

## **Information for pregnant patients attending the MRI department**

Your doctor has referred you for an MRI scan to be carried out during your pregnancy. This decision has been made as the MRI scan will be of benefit to you.

The guidelines for clinical use of MRI in the UK are issued by the Medicines and Healthcare products Regulatory Authority (MHRA). They recommend that scanning of pregnant patients ought to proceed in such a way as to minimise the risk to the foetus.

MRI uses a combination of radio waves and a strong magnetic fields to take pictures of the inside of your body. During an MRI scan the risks to the foetus are very low but we want to inform you of the risks and tell you how they will be minimised.

While we wish to inform you about the very low risks involved, it would be our recommendation that you proceed with your scan.

### **The risks and how we manage them to ensure safety**

#### **Magnetic Field**

There is no evidence to suggest that the foetus is sensitive in a harmful way to the magnetic fields that are used by clinical MRI scanners at any stage of pregnancy.

#### **Heating**

The MRI scan delivers energy to tissue that can cause it to warm up. The scanner will use your weight (and height) to estimate how much energy can be given. To minimise the amount of heating we limit the amount of energy delivered. This is done by limiting the number of scans we take, by carefully choosing the type of scan and by selecting the appropriate scanning mode. The scanner also lets us closely monitor the energy being delivered to tissues so that we can ensure that it stays at low levels.

#### **Hearing**

MRI scanners are very noisy. You will be given ear plugs or headphones to reduce the noise levels. While we can't offer ear protection to your developing foetus, your body and the fluid sac around the foetus will reduce this noise to some extent. Scans will also be carefully chosen to reduce the noise level whilst you are in the scanner.