

## Appendix 1

### *Algorithm for Mediastinal Lymph Node Staging in NSCLC*

Algorithm for preoperative mediastinal staging and post-induction restaging according to the Revised European Society of Thoracic Surgeons (ESTS) Guidelines.

#### **Preoperative Mediastinal Staging Algorithm**

1. Patient with potentially resectable NSCLC
  - Contrast-enhanced CT of the chest
  - PET-CT
2. Evaluation mediastinal and hilar lymph nodes
3. Low-risk situation (ALL criteria required):
  - Peripheral tumour
  - Tumour size  $\leq 3$  cm
  - No mediastinal or hilar lymph node enlargement on CT
  - No mediastinal or hilar FDG uptake on PET-CT
  - No invasive mediastinal staging required
4. If ANY of the following are present:
  - Central tumour (any size)
  - Tumour  $> 3$  cm
  - PET-positive mediastinal lymph nodes
  - CT-enlarged mediastinal lymph nodes ( $>10$  mm)
  - Suspected N1 disease
  - Invasive mediastinal staging REQUIRED
5. First-line invasive staging:
  - Endosonography (EBUS-TBNA  $\pm$  EUS-FNA)
6. Endosonography results:
  - a) Positive for malignancy
    - No further mediastinal staging
  - b) Negative for malignancy AND high clinical suspicion persists or inadequate
    - Surgical mediastinal staging
7. Surgical mediastinal staging:
  - Video-assisted mediastinoscopy (preferred)

#### **Post-Induction Mediastinal Restaging Algorithm**

1. Patient with initially proven N2/N3 disease treated with induction therapy
2. Restaging imaging:
  - PET-CT (for guidance only)
3. Restaging strategy:
  - Endosonography (EBUS-TBNA  $\pm$  EUS-FNA)
  - Consider surgical restaging if endosonography is negative or inadequate