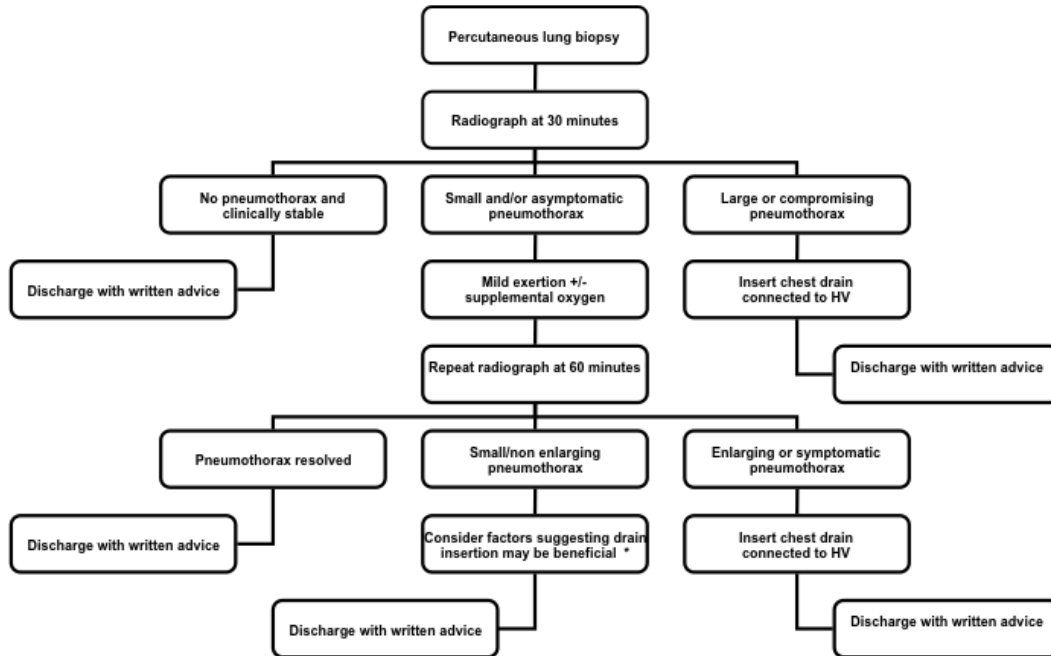


Supplementary online Figure 1- Schematic of early discharge ambulatory percutaneous lung biopsy service. Patients perform first bubble test at a minimum of 24 hours post Heimlich-valve chest drain (HVCD) insertion. (*biopsy track crossing a pulmonary fissure (i.e. 4 pleural surfaces breached); social issues; elderly or frail patients).



Supplementary online Figure 2 – A) MDCT shows a 20 mm nodule located deep within the right lower lobe, abutting the major fissure (arrow) in a 59 year old man with weight loss. Initial attempt to biopsy in a prone position with CT-guidance was unsuccessful as pneumothorax occurred (not shown). B) HVCD was placed at the same sitting and supine percutaneous fluoroscopic biopsy was successfully performed with HVCD in-situ. The fluoroscopic CT image shows needle tip at the lesion margin (white arrow) despite residual pneumothorax (black arrow). C) Fluoroscopy still image taken during biopsy shows the biopsy needle in the lesion (white arrow) with chest drain in-situ (black arrow indicates tip of drain) connected to Heimlich valve (black arrowheads). HVCD was removed as standard 24 hours post-procedure. Biopsy revealed pulmonary adenocarcinoma.

