Conclusion Although SBx is here to stay, it has significant morbidity and mortality. Transbronchial cryobiopsy may in the future sit alongside SBx in the diagnostic pathway for ILD, but in addition to offering low morbidity and mortality it must also offer a high diagnostic yield.

Major complications	% of cases
HDU/ITU admission	6
Required re-intubation	3
Required tracheostomy	1
Acute renal failure	3
Empyema	1
lleus	1
Minor complications	% of cases
Pneumothorax	6
Persistent air leak	4
Atrial fibrillation	1
Lower respiratory tract infection	11
Urinary retention	1
Wound infection	2

#### REFERENCE

1 Travis WD, Costabel U, Hansell DM, et al. An official American Thoracic Society/ European Respiratory Society Statement: Update of the international multidisciplinary classification of the idiopathic interstitial pneumonias. Am J Respir Crit Care Med 2013:188:733–748.

P166

## THE EMERGING ROLE OF AIRWAY CLEARANCE TECHNIQUES IN THE TREATMENT OF INTERSTITIAL LUNG DISEASE

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Introduction Patients with interstitial lung disease (ILD) may develop airway abnormalities as part of their underlying condition, in response to fibrotic/tractional dilatation or as a result of repeated bronchiolar infection. While current practice guidelines recommend the provision of pulmonary rehabilitation for ILD patients, no other interventions have been endorsed. We assessed the symptomatic need of patients with ILD for airway clearance techniques (ACT's) using a visual analogue scale, and whether, in those with fibrotic ILD, the presence of traction bronchiectasis was correlated with the need for ACT's.

Methods Over a 15-week period, data were prospectively collected on ILD patients who consented for detailed physiotherapy assessment and intervention. Those who reported a sensation of persistent secretion retention, frequent chest infections (>2 in 6 months) or those with pre-existing airway disease had a full clearance assessment. The radiological presence or absence of traction bronchiectasis was noted, as was evidence of other airway pathology such as bronchiolitis.

Results 30 ILD inpatients (16 females) were included in the study (Table 1). The commonest causes for admission were ILD staging (n = 10) and disease deterioration requiring intravenous treatment (n = 14). 27 patients (90%) required physiotherapy input and 11 patients (41%) required ACT's. 9 patients had positive sputum microbiology; of these, 3 were first isolates. 7 of these 9

patients had traction bronchiectasis on CT acquired within 3 months of assessment. One patient did not undergo CT. The presence of traction bronchiectasis correlated with a higher sputum microbial yield (p < 0.05) but not with a need for ACT (p > 0.05).

Conclusion Airway abnormalities are often not a principal therapeutic focus in ILD but symptoms related to mucostasis, recurrent infection and airflow limitation may be disabling. In this study, the majority of patients with positive microbiology had traction bronchiectasis. Although no firm conclusions can be drawn regarding the role of ACT's in their management, this intervention improved the yield of specimens for microbial analysis and facilitated pathogen-directed antimicrobial therapy. These findings suggest that a systematic physiotherapy approach including optimisation of airway clearance can benefit patients with parenchymal lung disease.

Total patients, n	30
Age (year), mean (SD)	59.1 (15.7)
Gender, n females (%)	16 (53)
Length of stay (days), mean (SD)	11.3 (8.3)
Patients with traction bronchiectasis, (%)	17 (56.6)
Sarcoidosis	7
Idiopathic Pulmonary Fibrosis	5
Chronic Hypersensitivity Pneumonitis	5
CTD-ILD	3
Other* CTD-ILD, Connective Tissue Disease – Interstitial Lung Disease.	10
*Other ILD diagnosis or suspected ILD.	

P167

## DOES ANTIFIBROTIC TREATMENT OUTCOMES DIFFER IN USUAL INTERSTITIAL PNEUMONIA BASED ON HRCT CRITERIA ESTABLISHED BY ATS/ERS/JRS/ALAT IN 2011?

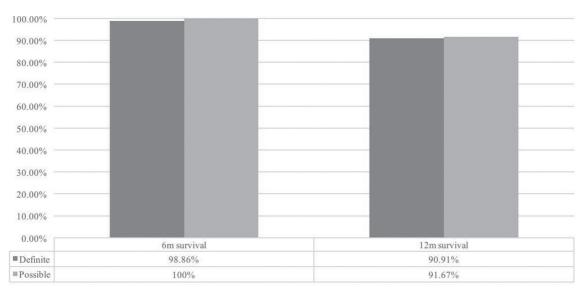
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Background Idiopathic pulmonary fibrosis (IPF) is an age-related, progressive and irreversible lung disease. The diagnosis of IPF is made using clinical history, pulmonary function testing (PFT), and radiological appearances of Usual Interstitial Pneumonia (UIP) on High Resolution CT (HRCT) Scanning provided other appearances have been excluded. The diagnosis is frequently made at MDT where the images are categorised into Definite UIP, Possible UIP, or Inconsistent with UIP using HRCT criteria. In the west of Scotland, patients demonstrating definite or possible UIP patterns on HRCT with a FVC < 80% are considered for antifibrotic therapy. The aim of this study was to assess whether response to antifibrotic therapy in IPF is correlated with the aforementioned categories. The presence of pleural plaques was also considered.

Methods We retrospectively divided 170 patients into three categories: definite UIP pattern, possible UIP pattern, and UIP with pleural plaques. Serial pulmonary function test results were obtained and the change in FVC calculated. Treatment failure was defined as a change in FVC% predicted of >10% per year. The rate of treatment failure, overall mortality, 6-month and 12-month survival was compared between the three groups.

A174 Thorax 2016;**71**(Suppl 3):A1–A288



Abstract P167 Figure 1 Pirfenidone therapy and survival rates in definite UIP, and Possible UIP

Results 116 patients out of 170 were started on antifibrotic therapy. The average duration of therapy was 256 days. There was a trend towards higher treatment failure in possible (n = 3 of 12 25%) versus definite UIP patterns (n = 6 of 55 11%), this was not statistically significant. Overall mortality rates were similar between possible and definite UIP patterns at 6- and 12-months (Figure 1). 5 patients with UIP and pleural plaques were started on therapy.

Conclusions Mortality at 12 months was similar in possible UIP and UIP groups; there was a trend towards higher levels of treatment failure in patients with possible UIP. A different disease process may exist in some patients with possible UIP which is non-responsive to antifibrotic treatment. Numbers are relatively small and further observation is warranted.

### **REFERENCES**

- 1 King TE, et al. Idiopathic pulmonary fibrosis. Lancet Elsevier 2011;378 (9807):1949–61.
- 2 Raghu G, et al. An official ATS/ERS/JRS/ALAT statement: Idiopathic pulmonary fibrosis: Evidence-based guidelines for diagnosis and management. AJRCCM 2011;183(6):788–824.

P168

# SAFETY AND TOLERABILITY OF NINTEDANIB IN PATIENTS WITH IDIOPATHIC PULMONARY FIBROSIS (IPF): ONE-YEAR DATA FROM POST-MARKETING SURVEILLANCE IN THE UNITED STATES

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Introduction In the two replicate, 52-week, placebo-controlled INPULSIS® trials, nintedanib 150 mg twice daily significantly reduced the annual rate of decline in forced vital capacity compared with placebo and had a side-effect profile that was manageable for most patients. After the US approval of nintedanib for the treatment of IPF in October 2014, post-marketing

surveillance was initiated to obtain additional information on the safety and tolerability of nintedanib in the real-world clinical setting.

Methods Data were collected from the drug safety database from the time of drug launch (15 October 2014) to 23 October 2015. Data on adverse events in patients treated with nintedanib were collected both via proactive patient communications, as part of a patient support programme, and by the spontaneous reporting system. Adverse events were coded according to preferred terms in the Medical Dictionary for Regulatory Activities. Serious adverse events were defined according to International Conference on Harmonisation criteria as adverse events that were fatal or life threatening, required or prolonged hospitalisation, were associated with a congenital anomaly, or resulted in a disability.

Results In the period from drug launch to 23 October 2015, 6,758 patients were treated with nintedanib, with duration of exposure 6 to 390 days (median 113 days). This analysis will present 1-year adverse event data collected both via proactive patient communications, as part of a patient support programme, and by the spontaneous reporting system. Previously reported data collected from drug launch up to 31 May 2015, from 3,838 patients, were consistent with the safety profile described in the product label. In this dataset and as observed in the Phase III trials, the most frequently reported adverse events with nintedanib were gastrointestinal in nature and non-serious in severity.

Conclusion Data from post-marketing surveillance in the US are consistent with the safety profile of nintedanib as described in the label. Treatment with nintedanib in the real-world clinical setting appears to have an acceptable safety and tolerability profile, with no new safety concerns identified.

P169

## LONG-TERM SAFETY OF PIRFENIDONE IN PATIENTS WITH IDIOPATHIC PULMONARY FIBROSIS: POOLED ANALYSIS OF 4 CLINICAL TRIALS

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