Greater Manchester Cancer

Greater Manchester Cancer Lung Cancer Protocol for Reflex Testing

Definition of 'reflex testing' in this protocol – the immediate pathologist-led initiation of further testing for predictive markers on NSCLC samples to select anti-cancer systemic therapy (EGR, ALK, ROS-1, PDL1) without waiting for an MDT discussion

Step 1: Tissue sampling completed & NSCLC confirmed on morphology and 4-panel immunohistochemistry. Referring clinicians performing the tissue sampling procedure must provide the following information:

- \checkmark Lung cancer is the most likely diagnosis based on clinical history & investigations to date
- ✓ Clinical stage (stage I, II, III, IV)
- ✓ Smoking status (never smoker*, light ex-smoker**, ex-smoker, current smoker)

Step 2: NSCLC confirmed on morphology and immunohistochemistry (ideally no more than 4 panel IHC to preserve tissue) The reporting pathologist will initiate reflex testing in any one the following scenarios:

- ✓ Stage III/IV NSCLC provided in clinical details
- ✓ NSCLC identified in samples representing distant metastatic disease (brain, liver, pleural etc)
- ✓ NSCLC identified in any EBUS nodal sample



If clinical detail of lung cancer stage is not provided and reflex testing cannot be performed for this reason, the pathologist will record this within the pathology report.

Greater Manchester Cancer Lung Cancer Protocol for Reflex Testing

Implementation recommendations

Greater

Cancer

By signing up to this regional pathway the pathology and physician teams will work collaboratively to ensure effective implementation. This will require the following processes:

- Systems and safety nets to ensure the minimum dataset is provided on the request forms in suspected lung cancer samples. This might include:
 - 1. Bespoke request forms with minimum dataset as mandatory data fields this could be paper form or in an electronic patient record / electronic requesting system
 - 2. Implementing a specimen check in the WHO (or equivalent) safety checklist to ensure the minimum datasets have been completed
- An audit process of compliance with the minimum dataset requirements and the proportion of eligible samples for reflex testing that completed reflex testing
- A lead lung cancer clinician / team is identified with an appropriate contact mechanism agreed so the pathology team can rapidly seek advice or further information regarding specific cases for reflex testing