



# Third left pulmonary lobe

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A 67-year-old man with a 20 pack-year smoking history presented to our hospital with a month-long persistent cough. Blood tests showed elevated serum tumour biomarkers including neuron-specific enolase and carcinoembryonic antigen up to 10-fold the normal range. CT examination of the chest and whole abdomen revealed a 5 cm mass located on the left upper lobe with diffuse metastasis in both lobes of the lung. In addition to the mass in the left upper lung lobe, we also observed extra lung tissue with notable interstitial markings and the presence of metastasis situated above the left upper lobe (figure 1A and B) which we then referred to as the 'third left lung lobe'. There was no evidence of extrathoracic metastatic disease. A CT-guided biopsy was performed to obtain tissue samples from the primary lesion in the left upper lobe and the metastatic lesion in the 'third left lung lobe'. The histopathological diagnosis of both lesions revealed small cell lung cancer, characterised by positive expression of TTF-1, Syn, CgA, and CD56, and negative expression of CK7 and NapsinA (figure 1C and D). The patient was

diagnosed with extensive-stage small-cell lung carcinoma and was administered with cisplatin-based etoposide plus atezolizumab as front-line therapy. After two cycles of chemotherapy, chest CT revealed significant tumour shrinkage both in the primary and 'third left lung lobe' which was evaluated as partial response.

An ectopic or a third left pulmonary lobe is rare.<sup>1</sup> Without the protection from the ribs, pneumothorax and bleeding can occur, which can easily be misdiagnosed as subcutaneous emphysema. If malignancy is suspected within an ectopic lobe, it can be a more accessible biopsy site but does carry a higher risk of complications such as bleeding and pneumothorax.<sup>2 3</sup> Physicians must be able to recognise this disease in order to provide accurate diagnosis and suitable treatment strategies that can improve the survival and quality of life of patients presenting with rare ectopic lesions.

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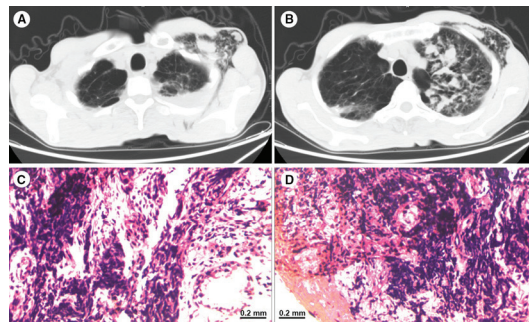
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**Figure 1** Chest CT scans revealing the third left pulmonary lobe (A, B). Histological examination of the metastatic lesion (C) in the 'third left lung lobe' and the primary lesion (D) reveal small-cell carcinoma.