# QueenslandXRay

## **NUCLEAR MEDICINE GUIDE FOR GPs**

#### All studies BULK BILLED when Medicare eligible.

CONDITION/CLINICAL PRESENTATION	EXAMINATION TO REQUEST
CARDIAC	
Risk stratification of known coronary artery disease	Myocardial Perfusion Study
Diagnose coronary artery disease	Myocardial Perfusion Study
Inability to complete exercise stress test due to body habitus / injury	Myocardial Perfusion Study
THYROID/PARATHYROID	
Diagnose thyroid disease (Multi-nodular goitre, function of thyroid nodules)	Tc-99m Pertechnetate Thyroid Scan
Investigation of thyrotoxicosis (Graves, toxic nodule, subacute thyroiditis)	Tc-99m Pertechnetate Thyroid Scan
Detect parathyroid adenoma	Parathyroid Scan
ORTHOPAEDIC	
Confirm & localise facet joint activity for injection	Bone Scan
Identify occult bone trauma (sports injuries)	Bone Scan
Diagnose osteomyelitis or infected prosthesis	Bone Scan +/- Labelled White Cell Scan
Evaluate arthritic activity and extent	Bone Scan
Detection of stress fractures and shin splints	Bone Scan
Cancer Staging (identify bony metastases/primary bone cancer)	Bone Scan or PET Scan*
RENAL	
Measure differential renal function	Tc-99m DMSA or Tc-99m DTPA or Mag3 Scan
Detect renal scars	Tc-99m DMSA
PULMONARY	
Investigation of pulmonary hypertension	V/Q Lung Scan
Diagnose pulmonary emboli	V/Q Lung Scan
GASTROINTESTINAL	
Investigate gastroparesis / gastric dumping	Gastric Emptying Study
Detect acute gastrointestinal bleeding	Tc-99m Labelled Red Blood Cell Scan
Detect acute or chronic cholecystitis and biliary dyskinesia	HIDA Scan with fatty meal
NEUROLOGICAL	
Diagnose multi-infarct dementia	Cerebral Perfusion Study or PET Scan*
Diagnose Alzheimer's	Cerebral Perfusion Study or PET Scan*
	Cerebral Perfusion Study or PET Scan*
Diagnose stroke	Celebrat Fendsion Study of FET Scall

#### APPROX TIME FOR STUDY

Myocardial Perfusion Study (MPS)	Up to 3 hours if done on a 1 day protocol
Tc-99m Pertechnetate Thyroid Scan	40 mins
Parathyroid Scan	1 hour. 2nd appointment may be required 2-4 hours later.
Bone Scan	1st appointment 10-15 minutes. Requires a 2nd appointment 2-4 hours later for imaging
Tc-99m DTPA or Mag3 Scan	1 hour
Tc-99m DMSA	1st appointment 10-15 minutes. Requires a 2nd appointment 2-4 hours later for imaging
V/Q Lung Scan	1 hour
Gastric Emptying Study	4 hours
HIDA Scan with Fatty Meal	2 hours
Cerebral Perfusion Study (CPS)	2 hours
Tc-99m Labelled Red Blood Cell Scan	Typically 1 hour, but may take up to 6 hours
Tc-99m Labelled White Blood Cell Scan	1st appointment 1 hour. Requires a 2nd appointment 3-4 hours later for imaging

\*Please note: CPS can assist in the differentiation of dementia syndromes, but PET/CT is more specific/sensitive for predicting onset and progression of disease (especially Alzheimer's). GPs can refer for PET/CT but a modest private fee will apply. Specialist PET/CT studies are bulk billed.

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To talk to a Nuclear Medicine Physician, please call 1800 779 977 and our Referrer Help Desk team will direct your call.

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