

Clinical Indications for PET/CT

Central South Cancer Network

April 2008

Clinical/diagnostic problem	Recommendation	Comment
Lung		<p>Indicated:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Differentiation of benign versus malignant lesions where anatomical imaging or biopsy are inconclusive or there is a relative contraindication to biopsy <input type="checkbox"/> Preoperative staging of non-small cell cancer <input type="checkbox"/> Staging of lung cancer prior to radical radiotherapy <input type="checkbox"/> Assessment of recurrent disease in previously treated areas where anatomical imaging is unhelpful
Lymphoma		<p>Indicated:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Staging of Hodgkin's lymphoma <input type="checkbox"/> Staging of Non-Hodgkin's lymphoma <input type="checkbox"/> (Problem solving following conventional imaging for above 2 categories). <input type="checkbox"/> Assessment of residual masses for active disease <input type="checkbox"/> Assessment of response to chemotherapy <input type="checkbox"/> Assessment of remission from lymphoma <input type="checkbox"/> Pre-transplant assessment <input type="checkbox"/> Identification of disease sites when there is suspicion of relapse from clinical assessment
Colon and Rectum		<p>Indicated:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Assessment of recurrent disease <input type="checkbox"/> Prior to metastectomy

Oesophagus		Indicated: <input type="checkbox"/> Staging of primary cancer prior to radical surgery
Brain and Spinal Cord		Indicated: <input type="checkbox"/> Benign versus malignant lesions, where there is uncertainty on anatomical imaging and a relative contraindication to biopsy <input type="checkbox"/> Suspected tumour recurrence when anatomical imaging is difficult or equivocal and management will be affected <input type="checkbox"/> Identifying the grade of brain malignancy <input type="checkbox"/> Investigation of the extent of tumour within the brain or spinal cord
Head and Neck		Indicated: <input type="checkbox"/> Identify tumour recurrence in previously treated carcinoma <input type="checkbox"/> Identification of metastatic disease in the neck and at distant sites, from a diagnosed malignancy, prior to consideration of neck dissection
Thyroid		Indicated: <input type="checkbox"/> Assessment of patients with elevated thyroglobulin and negative iodine scans for recurrent disease
Breast Cancer		Indicated: <input type="checkbox"/> Assessment and localisation of brachial plexus lesions in breast cancer (Radiation effects versus malignant infiltration) <input type="checkbox"/> Assessment of the extent of disseminated breast cancer, if this will change management
Testicle		Indicated: <input type="checkbox"/> Assessment of recurrent disease from seminomas and teratomas <input type="checkbox"/> Assessment of residual masses
Liver: Secondary Lesion		Indicated: <input type="checkbox"/> Equivocal diagnostic imaging (CT,MRI, Ultrasound) <input type="checkbox"/> Assessment pre and post therapy intervention

		<input type="checkbox"/> Exclude other metastatic disease prior to metastectomy
Pancreas		Indicated: <input type="checkbox"/> Staging a known primary
Adrenal		Indicated: <input type="checkbox"/> Assessment of possible adrenal metastases
Musculoskeletal Tumours		Indicated: <input type="checkbox"/> Soft tissue primary mass assessment to distinguish high grade malignancy from low or benign disease <input type="checkbox"/> Soft tissue mass biopsy site – to direct biopsy to most malignant area <input type="checkbox"/> Staging of primary soft tissue malignancy to assess non-skeletal metastases <input type="checkbox"/> Assessment of recurrent abnormalities in operative sites <input type="checkbox"/> Follow up to detect recurrence or metastases <input type="checkbox"/> Assessment of osteogenic sarcomas for metastatic disease
Skin Tumours		Indicated: <input type="checkbox"/> Malignant melanoma with known dissemination to assess extent of disease <input type="checkbox"/> Malignant melanoma in which a sentinel node biopsy was not or cannot be performed in stage II (AJCC updated classification)
Metastases from unknown primary		Indicated: <input type="checkbox"/> Determining the site of an unknown primary when this influences management
Myeloma		Indicated: <input type="checkbox"/> PET/CT is recommended in the management of selected patients with myeloma, particularly those with non-secretory myeloma, plasmacytomas and patients following stem cell transplantation who show biochemical evidence of recurrence (referral by Haematology Consultants only)

All other indications must have prior funding agreed by the patient's PCT prior to referral. This should be arranged via the Lead Cancer Clinician at the referring Trust.