

## PET-CT

PET-CT is a combination of two imaging tools (PET and CT) which provide both functional and anatomical information of the area under examination. It is used most frequently in Oncology. PET uses a small amount of radioactive glucose to identify areas in the body which are overactive (e.g. tumours), while the CT part of the scanner allows the radiologist to identify which organs are involved.

Once your doctor has arranged for you to have a PET-CT you will be contacted by us to arrange an appointment date and time. You must fast for 6 hours prior to your appointment time. If you are diabetic we will make special arrangements for you. You must avoid strenuous exercise the day before and the morning of the scan. All medications can be taken (with water only) on the day of the scan. You will be in the diagnostic imaging department for approximately 3 hours for this procedure.

## ULTRASOUND AND VASCULAR IMAGING

Ultrasound uses sound waves, not radiation to produce images. During an ultrasound examination, a sonographer will apply gel to the area of interest. The sonographer will move a handheld transducer over the skin surface. You may be asked to fast from midnight or drink a litre of water an hour before your scan. If you are a diabetic you need to inform reception so they can schedule a morning appointment for you. Ultrasound is also useful for the detection of deep vein thrombosis and many vascular studies are undertaken using ultrasound.

## MAGNETIC RESONANCE IMAGING (MRI)

MRI uses a magnetic field to acquire cross sectional images of your anatomy. Unlike conventional radiography and Computed Tomographic (CT) imaging, which make use of radiation (X-rays), MRI imaging is based on the magnetic properties of atoms. Several sets of images are usually required, ranging from 2 to 8 minutes. During the scan it is important that you remain very still. A complete scan may take from 20 minutes to one hour. The radiographer performing the scan will explain the length of scan and answer any questions prior to entering the scan room. The scanner in the Galway clinic is a very modern scanner and is smaller in length than older scanners. Music will be played during your scan to help eliminate the banging noise produced by the machine. This noise is normal.



### USEFUL NUMBERS

REPORTS & IMAGES – 091 785628  
APPOINTMENTS – 091 785601  
MRI APPOINTMENTS – 091 785554  
RADIOLOGY NURSE – 091 785644



The Galway Clinic is located on the N6 Dual Carriageway off the Martin Roundabout

We have a walk in service for X-Ray and Mammography

Fax 091-785604

MRI Fax 091-785635

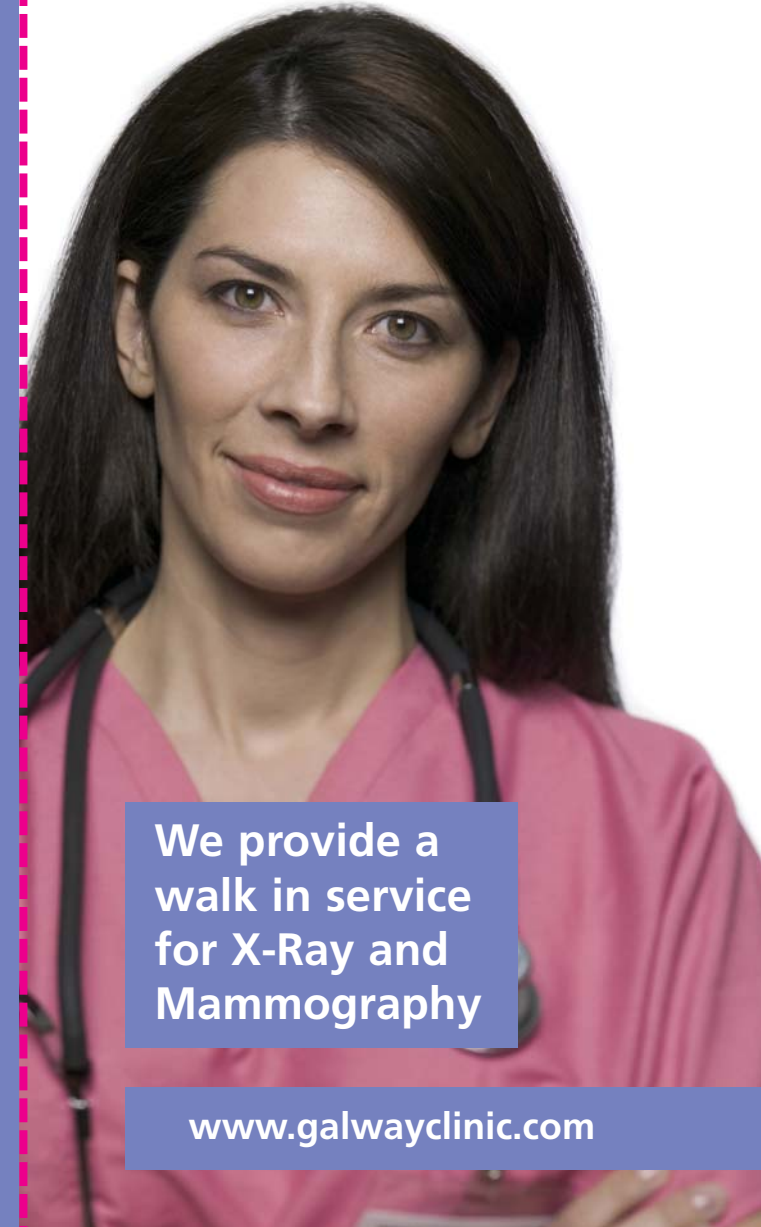
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## RADIOLOGY DEPARTMENT PATIENT LEAFLET



We provide a walk in service for X-Ray and Mammography

[www.galwayclinic.com](http://www.galwayclinic.com)

## Dear Patient, Welcome to our Radiology Department.

The mission of the Department of Radiology is to provide exceptional care with a world class facility. We offer state-of-the-art diagnostic imaging technology in a caring and compassionate atmosphere. We would like to ensure that you feel comfortable and secure during your time with us. This brochure is designed to give you a quick overview of all our imaging modalities and some useful contact numbers.

Below are listed the various services that we offer in Radiology.

**CT, MRI, Fluoroscopy, X-Ray, Interventional Radiography, Mammography, Nuclear Medicine, PET/CT and Ultrasound**

We have also included some of the preparations that are necessary before going for your exam. Not all preparations are included in this brochure and will be discussed when your appointment is made. Please make sure you have the correct appointment time and preparation for your exam. We can be contacted on 091 785628 to confirm your scheduled appointment time.

Please inform the radiographer or radiologist carrying out the exam if you suffer from hay fever, diabetes, asthma or have any allergies. Ladies please inform the radiographer or radiologist if you think you may be pregnant. If you have concerns about your medication please contact 091 785644.

## WHAT YOU NEED TO KNOW

### COMPUTED TOMOGRAPHY OR CT

CT or CAT scan uses ionising radiation to acquire cross-sectional images of your anatomy. The CT scanner has a circular opening in which a table passes through. The CT scanner is not enclosed. In the Galway Clinic we have a multislice scanner which allows us to gather more information in a shorter time. If you are having an abdominal CT scan you will need to check in 1 hour before your procedure to drink contrast for your exam. Your exam may also require the use of IV contrast. This involves the injection of an iodine-based contrast through a vein.

### FLUOROSCOPY

Fluoroscopy is a form of diagnostic radiology used to obtain "real-time" images of the internal structures of the body. Often a contrast agent, also known as contrast media such as barium is administered to aid in the evaluation.

Some common fluoroscopy studies are: Oesophagram (Barium Swallow) and Upper Gastrointestinal Series (UGI) which examines the oesophagus, stomach and the first part of the small intestine (bowel). To get an unobstructed view of your gastrointestinal system, we require that patients have nothing to eat or drink after midnight.

### INTRAVENOUS UROGRAM (IVP/IVU)

An IVU is an examination of your kidneys, ureters and bladder. The test can take 45-60 minutes and will be performed by a radiographer. A cannula (small needle) will be inserted into your arm to enable us to inject a contrast agent. The contrast will allow us to see the kidneys, ureters and bladder on the x-ray. Prior to an IVP you must fast from midnight the night before.

### MAMMOGRAPHY

A mammogram is an x-ray of the breast. It is considered to be the best method to detect abnormalities of the breast tissue. This makes mammography particularly valuable as a screening tool in detecting early breast cancer. If your breast is symptom-free it is recommended you have a 'baseline' mammogram starting at age 45. Two pictures are usually taken of each breast. It is best not to wear antiperspirants or powder since they may obscure the picture. If you have had any previous mammo images please bring them with you so we can provide a comparison.



### DIAGNOSTIC RADIOGRAPHY OR X-RAY

An X-ray or radiograph is one of the most commonly used techniques in the radiology department. Here at the Galway Clinic we are equipped with an integrated digital imaging system. A radiographer may take several views of the area specified by your GP or consultant. The amount of radiation used is kept to the minimum. Please note X-rays are not scheduled appointments and can be done on a walk-in basis. You will need to have a written request form from your GP/Clinician with his/her signature. The normal working hours are Mon-Fri 8.30am-5.00pm.

### NUCLEAR MEDICINE

In a nuclear medicine exam, a radioactive material will be administered to you by the radiographer. This substance produces radiation, which is detected by a gamma camera. Nuclear medicine exams provide functional information, i.e. they can tell us whether an organ is working properly. Often functional changes on nuclear medicine scans can be detected much earlier than structural changes on x-rays, e.g., bone destruction. Nuclear medicine exams can in some instances enable an earlier diagnosis and treatment of certain abnormalities. Patients are usually given an appointment in the morning at which time they will be given a small injection into a vein in their arm. They will be scanned at varying times after the injection depending on the area of the body to be scanned. Scan times vary from 15 minutes to 1 hour depending on the scan type. N.B. Pregnant women and young children should not attend with the patient.

### NUCLEAR CARDIOLOGY- STRESS/REST

Myocardial Perfusion Scanning is a non-invasive method of assessing blood supply to the heart wall. It shows perfusion defects, wall motion, wall thickening and ejection fraction. Stress may be achieved by exercise on a treadmill or using a drug. All patients will have an IV administration of a radioactive tracer. Preparation depends on the type of study chosen. This procedure may take six to seven hours depending on the information required by your Doctor.