Optimal assessment of an additional lung nodule in a patient with potential for cure
Christophe Dooms, BE

What is the place of less invasive surgery in lung cancer?
Giulia Veronesi, IT

Stereotactic ablative radiotherapy in early stage NSCLC
Suresh Senan, NL

Defining the role of targeted therapies in early stage NSCLC
Solange Peters, CH
Establishing a diagnosis for an additional lung nodule

- **Increasing incidence**
  - CT imaging advances
  - Often below PET detection limit

- **Diagnostic challenge**
  - Definitely malignant vs. possibly malignant vs. probably benign

- **Staging challenge**
  - Synchronous other tumour vs. satellite vs. metastasis vs. multifocal lung cancer

- **Therapeutic challenge**
  - Follow-up vs. invasive test vs. diagnostic resection
Minimally invasive surgery and stereotactic radiotherapy

Technically resectable stage I NSCLC

Need for minimally invasive techniques
- posterolateral thoracotomy
- muscle sparing thoracotomy
- video: VATS
- robot: RATS

Need for better efficacy/toxicity ratio
- high-dose
- altered fractionation
- SABR peripheral
- SABR central
Minimally invasive surgery and stereotactic radiotherapy

Clinical Practice Guidelines

Table 2. Summary of recommendations

- **Surgery** should be offered to patients with stage I or II NSCLC who are willing to accept procedure-related risks [III, A].
- Anatomical resection (lobectomy) is preferred over lesser resections such as wedge or segment resection [I, A].
- Either open thoracotomy or VATS access can be utilised as appropriate to the expertise of the surgeon [III, A].
- Lymph node dissection should conform to IASLC specifications for staging [III, A].
- The non-surgical treatment of choice for stage I NSCLC is stereotactic ablative radiotherapy (SABR). The dose should be to a biologically equivalent tumour dose of $\geq 100$ Gy, prescribed to the encompassing isodose [III, A].
- SABR for early-stage peripheral lung tumours is associated with low toxic effect in patients with COPD and the elderly [III, A].
- For tumours with a size $>5$ cm and/or central location, radical radiotherapy using more conventional daily or accelerated schedules is recommended [III, A].
Minimally invasive surgery and stereotactic radiotherapy

Technically resectable stage I NSCLC

Functionally operable
- Standard = lobectomy
- Investigational: lobectomy
  - vs. sublobar
  - vs. SABR

Borderline operable
- Choice between sublobar resection vs. SABR
- RCTs ongoing

Non operable
- Standard = SABR
- central tumour?
Adjuvant therapy for early stage NSCLC

Table 2. Summary of recommendations

- **Adjuvant chemotherapy** should be offered to patients with resected stage II or III NSCLC [I, A] and can be considered in patients with resected stage IB disease and a primary tumour >4 cm [II, B]. However, pre-existing co-morbidity and postoperative recovery need to be taken into account in this decision.

- For adjuvant chemotherapy, a two-drug combination with cisplatin is preferable [I, A]. In randomised studies, the attempted cumulative cisplatin dose was up to 300 mg/m², delivered in three to four cycles. The most frequently studied regimen is cisplatin–vinorelbine.

- **Given the current state of knowledge, the choice of adjuvant therapy should not be guided by molecular analyses such as ERCC1 or mutation testing [IV, B].**

- **Given the current state of knowledge, targeted agents should not be used in the adjuvant setting [II, A].**

- In view of the equivalence of neo-adjuvant and adjuvant chemotherapy for overall survival, the consistent results and broad evidence base support adjuvant chemotherapy as the timing of choice [I, A].
Adjuvant therapy for early stage NSCLC

Modern thoracic surgery
- less invasive procedures
- ~15% pneumonectomy
- conform LN procedure

Adjuvant treatment
- additional treatment after radical local therapy to improve cure rate

Cytotoxic therapy
- cisplatin-based chemo
- PGX driven chemo

Cytostatic therapy
- TKIs
- angiogenesis blockers

Immunotherapy
- vaccines
- checkpoint inhibitors
Thank you for your kind attention

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