Guidance for Pre-Operative Chest CT imaging for elective cancer surgery during the COVID-19 Pandemic

Background:

- Part of the NHSE response to the COVID-19 pandemic involves the maintenance of some urgent services including cancer surgery.

- The risk of respiratory complications may be exacerbated by operating on unknowingly undetected COVID positive patients who undergo major surgery and mechanical ventilation. Neither naso- / oropharyngeal swabs (PCR) or CT-scanning are particularly sensitive for the SARS-Cov-2 virus and have false negative rates 25 to 30%

- For this reason, it is important we have consensus agreement for the appropriate screening of pre-operative patients. All patients should have been asymptomatic for at least 7 days prior to surgery, have been socially isolating for 14 days with shielding and have Covid-19 negative naso / oropharyngeal swabs within 48 hours of the procedure according to local infection prevention control guidance.

- This guidance relates to the use of chest CT prior to elective cancer surgery only (Priority 2 and 3 - NHSE Guidance). This guidance is likely to evolve over time as further data becomes available.

- Patients who present as abdominal emergencies who have an abdominal CT in their diagnostic investigations should also have a Chest CT scan (ref —Updated General Surgery Guidance on Covid-19 – Intercollegiate / ASGBI 5th April 2020).

Practical recommendations:

- Radiographers should wear basic personal protective equipment (PPE) for patient protection.

- Patients should be directed straight to the scanner, thus avoiding waiting areas.

- Ideally the hospital's 'clean' scanner should be used and these patients should be scanned first on the list to decrease risks to the patient.

- The CT should be wiped down prior to use with disinfectant wipes according to local policy.

Imaging recommendations:

- Due to its low sensitivity and the low pre-test probability of disease, computed tomography should only be deployed in very specific circumstances
- Preoperative Chest CT scanning should be undertaken in patients whose preoperative assessment indicates that they will need level II/III Critical Care in their postoperative recovery
- This particularly applies to thoracic surgery and complex upper abdominal surgery (oesophageal, gastric, hepatic and pancreatic)
- Screening for other complex, high risk surgeries should be determined by careful discussion with the duty radiologist by the individual treating teams, based on the likelihood of respiratory compromise and / or critical care support postoperatively. However, it should only be considered if positive CT findings would change the patient's immediate surgical management.

- **A negative CT cannot be interpreted as a signal to omit the use of PPE by staff.**

CT Findings Pathway

Normal	• Proceed to surgery
Indeterminate	• Repeat full clinical assessment including bloods and throat swabs • Consider repeat CT in 1-2weeks • If no change or resolution proceed to surgery
Classical features of COVID-19	• Postpone surgery • Reassess in 2-4 weeks depending on respiratory symptoms and urgency of cancer surgery

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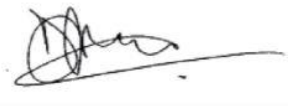

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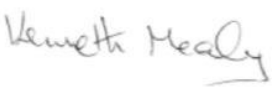

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