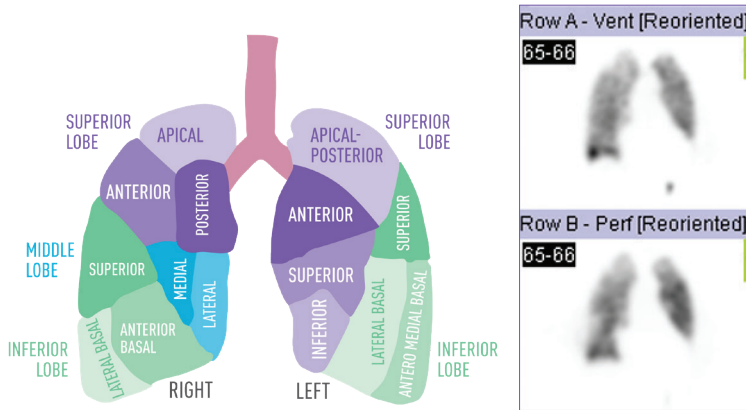


MOLECULAR IMAGING V/Q Lung Scan

Investigates pulmonary emboli within the lungs



Scan details

- The patient inhales a radioactive gas through a mouthpiece to allow a 3D image of the lungs to demonstrate the ventilation/airflow.
- A radioactive tracer is then injected into a vein in the patient's arm. The same set of images are acquired to look at the blood supply to the lungs.
- The airflow and blood flow are compared to look for mismatch defects in the lungs which are caused by blood clots/PEs.

Patient symptoms

- Shortness of breath
- Chest pain
- Procoagulant state (such as; factor 5 Leiden, lupus & family history)
- Patient may have a positive D-Dimer (blood test)
- Have a DVT
- Pulmonary hypertension
- Post-operative (hip/knee surgery)

Why a V/Q over a CTPA

- Iodine allergy
- Low eGFR unsuitable for contrast
- Patients age and giving a high dose of radiation from a CTPA to breast tissue
- Is ideal as a follow up imaging tool to avoid multiple CTPAs
- Can identify small and large emboli

Radiation comparison

- V/Q- 3 mSv
- CT Chest – 7 mSv **Taken from ARPANSA

Duration of scan

- Approx 45 mins

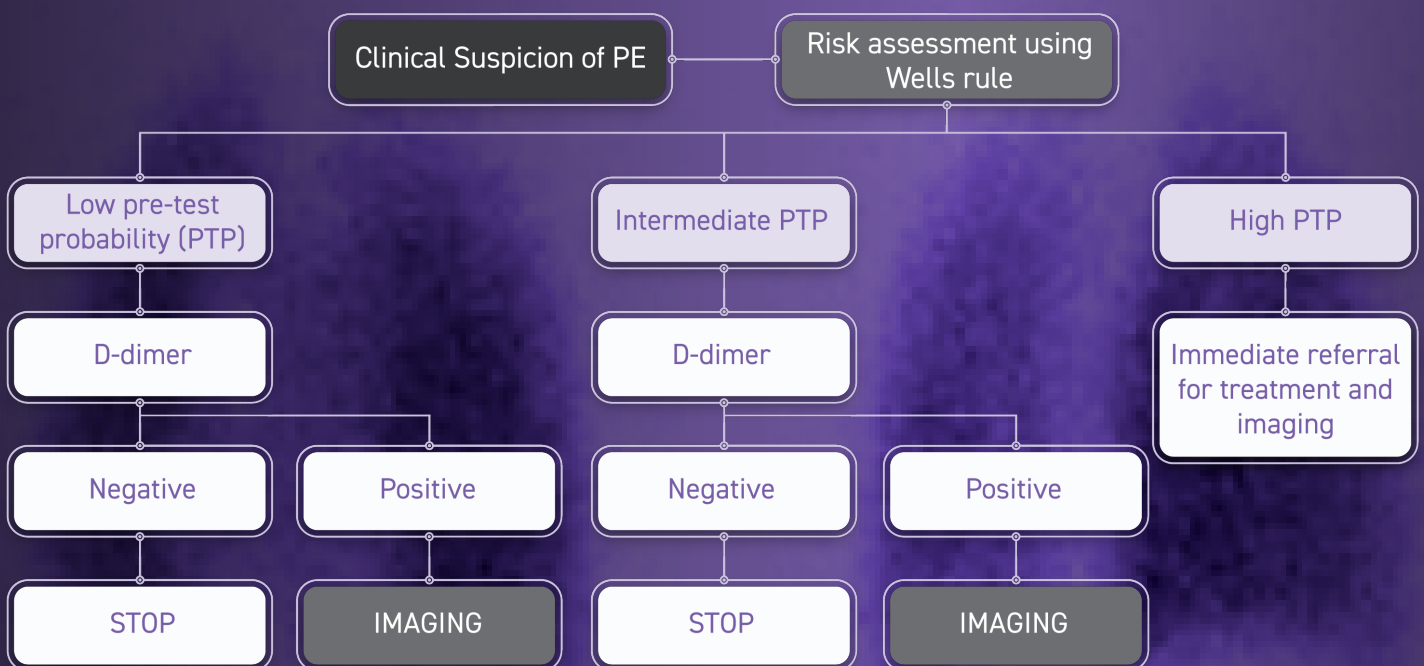
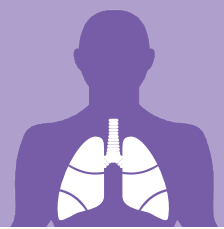


Figure 1. Suspicion of PE assessment pathway



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Nuclear Medicine
Brochures



Nuclear Medicine

A safe and non-invasive imaging modality, nuclear medicine scans provide early detection of a range of pathologies from heart disease, bone and joint disorders, to functionality of organs – as well as skeletal imaging for cancer.

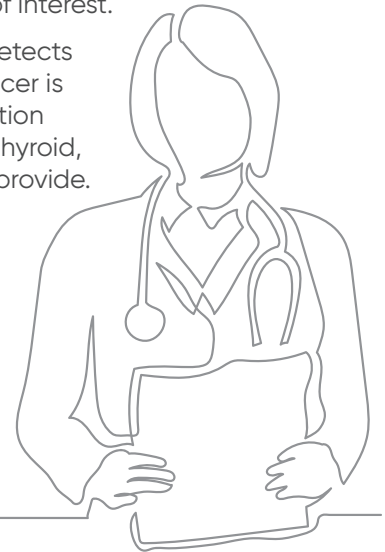
Early detection is crucial for faster and most appropriate treatment, allowing a better overall prognosis.

Nuclear medicine is a specialised, highly sensitive medical imaging technique that uses a small amount of a radioactive tracer for imaging. The tracers are designed either for whole body studies or to target specific organs, providing functional images of the organ of interest.

Images are produced by a gamma camera that detects gamma rays emitted from the patient after the tracer is administered. These images demonstrate the function of different organs (including kidney, gall bladder, thyroid, lymph nodes) that other imaging modalities can't provide.

Improving technology means doses are always optimised and minimised, delivering procedures that are safe and non-invasive – and are suitable for patients with low renal function.

Generally speaking, nuclear medicine injections will not cause any side effects.



Why Choose PRP

An established reputation for excellence

PRP nuclear medicine physicians have specialty knowledge in all facets of nuclear medicine.

This unique depth of subspecialty expertise allows for a valuable second opinion and expert consultation, ensuring an excellent level of care and accuracy for every investigation performed.

We utilise the latest technology and expertise to provide high-quality imaging with precise and detailed reporting to support diagnosis through to long-term health management plans.


Additionally, PRP offers urgent consultations via our DrLine service, to support diagnosis and health care management plans.

We understand that time matters

PRP offers an easy referral process through our website, including fast reporting to reduce anxiety for patients and allow prompt action where required.

Our goal is to ensure all patients can access timely, world-class radiology services with all nuclear medicine scans bulk billed – based on MBS referral criteria.

We also offer free, local parking with patient drop-off facilities with disabled access at our practices.



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