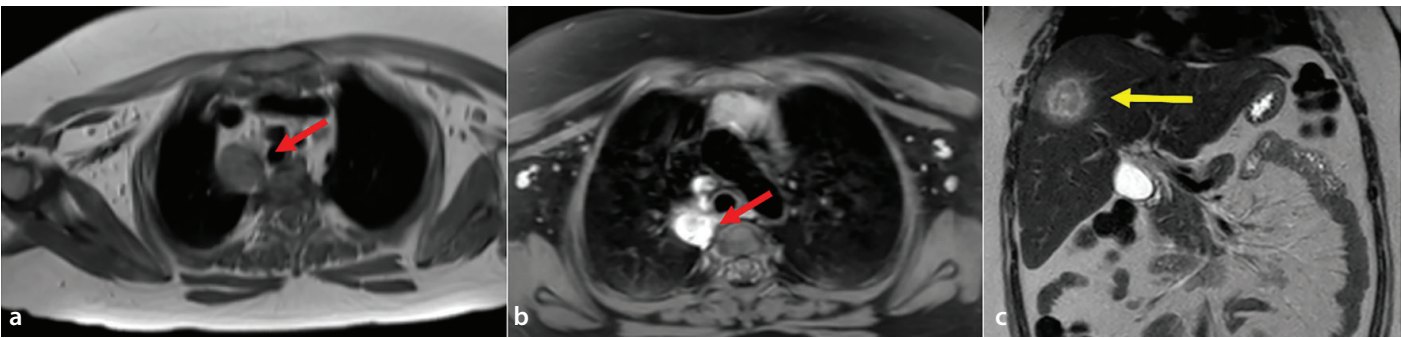
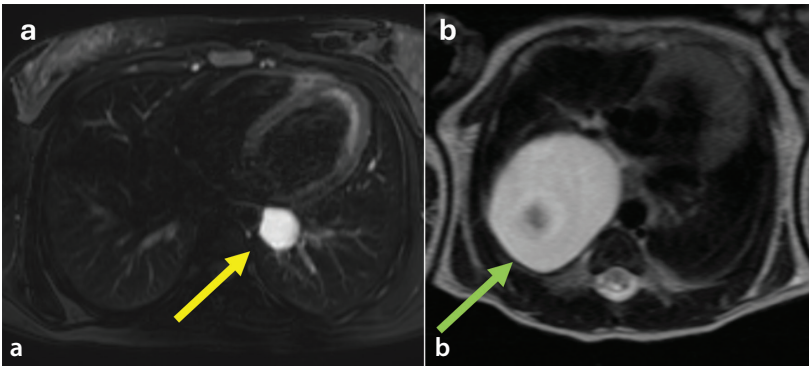
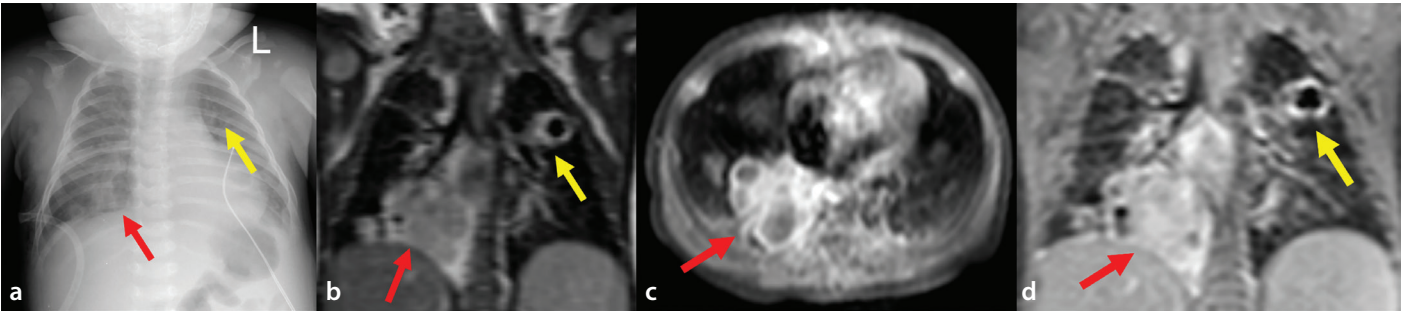




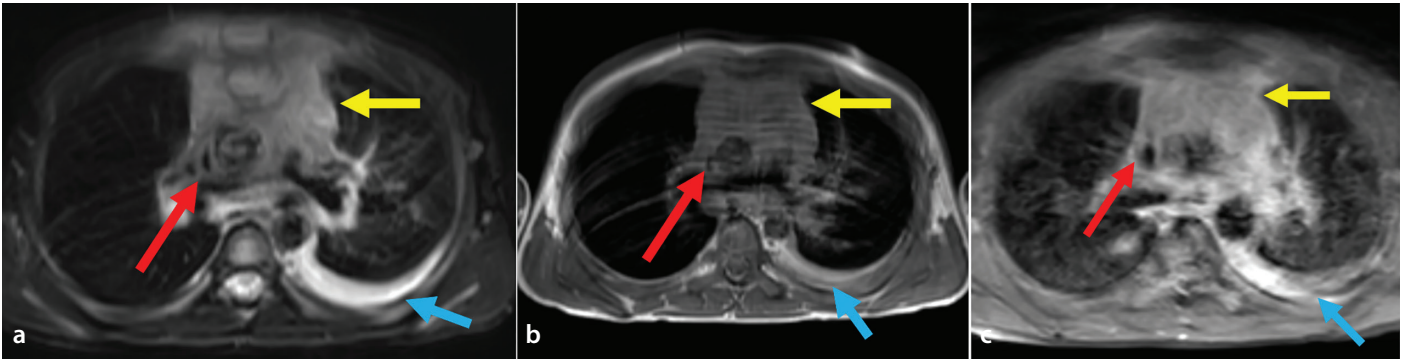
Supplementary Figure 1. Thoracic tuberculosis in a 9-year-old boy. A nodular, pathologically enlarged lymph node is seen in the right paratracheal mediastinum (a: axial T1-weighted, b: axial contrast-enhanced T1-weighted SPIR, c: coronal T2-weighted image). Red arrows indicate the mediastinal lymph node. The yellow arrow indicates an inhomogeneous lesion with surrounding oedema in hepatic segment VIII on abdominal MRI. Biopsy and culture of the mediastinal lymph node confirmed *Mycobacterium tuberculosis*. SPIR, spectral presaturation with inversion recovery; MRI, magnetic resonance imaging.



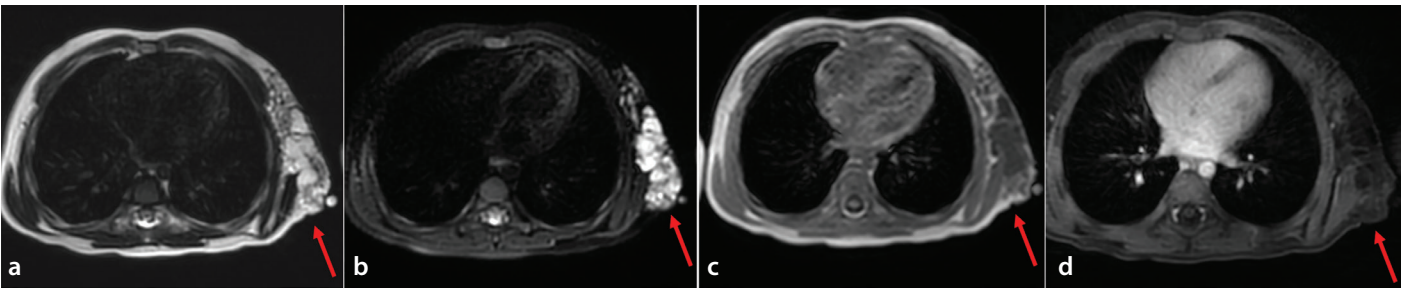
Supplementary Figure 2. Congenital cystic lesions in two paediatric patients. Axial PROPELLER imaging in a 16-year-old girl demonstrates a cystic lesion adjacent to the left lower lobe bronchus, consistent with a bronchogenic cyst (a). Thoracic MRI performed on the first day of life in a neonate with a prenatal diagnosis of a right thoracic cystic lesion demonstrates a large cystic lesion occupying nearly the entire posterior right hemithorax, consistent with an intestinal duplication cyst (b). The yellow arrow indicates the bronchogenic cyst, and the green arrow indicates the intestinal duplication cyst. PROPELLER, periodically rotated overlapping parallel lines with enhanced reconstruction; MRI, magnetic resonance imaging.



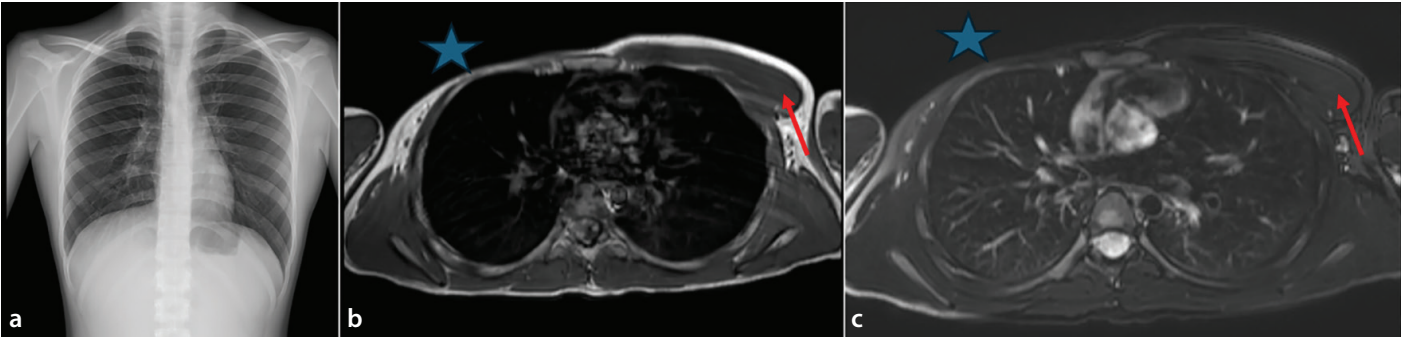
Supplementary Figure 3. Pulmonary Langerhans cell histiocytosis in a 2-month-old infant presenting with fever. Chest radiography demonstrates multiple bilateral pulmonary lesions, including a cavitory lesion in the left upper lobe (a). Thoracic MRI confirms multiple bilateral lesions with peripheral contrast enhancement and more clearly depicts the cavitory lesion (b: coronal T2-weighted, c: axial contrast-enhanced T1-weighted SPIR, d: coronal contrast-enhanced T1-weighted SPIR). Red arrows indicate the bilateral pulmonary lesions, and the yellow arrow indicates the cavitory lesion in the left upper lobe. Histopathological examination confirmed pulmonary involvement by Langerhans cell histiocytosis. SPIR, spectral presaturation with inversion recovery; MRI, magnetic resonance imaging.



Supplementary Figure 4. Granulocytic sarcoma in a 12-year-old boy with acute myeloid leukaemia. A mass lesion is seen in the superior and anterior mediastinum, encasing the major mediastinal vascular structures and narrowing the superior vena cava (a: axial T1-weighted, b: axial T2-weighted, c: axial contrast-enhanced T1-weighted SPIR). Yellow arrows indicate the mediastinal mass, red arrows indicate narrowing of the superior vena cava, and blue arrows indicate the left pleural effusion. SPIR, spectral presaturation with inversion recovery.



Supplementary Figure 5. Thoracic wall lymphatic malformation in a 3-year-old boy. A lobulated multicystic lesion is seen in the left lateral thoracic wall, extending into the axillary fossa and posterior thoracic region, with internal septations and heterogeneous signal intensity (a: axial T2-weighted, b: axial PROPELLER, c: axial T1-weighted, d: axial fat-saturated contrast-enhanced T1-weighted image). No significant contrast enhancement is observed. PROPELLER, periodically rotated overlapping parallel lines with enhanced reconstruction.



Supplementary Figure 6. Poland syndrome in a 16-year-old boy. Posteroanterior chest radiography demonstrates unilateral hyperlucency of the right hemithorax (a). Thoracic MRI shows absence of the right pectoralis major muscle and a normal left pectoralis major muscle (b: axial T1-weighted, c: axial fat-saturated T2-weighted image). The blue star indicates the absent right pectoralis major muscle, and the red arrow indicates the normal left pectoralis major muscle. MRI, magnetic resonance imaging.