



## Procedure Information Sheet

### Introduction

MRI (Magnetic Resonance Imaging) is a scan that uses magnetic field and radio-waves to produce detailed morphological and functional information of the organs, tissues and structures within the body.

PET (Positron Emission Tomography) is an imaging modality utilizing radiotracers to quantify the molecular information of tissues and organs within the body.

PET-MR is a high-end technology product that inhabits high definition PET detectors in a 3 Tesla high magnetic field MRI. This hybrid scanner combines two modalities, PET & MRI, into a single scan, allowing for simultaneous PET and MRI images. The resulting combination of molecular, functional and morphological information will offer doctors a more precise and accurate assessment of disease, as well as an improved understanding of the physiological process.

### The Operation / Procedure

1. You have to remove from your body any loose ferromagnetic items, metallic objects (e.g. glasses, wristwatch, necklace, safety-pin, hair-slide and dentures), and items which may be damaged by the magnetic field (e.g. credit cards, Octopus card and mobile phone) prior to entering the magnet room. A locker will be provided for you to secure your personal belongings.
2. The examination time varies from 1 to 2 hours. You are required to keep still during the examination. Therefore, children and infants may have to be sedated by medication.
3. Ear plugs or headphone will be provided to protect you from the noise generated by the machine during the examination.
4. For the sake of safety, an intercom system is installed inside the examination room so that you can communicate with our staff during the examination. In addition, an emergency button or ball which you can hold and press for assistance is also available.
5. In some examinations, magnetic resonance imaging contrast agent will be administered intravenously to you in order to show the pathology more clearly.

### Before the Operation / Procedure

Besides which specified in the Examination Instruction sheet, please inform our staff if you have the following items and conditions because they are potentially hazardous and may interfere with the MRI examinations by producing artifacts.

1. You have implants or foreign bodies inside your body?
  - ❖ Internal shunt
  - ❖ Cochlear implants
  - ❖ Cardiac pacemaker
  - ❖ Dentures
  - ❖ Prosthetic heart valve
  - ❖ Intravascular coils, filters and stents
  - ❖ Surgical clips
  - ❖ Metallic foreign bodies
  - ❖ Insulin pump
  - ❖ Intrauterine contraceptive device
  - ❖ Hearing aid
  - ❖ Orthopaedic devices (e.g. pins, nails, screws)
2. You are now or used to be a metal worker
3. You have been injured by metallic foreign body (e.g. bullets, shrapnel)
4. You have been injured in the eye by a metallic foreign body
5. You have tattoo or permanent eye-lining
6. You are pregnant or suspect that you are pregnant

<b>Patient's Label</b> Patient Name: _____ Hospital No: _____ Adm No/Episode No: _____
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**After the Operation / Procedure**

1. There is no restriction for food and exercise.
2. After the procedure on the examination day, encourage water intake and please sit on the toilet for urination to avoid spillage on the floor and flushing the toilet twice.
3. After the procedure on the examination day, avoid prolonged and close contact with pregnant women and children under 12 years of age.
4. Normally the examination will not cause you any discomfort.

**Risk and Complication**

1. Rarely, as with many drugs, contrast media can cause death. The chance of this fatal occurrence is extremely rare.
2. Rarely, renal failure patients receiving gadolinium contrast are associated with nephrogenic systemic fibrosis/nephrogenic fibrosing dermopathy and deaths have been reported.
3. Long term biological effect of MRI examination on human body and fetus are still not fully understood.

**Disclaimer**

This leaflet only provides general information pertaining to this operation / procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

**Reference**

1. Kanal E, Barkovich AJ, Bell C, et al. ACR Guidance Document on MR Safe Practices: 2013. Journal of Magnetic Resonance Imaging 2013; 37: 501–530.
2. American College of Radiology. ACR Manual on Contrast Media, Version 10.3, 2017.

Patient's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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