Artis pheno Angiography System](#).

Furthermore, the OP Head Holder LUCY and the NORAS OP Head Coils can be used with the [Philips MR systems Ingenia 1.5T and 3T, Ingenia Ambition 1.5T and Ingenia Elition 3T](#).

Overview



Features

- ▶ The design provides a comfortable positioning of the patient in prone, supine or lateral position on the OR table.
- ▶ The head frame of the NORAS OR Head Holder allows exact adaptation to the patient's head size. For optimal access to the area of intervention, the head frame can be pivoted, rotated, tilted and adjusted in height.
- ▶ A secure attachment of the patient's head is ensured by the three-point fixation. With the help of the integrated force indicator, the required clamping force can be checked exactly.
- ▶ The entire system is height-adjustable to achieve optimal patient positioning in 70 cm bores (Siemens/Philips) as well as in Siemens CT scanners. In addition, the entire structure can be moved along the head-foot-axis and the horizontal axis.
- ▶ The Noras 2x4 Ch coil concept, with the ability to position both coil halves close to the head, provides excellent image quality.
- ▶ The OR Head Holder LUCY can be used in combination with the nexaris Angio-MR-CT and the Artis pheno Angiography System.
- ▶ LUCY is compatible with various surgical equipment (GREENBERG™, VarioGuide™, LEYLA retractors) and supports the navigation system of Brainlab.
- ▶ Thanks to a unique sterile concept, neither cables nor coils need to be sterilized!

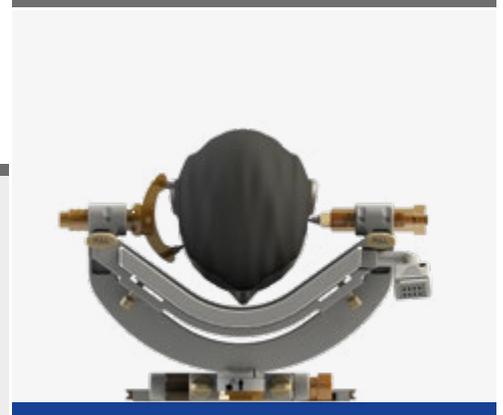
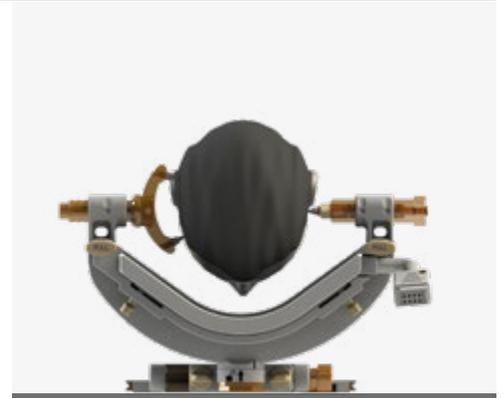
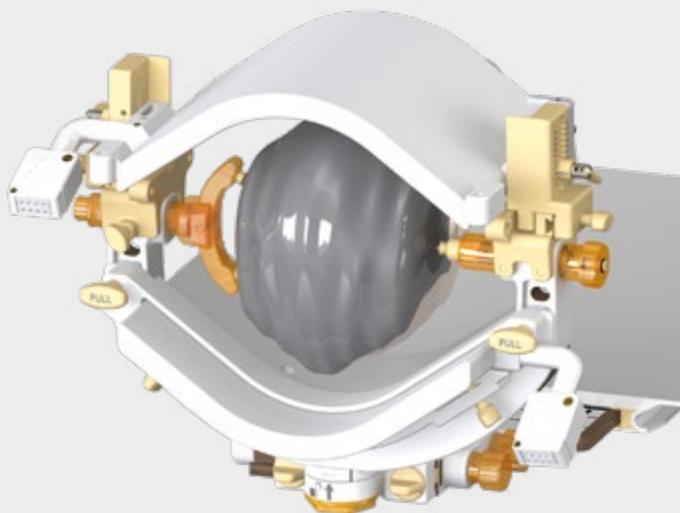
Coil system

8-Channel Coil setup 1.5T / 3T

The NORAS 8-channel coil system provides homogeneous illumination and good imaging of the intervention area.

The two-part construction of the coil system allows the removal of the coil halves in the preparation phase and during the intervention, which allows excellent access to the region of interest.

The lower coil can be placed close to the patient's head due to the height adjustment possibility!



height adjustable lower coil

Fixation

3-point fixation with integrated force indicator

Choose the right clamping force for a secure position of the patient's head!

The integrated force indicator on the rear end of the one-point fixation allows you to precisely control the tension before and during the procedure.



Sterile concept

Sterile workspace: protection and time saving

Thanks to a unique sterile concept, neither cables nor coils need to be sterilized!

The sterile work area is delimited with two surgical disposable drapes. Thus, coils and cables as well as most of the components of the head-holder can be used in a non-sterile environment.

The newly designed clamping mechanism ensures easy handling for optimum surgical drape protection!



Flexibility

Shift in the Z direction



Side shift



Side tilt



Optional Components

Extended application possibilities

For an optimal result, we offer you a variety of optional components for the NORAS OR Head Holder LUCY and the NORAS OR Head Coil Set.

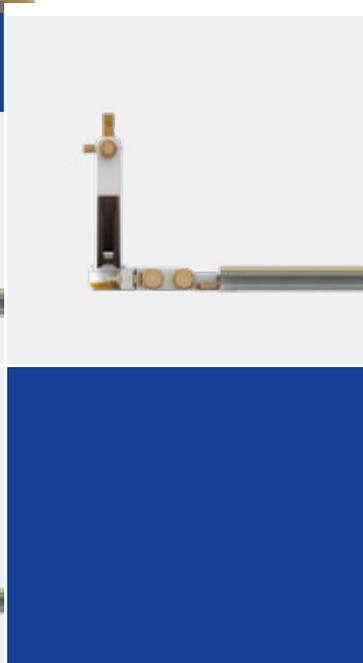
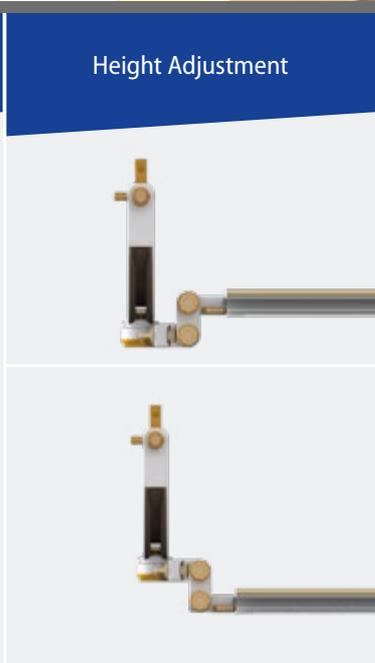
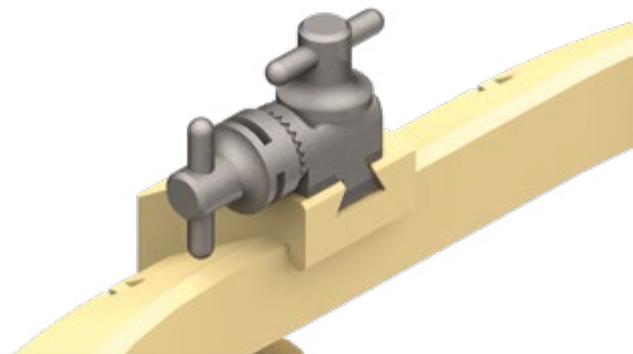
Pediatrics Set LUCY: With the help of the „One-point Fixation with Force Indicator Pediatrics LUCY“ and the „Two-point Fixation Pediatrics LUCY“ it is possible to respond to the smaller head geometry of pediatric patients and to safely tension the head during surgery (and intraoperative imaging).

Various operating accessories such as GREENBERG™ retractors, VarioGuide™ Biopsy Arm or LEYLA retractors can be attached to the head holder using special adapters.

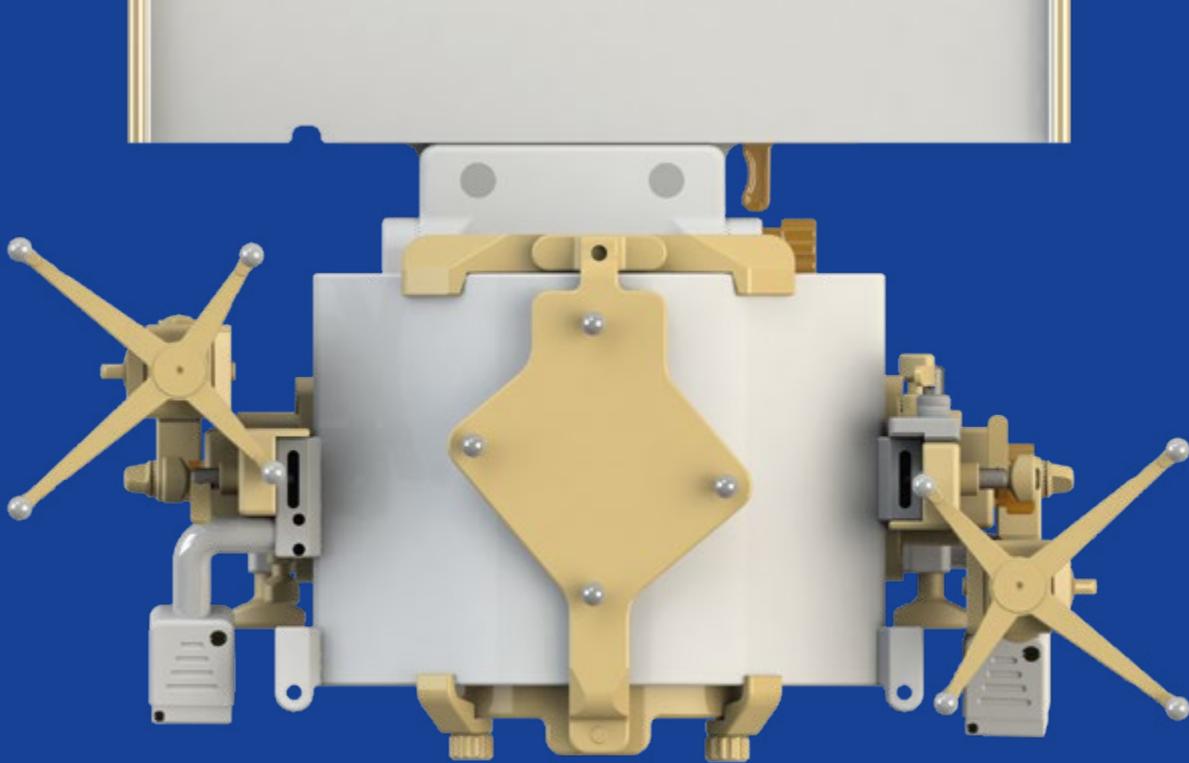
The Universal Arc Set LUCY serves as a hand rest as well as for the attachment of surgical instruments. Furthermore, it offers the ability to fix the scalp using hooks and rubber bands.

The NORAS OR Head Holder LUCY and the NORAS OR Head Coils are designed for use with Brainlab Navigation Systems. The navigation system adapter gives the possibility to mount the reference star both on the left and right side of the head frame, in either „head“ or „foot“ direction.

At the top of the coil, the Brainlab AIR Matrix can be attached for automatic image registration.



Technical data



Receiving channels:	8 (2x4)
Field of View (maximal):	30 cm x 25 cm x 22 cm
Weight:	with LUCY Maquet base plate: 8.6 kg with base plate LUCY long: 8.1 kg
Measurements:	Width: 47 cm Height: 36 cm Depth: 56 cm (version for transfer board Maquet 1180.71C0) Depth: 83 cm (version for all other transfer boards)
Certifications for Siemens/ Philips:	CE 0123
Transferboard compatibility:	Maquet 1180.71C0/ 1180.71B0/ 1180.71A0/ Mizuho MST-7300BX-MRI MG-T system/ Trumpf 10850510
Navigation system compatibility:	Brainlab
MR Scanner-compatibilty:	Siemens Magnetom Aera 1,5T / Magnetom Skyra 3T / Magnetom Vida 3T & Vida fit 1,5T / Magnetom Sola 3T & Sola fit 1,5T // Philips Ingenia 1,5T & 3T / Ingenia Ambition 1,5T/ Ingenia Elition 3T
CT and X-ray compatibilities:	Artis pheno Angiography System/ nexaris Angio-MR-CT
Please contact us if you have any questions about the compatibility of the OR head holder LUCY and the head coil of NORAS.	

NORAS – Your partner for innovative solutions in MR Imaging

Since more than 30 years NORAS MRI products GmbH is a reliable partner for high resolution imaging in MR-based diagnostics and intervention. Kindly get in touch with us in order to learn more about the application areas of our solutions for your MR-based tasks.

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