

2.03 To evaluate the role of ATS/ERS/JRS/ALAT high resolution CT-Thorax imaging categories in selecting candidates for transbronchial lung cryobiopsy for undifferentiated interstitial lung disease

¹Sean Landers, ¹Grace O'Sullivan, ¹Louise Burke, ¹Michael M Maher, ¹Deirdre Doyle, ¹Michael T Henry
¹Cork University Hospital, Cork, Ireland

Background: To assess if High-Resolution CT-Thorax (HRCT) imaging can predict utility of transbronchial lung cryobiopsy (TBLC) in impacting diagnosis of interstitial lung disease (ILD) that lacks confident diagnosis despite prior investigations. **Methods:** Retrospective study of 75 patients who underwent TBLC for undifferentiated ILD at a university hospital between 2017 and 2023. HRCT imaging was reviewed on patients and categorised as per their ATS/ERS/JRS/ALAT imaging pattern. Chart history/examination, pulmonary function tests, ILD blood-panel, previous bronchoscopy/ bronchoalveolar lavage results and multi-disciplinary team meeting (MDM) discussion were assessed to determine the pre-TBLC diagnostic consensus. These were compared against post-TBLC MDM outcomes to confirm if TBLC altered diagnosis and management. **Results:** Diagnosis was changed in 44% (33/75) of cases post-TBLC. Significantly, TBLC altered the pre-TBLC diagnosis in 68.4% (13/19) in the indeterminate usual interstitial pneumonia (UIP) HRCT category, 41.9% (13/31) in alternative diagnosis, 30% (6/20) in probable UIP and 20% (1/5) in definite UIP categories. TBLC led to a confirmed post-MDM diagnosis in 81.3% of cases. **Conclusions:** TBLC is a really effective diagnostic tool in those with indeterminate UIP and alternative diagnosis HRCT patterns. When UIP/IPF is felt likely (definite/ probable UIP) on pre-TBLC HRCT, TBLC is less useful. **Conflict of interest:** Authors declare no conflicts of interest. **Keywords:** ILD, UIP, cryobiopsy, bronchoscopy