

Lung cancer and mesothelioma service guidance during the COVID-19 pandemic

Version 2.4: The restoration and recovery COVID-19 endemic phase

The COVID-19 pandemic has forced unprecedented transformation in the NHS resulting in radical alterations to services and a change in the behaviour of the public towards seeking help. Without mitigation of this effect we will see morbidity and mortality at a level that will likely exceed the direct effects of COVID-19 infection. In cancer, we are already seeing a dramatic reduction in fast track referrals and this will inevitably lead to stage progression. The effects of this will be most marked for the more aggressive cancers such as lung cancer, and because lung cancer is common the total burden will be high. Thus, as services resume in the context of endemic COVID-19 infection, we will need to adapt services so that people with suspected lung cancer can rapidly address their symptoms and feel confident that the healthcare system will keep them safe through their diagnosis and treatment. Geographical variation in the prevalence of COVID-19 infection may dictate to what extent services can return to an emphasis on awareness, early diagnosis, rapid diagnosis and comprehensive treatment. The purpose of this updated guidance is to provide assistance to cancer teams as they move towards full restoration of services, including compliance with the currently commissioned National Optimal Lung Cancer Pathway, whilst maintaining a favourable risk to benefit ratio. The latter will depend on how well the pandemic is controlled, with considerable uncertainty about the impact of changes in social restrictions. The guidance takes into account the latest NHS recommendations on restoration of services and on that being produced by the relevant Royal Colleges and specialist societies. This guidance does not cover the Targeted Lung Health Checks and CT screening, where separate guidance is anticipated.

This is a rapidly evolving situation and this guidance may need to be updated regularly.

This guidance cannot cover all clinical scenarios. Individual clinicians, trusts and MDTs will always make the final decisions on the most appropriate action for individual patients and their local services.

Infection control measures should be compliant with the latest guidance. Appendix 1 contains some suggestions that are in place in some NHS Trusts. This guidance will be reviewed bi-monthly and updated as necessary.

1. Diagnostics and staging

These recommendations are designed to minimise the need for hospital attendance and to minimise the duration of any hospital attendances whilst maintaining an appropriate and effective diagnostic and staging pathway.

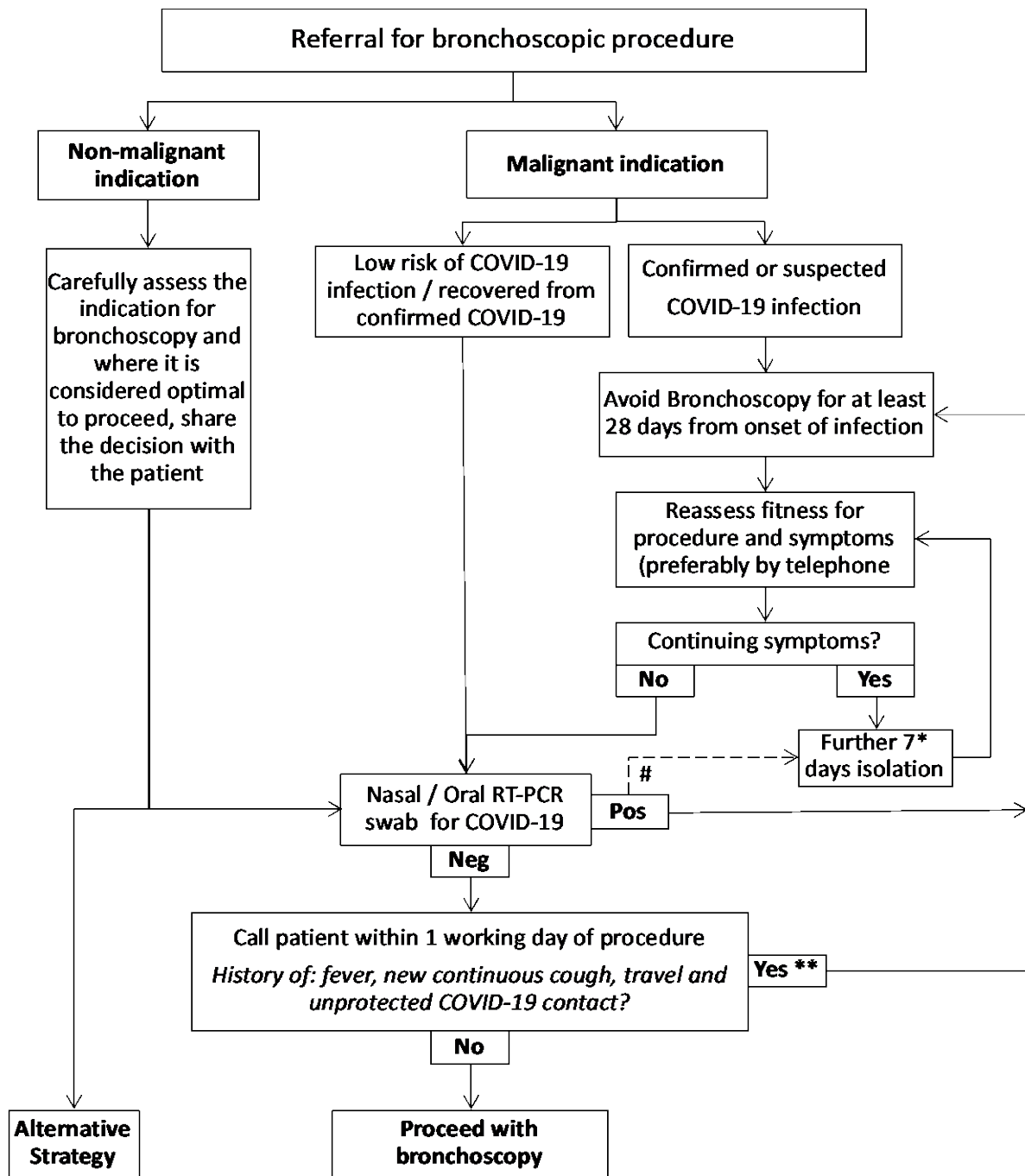
- Primary Care clinicians should consider the risk of COVID-19 infection and ensure that a nasal / oropharyngeal swab is taken and is negative in suspected cases. Otherwise referral practice should adhere to normal practice as recommend in NICE NG12. (*New recommendation*)

- Follow current NICE guideline (2019 update) on the investigation and management of lung cancer ([NG122](#)) (*New recommendation*)
- Follow the National Optimal Lung Cancer Pathway, with a focus on minimising the chance of acquiring COVID-19 infection: (*New recommendation*)
 - The normal triage process should be employed that includes correspondence with patients; those without cancer, or at very low risk, should not be invited for an appointment at the hospital. Consider telephone consultation and repeat scans for indeterminate findings scheduled after the anticipated reduction in COVID-19 infections.
 - Where appropriate, telephone consultations should be used in place of scheduled visits to the hospital, e.g. for results and planning of subsequent tests.
 - Ensure that all investigations that are necessary to plan treatment are completed with a minimum of visits to the hospital. Avoid investigations that have no influence on management, especially where no treatment is likely.
 - Institute the recommended enhanced infection control measures during diagnosis and treatment as recommended by Public Health England.
 - Where face-to-face appointments are planned, try to arrange multiple consultations on the same day (joint clinics).
- Follow the updated guidance for bronchoscopy (version 2) available on the [BTS website](#) / NHSE, (figure 1). In addition:
 - Carefully evaluate whether patients really need a bronchoscopy and where it is thought that proceeding is optimal, share the decision with the patient.
 - When indicated, use PET-CT prior to any staging EBUS and to identify alternative biopsy target.
 - In cases where there is a low risk of mediastinal disease, consider percutaneous lung biopsy or proceeding directly to treatment based on lung cancer probability (including the use of the Herder model, clinical history and lesion morphological appearances). When proceeding straight to resection, risks of benign resection should be specifically discussed with the patient.

Follow [British Thoracic Society Guidelines](#) on pulmonary nodule management, with a focus on infection control including:

- Consider CT surveillance to measure growth rate rather than staging and treatment in those lesions likely to be indolent or benign, including pure ground-glass nodules, smaller part-solid and solid nodules or those with a volume doubling time of ≥ 400 days.
- Refer and investigate lesions with a baseline risk of malignancy of $\geq 10\%$ or those with a volume doubling time of < 400 days
- Consider implementing virtual nodule management avoiding visits to hospital
- Reinstate any delayed follow-up CTs, in low risk patients
- Use telephone follow-up and/or correspondence to convey results
- Reinstate thoracic CT for acute indications that might not be directly related to suspected lung cancer symptoms

Figure 1: Summary of Bronchoscopy Guidelines



*14 days for low risk patients with household members, according to latest guidance

#For patients recently recovered from confirmed COVID-19

** This does NOT apply to people who have recently recovered from COVID-19 infection confirmed by PCR, who will not have COVID-19 infection and can proceed to bronchoscopy

2. Treatment

Clinicians should discuss with patients whether the risks of starting anticancer treatment could outweigh the benefits during the COVID-19 pandemic, including the local measure in place to reduce the risk of infection. This is particularly true for patients considered for systemic anti-cancer treatment (SACT). **In the context of restoration of services the aim should be to provide pre-pandemic standards of treatment as soon as the local prevalence allows and to react to changes in prevalence that may occur when social restrictions are relaxed.** This is in line with current [NHS guidance](#).

2.1 Surgery and curative-intent treatment

Thoracic surgery capacity has varied greatly according to the prevalence of COVID-19 infection and the reduced referrals have resulted in many surgical units now having spare capacity. It is anticipated that demand may increase considerably over the next few months with some patients required more complex surgery owing to stage progression. Where possible services should return to normal with an emphasis on infection control. Current guidance on surgery during the pandemic should be followed including:

- RT-PCR testing of all patients prior to surgery
- Use of [chest CT prior to surgery](#)
- Use of “clean” or “low risk” sites or areas to reduce risk of infection
- Use of Cancer Alliance hubs where services find themselves unable to meet demand.

Patients should be offered treatment according to the accepted standard of care unless there is a significant second wave in the pandemic. Any variation from normal practice should be recorded with the reason. Prioritisation of cases should be discontinued (*New recommendation*)

2.1.1 Surgery and curative-intent radiotherapy/chemoradiotherapy

- Plan surgery to minimise length of stay, by using minimal access surgery, day case or day of surgery admission.
- The benefit of adjuvant chemotherapy may be outweighed by the risk so consider omitting this and stopping existing treatment early at 3 cycles.
- In higher risk patients, particularly those not fit for a lobectomy, consider direct referral for radiotherapy or microwave / radiofrequency ablation..
- Consider treatment without biopsy, as above, using Herder score and frozen section for intraoperative confirmation (in-line with current [BTS nodule guidance](#) and [Royal College of Pathologist](#) advice on frozen section during an infectious disease outbreak).
- Carefully consider patients for trimodality treatment for N2 positive lung cancer, according to NICE NG122.
- Resume the standard of care when choosing between surgery and curative radiotherapy, basing decisions on what is optimal for the patient on the balance of risk and benefit, and on the patient’s preference.
- Use hypo-fractionated regimens wherever possible- See [RCR emergency paper](#) for protocols.
- Pre- and post-operative clinical appointments should be remote (via secure video-link to telephone call) whenever possible.

2.2 Systemic anti-cancer therapy

- Defer face-to-face consultation with oncologists pending complete predictive marker analysis.
- Patients should be counselled about the risks of chemotherapy during the pandemic and risk stratified according to tumour biology and urgency of treatment, in line with [NHS guidelines](#).
- Consider using regimens which reduce chemotherapy chair time and therefore potential exposure e.g. carboplatin rather than cisplatin, oral etoposide rather than intravenous and in line with NHS [interim treatment](#) recommendations.
- Consider offering GCSF to all patients undergoing cytotoxic chemotherapy.
- Utilise the least labour (pharmacist and nursing) intensive regimen where possible e.g. platinum/pemetrexed, taxol/carbo or platinum/oral vinorelbine.
- Consider using a maximum 4 cycles of cytotoxic chemotherapy per course. (*Updated recommendation*)
- Denosumab should be available for self-administration.
 - Omit routine dental review before commencement.
- Consider omitting maintenance pemetrexed. (*Updated recommendation*)
- Offer immunotherapy in the schedule that requires the least number of hospital visits.
- Third or more line therapy should not to be offered routinely.
- Imaging whilst on treatment should utilise most pragmatic modality using CXR, limiting CT and other scans to the point when a change of management is being considered.

2.3 Palliative radiotherapy

- Consider offering radiotherapy without a tissue diagnosis if patient unlikely to benefit from systemic therapy.
- Use hypo-fractionated regimens where possible.
- Omit PCI and thoracic consolidation for extensive stage small cell lung cancer.

2.4 End of treatment

End of treatment summaries should be completed detailing the variation from standard of care to enable subsequent treatment planning and audit.

2.5: Supportive Care

- All patients, regardless of stage, should be offered a discussion regarding advance care planning.
- Ideally, enhanced supportive care should be offered to all patients who are stage IIIB/IV.

3. Mesothelioma

- Reinstate local anaesthetic thoracoscopy / VATS in patients with suspected mesothelioma after a full discussion with the patient about risks, benefits and likely treatment
- Outpatient therapeutic aspiration or indwelling pleural catheter insertion should be preferred over procedures that require an inpatient stay.
- Consider assessing cell blocks from pleural fluid to minimise invasive inpatient procedures (cytological samples should be placed in formalin and processed as histologic samples to minimise risk of infection to staff). In this setting testing for BAP1 loss and P16 deletion may

contribute to diagnosis, although testing should be undertaken in UKAS accredited laboratories and results must be reviewed in the context of all available data.

- Consider deferring cytotoxic therapy in patients with epithelioid mesothelioma until patient symptomatic.
- Consider restricting chemotherapy for patients with mesothelioma to those with epithelioid/biphasic tumours. (*Updated recommendation*)

4. Information for Patients

Please discuss with all patients undergoing diagnostic and staging tests or being referred for treatment about how the local service has adapted to try to keep patients safe, but that there is still some risk and that this may change according to how the pandemic progresses. Ensure that patients appreciate the harm that may result from not having a diagnosis and treatment. Allow time for decisions and be prepared to re-discuss matters with patients. The LCNS will have a pivotal role here. Please ensure that the LCNS, if not present, is aware of the patient and that the patient has contact details of their lung cancer specialist nurses (LCNS) or relevant team to discuss any concerns and seek support at this difficult time.

5. Role of Lung Cancer Nurse Specialist

The LCNS normally plays a crucial role throughout the lung cancer pathway but in the context of the pandemic their role is even more important. The LCNS will be able to ensure that as much contact as possible by phone, that the modified pathway runs smoothly and is explained to patients. The LCNS will play a greater role as the key worker in supportive care. Inevitably both awareness by patients of the changes to treatment and the concern about becoming infected with COVID-19 will generate more anxiety that the LCNS will need to manage. It is vital that LCNS are not re-deployed and their time with cancer patients protected.

The LCNS should contact the patient after initial telephone consultations with treating specialists to clarify any issues that may arise and confirm a point of contact.

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Appendix 1: Suggested detailed guidance on service delivery

Consultation rooms should be designated as 'non-COVID'

- Patients should be phoned to pre-book appointments and screened for symptoms. Any patients reporting symptoms consistent with covid-19 should be instructed to self-isolate for at least 7 days and until free symptoms.
- A designated staff member should welcome the patient, encourage them to wash to their hands, provide a mask, temperature screen them and direct them to the 'non-COVID' room.
- Optimise distancing measures e.g. cordoning off reception and waiting areas, spaced seating, posters/ banners and floor stickers.
- Surgical masks, visor, gloves and apron should be worn by staff with close contact (within 1 metre).
- Equipment is cleaned regularly between patients.

During investigation and treatment, patients should shield themselves and should report any new contact with a potentially infected person or any new symptoms.

Consideration for an up to date swab and CT is required before embarking on treatment, and during treatment.