

Supplementary Table 1 - List of the 124 findings, including 34 critical findings which the model is validated to detect. The format used by the model to recommend each finding are presented in brackets (Laterality: indicates whether the predicted finding is present on the left or right side, or both. ROI: a predicted region of interest localiser is overlayed on the image. None: no segmentation). ETT: endotracheal tube, NGT: nasogastric tube, PAC: pulmonary artery catheter.

Critical Clinical Findings (Localisation)		
Acute humerus fracture (Laterality)	Loculated effusion (ROI)	Subcutaneous emphysema (Laterality)
Acute rib fracture (ROI)	Lung collapse (Laterality)	Subdiaphragmatic gas (None)
Air Space Opacity – Multifocal (ROI)	Multiple masses or nodules (ROI)	Suboptimal central line (ROI)
Cavitating mass with content (ROI)	Perihilar airspace opacity (Laterality)	Suboptimal ETT (None)
Cavitating mass(es) (ROI)	Pneumomediastinum (None)	Suboptimal NGT (ROI)
Diffuse airspace opacity (Laterality)	Pulmonary congestion (None)	Suboptimal PAC (None)
Diffuse lower airspace opacity (Laterality)	Segmental collapse (ROI)	Superior mediastinal mass (None)
Diffuse upper airspace opacity (Laterality)	Shoulder dislocation (Laterality)	Tension pneumothorax (ROI)
Focal airspace opacity (ROI)	Simple effusion (ROI)	Tracheal deviation (None)
Hilar lymphadenopathy (None)	Simple pneumothorax (ROI)	Widened aortic contour (None)
Inferior mediastinal mass (None)	Solitary lung mass (ROI)	Widened cardiac silhouette (None)
	Solitary lung nodule (ROI)	
Non-Critical Clinical Findings (Localisation)		
Abdominal Clips (None)	Coronary Stent (None)	Pectus Excavatum (None)
Acute Clavicle Fracture (Laterality)	Diaphragmatic Elevation (None)	Peribronchial Cuffing (None)
Airway Stent (None)	Diaphragmatic Eventration (None)	Pericardial Fat Pad (None)
Aortic Arch Calcification (None)	Diffuse Fibrotic Volume Loss (Laterality)	Pleural Mass (ROI)
Aortic Stent (None)	Diffuse Interstitial (Laterality)	Post Resection Volume Loss (Laterality)
Atelectasis (ROI)	Diffuse Nodular / Miliary Lesions (Laterality)	Pulmonary Arterial Catheter (None)
Axillary Clips (Laterality)	Diffuse Pleural Thickening (None)	Pulmonary Artery Enlargement (None)
Basal Predominant Interstitial (Laterality)	Diffuse Spinal Osteophytes (None)	Reduced Lung Markings (None)
Biliary Stent (None)	Distended Bowel (None)	Rib Fixation (Laterality)
Breast Implant (None)	Electronic Cardiac Devices (None)	Rib Lesion (ROI)
Bronchiectasis (None)	Endotracheal Tube (None)	Rib Resection (None)
Bullae Diffuse (None)	Gallstones (None)	Rotator Cuff Anchor (Laterality)

Bullae Lower (None)	Gastric Band (None)	Scapular Fracture (Laterality)
Bullae Upper (None)	Hiatus Hernia (None)	Scapular Lesion (ROI)
Calcified Axillary Nodes (None)	Humeral Lesion (ROI)	Scoliosis (None)
Calcified Granuloma (<5mm) (None)	Intercostal Drain (Laterality)	Shoulder Arthritis (None)
Calcified Hilar Lymphadenopathy (None)	Internal Foreign Body (ROI)	Shoulder Fixation (Laterality)
Calcified Mass (>5mm) (ROI)	Kyphosis (None)	Shoulder Replacement (Laterality)
Calcified Neck Nodes (None)	Lower Zone Fibrotic Volume Loss (Laterality)	Spinal Fixation (None)
Calcified Pleural Plaques (None)	Lung Sutures (None)	Spine Arthritis (None)
Cardiac Valve Prosthesis (None)	Mastectomy (None)	Spine Lesion (ROI)
Central Venous Catheter (ROI)	Mediastinal Clips (None)	Spine Wedge Fracture (ROI)
Cervical Flexion (None)	Nasogastric Tube (ROI)	Sternotomy Wires (None)
Chronic Clavicle Fracture (None)	Neck Clips (Laterality)	Suboptimal Gastric Band (None)
Chronic Humerus Fracture (None)	Nipple Shadow (None)	Unfolded Aorta (None)
Chronic Rib Fracture (None)	Oesophageal Stent (None)	Upper Predominant Interstitial (Laterality)
Clavicle Fixation (Laterality)	Osteopaenia (None)	Upper Zone Fibrotic Volume Loss (Laterality)
Clavicle Lesion (ROI)	Pectus Carinatum (None)	
Technical Findings		
Chest Incompletely Imaged (None)	Image Obscured (None)	Underexposed (None)
Hyperinflation (None)	Overexposed (None)	Underinflation (None)
	Patient Rotation (None)	