ESMO MANAGEMENT AND TREATMENT ADAPTED RECOMMENDATIONS IN THE COVID-19 ERA: LUNG CANCER

Cancer patient prioritisation

The tiered approach of ESMO in delivering a guidance for cancer patients during the COVID-19 pandemic is designed across three levels of priorities, namely: tier 1 (high priority intervention), 2 (medium priority) and 3 (low priority) – defined according to the criteria of the Cancer Care Ontario, Huntsman Cancer Institute and Magnitude of Clinical Benefit Scale (MCBS), incorporating the information on the value-based prioritisation and clinical cogency of the interventions

- **High priority**: patient condition is immediately life threatening, clinically unstable, and/or the magnitude of benefit qualifies the intervention as high priority (e.g. significant overall survival [OS] gain and/or substantial improvement in quality of life [QoL]);
- **Medium priority**: patient situation is non-critical but delay beyond 6 weeks could potentially impact overall outcome and/or the magnitude of benefit qualifies for intermediate priority;
- **Low priority**: patient's condition is stable enough that services can be delayed for the duration of the COVID-19 pandemic and/or the intervention is non-priority based on the magnitude of benefit (e.g. no survival gain with no change nor reduced QoL).

Priorities for lung cancer patients

Outpatient visit priorities

High Priority

New diagnosis or suspicion of invasive lung cancer with either:

- Disease-related symptoms (dyspnoea, pain, haemoptysis, etc.)
- Suspicion of clinical stage II/IIIA/IIIB or metastatic NSCLC or SCLC

Visits for treatment administration

Medium Priority

New diagnosis or suspicion of localised lung cancer of clinical stage I

Post-operative patients with no complications

Follow-up for patients at high risk of relapse

Established patients with new problems or symptoms from treatment: convert as many visits as possible to telemedicine visits

Low Priority

Survivorship visits

Follow-up for patients at low/intermediate risk of relapse

Patients visits for psychological support (convert to telemedicine)

Priorities for Lung Disease: Imaging

High Priority

Patients with significant respiratory symptoms and/or other clinically relevant chest, cancer- or treatment-related symptoms. In patients with new respiratory symptoms such as dyspnoea, cough with or without fever, a CT-scan is recommended

Standard staging work-up for suspected lung cancer of unknown stage or stage II/III/IV

Biopsies for suspicious nodules or mass for suspected lung cancer of stage or stage III/IV

Evaluation of active treatment response in the first 6 months of treatment or if suspicion of progression at any timepoint

Pre-planned imaging evaluation per clinical trial protocol

Medium Priority

Follow-up imaging for high/intermediate risk of relapse within one year of completion of radical treatment

Standard staging work-up for early lung cancer (stage I)

Biopsies for suspicious nodules or mass for suspected invasive cancer of unknown stage or stage I/II

Established patients with new problems or symptoms from treatment

Evaluation of active treatment response beyond 6 months of treatment if stable/controlled situation

Follow-up of nodules of incidental finding with either:

- Solid nodule 50-500 mm^3

- Pleural-based solid nodule 5-10 mm
- Partially solid nodule with a non-solid component of ≥8 mm
- Known VDT (Volume Doubling Time) 400-600 days

Low Priority

Follow-up imaging for high/intermediate risk of relapse more than a year after completion of radical treatment

Follow-up imaging after radical treatment in a low risk of relapse scenario

Follow-up of nodules of incidental finding with either:

- Solid nodule <50 mm^3
- Pleural-based solid nodule <5 mm
- Partially solid nodule with a non-solid component of <8 mm
- Non-solid nodule <8 mm
- Benign morphology
- Known VDT >600 days

Lung cancer screening can be deferred until the COVID-19 pandemic resolves – It is reasonable for patients in the general population to defer screening low-dose CT, a deferral that is not likely to have an impact on overall survival

Priorities for Lung Disease: Surgical Oncology

High Priority

Drainage +/- pleurodesis of pleural effusion, pericardial effusion, tamponade risk

Evacuation of empyema-abscess

T2N0 tumours naïve from treatment or after induction chemotherapy

Resectable T3/T4 tumours naïve from treatment or after induction chemotherapy

Resectable N-1/N2 disease naïve from treatment or after induction chemotherapy

Diagnostic procedure such as mediastinoscopy/thoracoscopy/pleural biopsy/endoscopy/transthoracic investigations for diagnostic/staging work-up

Medium Priority

Discordant biopsies likely to be malignant

Resectable NSCLC with T1AN0 (alternative if no surgical capacity available, is stereotactic radiotherapy; surgery is preferred)

Diagnostic work-up and/or resection of nodules of incidental finding with either:

- Solid nodule >500 mm^3
- Pleural-based solid nodule >10 mm
- Solid component >50 0mm^3 in partially solid nodule
- Known VDT <400 days
- New solid component in pre-existing non-solid nodule

(alternative if surgery indicated and no surgical capacity available is stereotactic radiotherapy)

Low Priority

Discordant biopsies likely to be benign

Operable pure GGO nodule (T1a)

Diagnostic work-up and/or resection of all other nodules of incidental finding including also:

- Solid nodule >500 mm^3 *and known VDT >600 days*

(alternative if surgery indicated and no surgical capacity available is stereotactic radiotherapy)

Priorities for Lung Cancer: Medical Oncology – Early Stage Lung cancer

High Priority

Concomitant chemoradiotherapy for SCLC limited disease stage I/II

Neoadjuvant chemotherapy (enabling deferral of surgery by 3 months) in clinical stage II

Delivery of adjuvant chemotherapy in T3/4 or N2 disease for young (<65 years old) and fit patients

G-CSF use if febrile neutropaenia risk evaluated to be >10-15%

Medium Priority

Adjuvant chemotherapy in T2b-T3N0 or N1 disease should be discussed with patients, considering clinical features and prognosis

Medical follow-up between 2 cycles should be performed only if necessary and by telephone

Blood check between 2 cycles should be performed only if necessary and at home if possible

Low Priority

Adjuvant chemotherapy in stage T1A-T2bN0 with negative prognostic features (lymphovascular infiltration, histological subtype…). The risk versus potential benefit should be individually discussed with patients

Adjuvant chemotherapy for patients with significant comorbidities, or elderly patients >70y, should be discussed and possibility omitted

Priorities for Lung Cancer: Medical Oncology – Locally advanced Lung Cancer

High Priority

Concomitant chemoradiotherapy for SCLC limited disease stage III

Concomitant or sequential chemoradiotherapy for inoperable NSCLC Stage III

Starting consolidation durvalumab (within 42 days)

Neoadjuvant chemotherapy in clinical stage III

G-CSF use if febrile neutropaenia risk evaluated to be >10-15%

Medium Priority

Medical follow-up between 2 cycles should be performed only if necessary and by telephone

Blood check between 2 cycles should be performed only if necessary and at home if possible

Low Priority

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Priorities for Lung Cancer: Medical Oncology – Metastatic Lung Cancer

High Priority

1st-line treatment including chemotherapy, chemotherapy plus IO, IO alone or TKIs to improve prognosis, cancer-related symptoms and QoL

Start 2nd-line chemotherapy or IO in symptomatic and progressive disease patients

Start 2nd-line TKI in progressive disease patients

G-CSF use has to be considered if despite optimal dose modification, risk of febrile neutropaenia is >10%

Anti-PD-(L)1 scheduled cycles may be modified/delayed to reduce clinical visits (for instance, using 4-weekly or 6-weekly dosing instead of 2- or 3-weekly for selected agents when appropriate (where allowed from National Regulatory Agency)

Medium Priority

Start 2nd and beyond line chemotherapy or IO in asymptomatic patients, in absence of threatening disease (volume/location)

Consider, when feasible, oral chemotherapy treatment instead of intravenous (etoposide, vinorelbine) to reduce hospital visits

Medical follow-up between 2 cycles should be performed only if necessary and by telephone

Blood check between 2 cycles should be performed only if necessary and at home if possible

For patients ongoing with IO from more than 12/18 months, delaying the next cycle, omitting some scheduled cycle, or generally enlarging intervals should be considered

Low Priority

Discontinuation of IO after 2 years of treatment should be considered, keeping in mind the lack of prospective evidence

For patients ongoing with IO having stopped due to toxicity, resuming might be delayed in absence of disease progression

Postpone antiresorptive therapy (zoledronic acid, denosumab) that is not needed urgently

Priorities for Lung Cancer: Radiation Oncology

High Priority

Radiotherapy for inoperable stage II-III cancers, with contra-indications for chemotherapy

Concomitant (preferred) or sequential chemoradiotherapy for inoperable NSCLC Stage II/III

Concomitant (preferred) or sequential chemoradiotherapy for SCLC limited disease

Superior vena cava obstruction, significant haemoptysis, spinal cord compression, significant bone pain or any life-threatening condition amenable to palliative radiotherapy

Medium Priority

SABR-SBRT for stage I cancers

Adjuvant PORT for R1 resection, if indicated in NSCLC could be considered at the at the end of adjuvant chemotherapy or delayed up to 3 months from surgery

PCI in limited stage SCLC after chemotherapy

Low Priority
Adjuvant PORT N2 R0, if indicated in NSCLC should be discussed and if retained considered at the at the end of adjuvant chemotherapy or delayed up to 3 months from surgery
PCI in extensive stage SCLC after chemotherapy may be replaced by MRI active surveillance
Non-life-threatening conditions such as mild bone or chest pain should be considered for more aggressive analgesics and use of palliative radiotherapy should be individualised depending on individual benefit/risk ratio

List of abbreviations: CT, computed tomography; G-CSF, granulocyte colony-stimulating factor; GGO, ground-glass opacity; IO, immune-oncology; NSCLC, non-small cell lung cancer; QoL, quality of life; PD-1, programmed cell death protein 1; PD-L1, programmed death-ligand 1; SABR, stereotactic ablative radiotherapy; SBRT, stereotactic body radiotherapy SCLC, small cell lung cancer; TKI, tyrosine kinase inhibitor; VDT, volume doubling time.