



## EXPLANATORY LEAFLET FOR PATIENTS AND EXPLANATION OF MRI EXAMINATIONS (MAGNETIC RESONANCE IMAGING SCREENING)

Dear patient,

Magnetic resonance imaging (MRI) is one of the most modern examination methods in the diagnostic radiology and remains also one of the safest examination methods for the body. In the MRI examination there is no risk of radioactive contamination. By using a strong magnetic field, stratified pictures of individual organs, joints or whole body regions are represented without being obscured by overlaying structures.

### When is it impossible to do an MRI examination?

An MRI examination is impossible at the moment if you have a pace maker, an insulin pump, a neuro-stimulator or a defibrillator. Metallic foreign bodies (e.g. metal splinters) in the head, the eye, the lungs or in the vicinity of blood vessels entail the risk of an injury and have to be conferred with us. Metal implants in the middle or inner ear as well as vascular clamps in the head have to be classified as being suitable for the MRI. Artificial cardiac valves and metal clips after surgeries in the abdominal area or the torso are usually no problem. However, we should know about them to rule out any risks. Also permanent make up at the eye lids can pose a risk in some examinations. In the first three months of a pregnancy, we can only carry out MRI examinations after a personal consultation and in acutely relevant cases.

### What do I need to consider before an MRI examination?

Patients should not have eaten at least two hours before the examination of the abdominal area. Any objects made of iron or other metals which could enter the magnetic field, can lead to accidents and image artifacts. For this reason, we ask you to remove all metallic objects in the changing room, such as you watch, glasses, keys, hearing aids, (piercing-) jewellery, hair pins/ clips, removable dental prosthetics, coins, ballpoint pens, belt buckles, credit cards and other digital data carrier. Please lock the door of the changing room and your valuables will be kept safely.

### How does an MRI examination proceed?

At the beginning of an MRI examination, you will be placed on the examination table. The body part that needs to be examined will be placed in or on a measuring coil. Afterwards, the table will enter the opening of the magnet. The short tunnel which has openings at both ends is constantly ventilated by fresh air. The whole examination room has a comfortable temperature. The most important requirement for a successful examination is to avoid movement during the examination. It may be helpful to close your eyes. During the diagnostic imaging process, loud knocking noises are created that cannot be avoided technically. For that reason you will be handed an effective ear protection. The body part that needs to be examined should be in the center of the examination tube. Depending on your height and the type of examination, your head will be in or outside of the device. Through an intercom you will have constant contact with us. Moreover, we have visual contact to you from the control panel. Additionally, you will receive a bell which you can ring anytime.

However you should only ring the bell in urgent emergencies because the examination will stop instantly. If you suffer from claustrophobia or nervousness, we can give you a quick-acting sedative after consulting with us. Afterwards, it is impossible for you to take part in traffic or work in a dangerous working environment! Therefore, we can only administer sedatives to patients who are accompanied.

### How long does the examination take?

Depending on the case, the examination time is between 10 and 15 minutes. However, the beginning and the duration of the MRI examination cannot be determined exactly. We do our best to adhere to the scheduled exam times. Nevertheless, in some cases there might be delays since we are also involved in the emergency care of hospitalized patients. Please understand that waiting times may arise.

### Contrast media

To give a diagnosis, in some cases it might be necessary to use a contrast medium. This non-iodic contrast medium which has been developed especially for the MRI will be injected through a vein in the arm. The contrast media used in MRI examinations, are tolerated very well. After an intravenous injection of a contrast medium, it is important to ensure sufficient intake of fluids.

### Risks and complications

The MRI examination is free of pain and to present knowledge does not lead to side effects or consequences. Skin contact with the examination tube should be avoided. Make up, tattoos and permanent make up can lead to irritations of the skin in some cases. In rare cases, the injection of contrast media might lead to allergy-like irritations of the skin accompanied with discomfort. In extremely rare cases, more serious allergic reactions can occur. In most cases of an impaired renal function, we must do without a contrast medium. If you have an allergy passport, we ask you to show it to us before the examination. We are unaware of intolerances with other medications.

### When will I get the results?

Normally, you are going to receive the MRI images after the examination. The written report will be sent to the referring physician within three work days.