**Online Supplementary Materials**

Online Supplementary Table 1. Clinical diagnoses

|  |  |
| --- | --- |
| Diagnoses | No. (%) |
| ILD group |  |
| Diagnosed by RP-EBUS-TBLB (*n* = 34) |  |
| Lung cancer | 34 (100) |
| Undiagnosed by RP-EBUS-TBLB (*n* = 17) |  |
| Lung cancer | 9 (52.9) |
| Pulmonary tuberculosis | 2 (11.8) |
| Unknown | 6 (35.3) |
| Non-ILD group |  |
| Diagnosed by RP-EBUS-TBLB (*n* = 685) |  |
| Lung cancer  | 599 (87.4) |
| Pulmonary tuberculosis | 37 (5.4) |
| Organizing pneumonia | 12 (1.8) |
| Nontuberculous mycobacterial lung disease | 8 (1.2) |
| Metastasis from extrathoracic malignancy | 8 (1.2) |
| Aspergilloma | 7 (1.0) |
| Anthracosis | 2 (0.3) |
| Sarcoidosis | 2 (0.3) |
| Cryptococcosis | 2 (0.3) |
| Sclerosing pneumocytoma | 2 (0.3) |
| Others | 6 (0.9) |
| Undiagnosed by RP-EBUS-TBLB (*n* = 218) |  |
| Lung cancer  | 82 (37.6) |
| Nontuberculous mycobacterial lung disease | 4 (1.8) |
| Pulmonary tuberculosis | 3 (1.4) |
| Organizing pneumonia | 3 (1.4) |
| Hamartoma | 1 (0.5) |
| Toxocariasis | 1 (0.5) |
| Unknown | 124 (56.9) |

ILD, interstitial lung disease; RP-EBUS-TBLB, radial probe endobronchial ultrasound-guided transbronchial lung biopsy.

Online Supplementary Table 2. Factors affecting the diagnostic yield of RP-EBUS-TBLB in patients with UIP pattern on CT

|  |  |  |  |
| --- | --- | --- | --- |
| Variables | Success (*n* = 24) | Failure (*n* = 15) | *P*-value |
| Age, years | 75.2 ± 5.2  | 73.4 ± 5.9 | 0.329 |
| Male sex | 22 (92) | 14 (93) | 1.000 |
| Mean lesion diameter, mm | 40.0 ± 22.2 | 33.6 ± 10.8 | 0.234 |
| Distance from pleura to the lesion, mm | 4.7 ± 7.6 | 4.5 ± 9.7 | 0.946 |
| Pulmonary function test\* |  |  |  |
| FEV1, % predicted value | 75.6 ± 21.1 | 87.6 ± 15.9 | 0.063 |
| FVC, % predicted value | 68.5 ± 14.1 | 74.8 ± 14.0 | 0.203 |
| FEV1/FVC, % | 73.1 ± 11.0 | 79.2 ± 4.0 | 0.028 |
| DLCO, % | 57.9 ± 18.9 | 59.6 ± 15.4 | 0.767 |
| Location of the lesion |  |  | 1.000 |
|  Upper or middle lobe | 12 (50) | 7 (47) |  |
|  Lower lobe | 12 (50) | 8 (53) |  |
| Bronchus sign  |  |  | 0.050 |
|  Positive | 24 (100) | 12 (80) |  |
|  Negative  | 0 (0) | 3 (20) |  |
| Margin  |  |  | 0.740 |
|  Lobulated | 9 (38) | 7 (47) |  |
| Others† | 15 (62) | 8 (53) |  |
| Character of lesion on CT  |  |  | 0.547 |
|  Solid lesion | 23 (96) | 13 (87) |  |
| Ground-glass opacity or mixed lesion  | 1 (4) | 2 (13) |  |
| EBUS finding |  |  | 0.003 |
|  Within lesion | 23 (96) | 8 (53) |  |
|  Adjacent or outside the lesion | 1 (4) | 7 (47) |  |
| Lesion inside UIP  |  |  | 0.603 |
| Yes | 10 (42) | 5 (33) |  |
| No | 14 (58) | 10 (67) |  |

\*Pulmonary function test results were available for 35 patients.

†Including smooth, spiculated, or pneumonic consolidation.

RP-EBUS-TBLB, radial probe endobronchial ultrasound-guided transbronchial lung biopsy; FEV1, forced expiratory volume in 1 s; FVC, forced vital capacity; DLCO, diffusing capacity for carbon monoxide; UIP, usual interstitial pneumonia.