



## INDICATIONS FOR THE USE OF $^{18}\text{F}$ -FDG PET IMAGING IN THE MANAGEMENT OF SARCOMA PATIENTS AND GASTROINTESTINAL STROMAL TUMOURS (GIST)

### Background

This guideline brings together the agreed indications for PET-CT scanning of sarcoma patients in Scotland. This was originally developed following the 2016 update of the PET-CT indications by the Royal College of Radiologists and was developed by the Scottish Sarcoma Network (SSN) in partnership with the Scottish Clinical Imaging Network (SCIN). This update is part of a routine review of PET CT indications. There has been no change to previously agreed indications as a result of this review.

Despite guidance from The Royal College of Physicians and the Royal College of Radiologist and other organisations, the evidence base for PET-CT in the management of sarcoma is not very strong. As such PET CT imaging in this tumour group continues to be considered as “non-routine” with the expectation that requests will only be submitted following discussion at the Scottish Sarcoma or Aberdeen/Dundee/Edinburgh/Inverness centre upper gastrointestinal cancer multi-disciplinary team (MDT) meeting.

As with all cases, PET referrals should only be considered where the outcome of the investigation will directly influence individual patient management and treatment. Referrals not covered by this guidance can be considered in discussion with the local PET CT lead clinician or ARSAC holder.

### Non routine Indications

- Assessment of disease response in patients with GIST receiving systemic therapy.
- Staging of high-grade sarcomas with a high tendency to have early metastatic disease. This includes Ewing’s sarcoma, rhabdomyosarcoma (including alveolar), osteosarcoma, synovial sarcoma and myxoid liposarcoma. These specific sub-types represent less than 15% of all soft tissue sarcomas. There is no clear role for PET CT in the staging of other types of high-grade sarcoma
- Pre-amputation of high-grade sarcomas to assess for distant disease that would alter surgical management, for example if amputation is considered as the definitive treatment of a limb primary sarcoma.
- In patients with metastatic high-grade sarcomas being considered for liver or lung metastectomy.
- For the staging, response to therapy and restaging/detection of relapse of paediatric patients with osteosarcoma, Ewing’s sarcoma and rhabdomyosarcoma.

## Future Considerations

These guidelines will be reviewed on an ongoing basis to incorporate any change in the existing evidence base.

## References

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### NOTE

*This guideline is not intended to be construed or to serve as a standard of care. Standards of care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns of care evolve. Adherence to guideline recommendations will not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. The ultimate judgement must be made by the appropriate healthcare professional(s) responsible for clinical decisions regarding a particular clinical procedure or treatment plan. This judgement should only be arrived at following discussion of the options with the patient, covering the diagnostic and treatment choices available. It is advised, however, that significant departures from the national guideline or any local guidelines derived from it should be fully documented in the patient's case notes at the time the relevant decision is taken.*