### Spoken sessions

#### Abstract S134 Table 1

	Honeycombed IPF profile	Non-honeycombed IPF profile	
	UIP	NSIP	Indeterminate pattern
n	38	44	14
Male	29 (76%)	29 (66%)	9 (64%)
Female	9 (24%)	15 (34%)	4 (36%)
Age (median)	76 (range 49-90)	74 (54-90)	77 (65-91)
FVC % pred. (mean)	83.0% (n=34)	83.3% (n=40)	82.6% (n=12)
DL <sub>CO</sub> % pred. (mean)	47.6% (n=30)	50.9% (n=35)	48.8% (n=10)
Smoking status			
Never	11 (29%)	18 (41%)	6 (43%)
Ex	26 (68%)	25 (57%)	8 (57%)
Current	1 (3%)	1 (2%)	0
Body mass index, BMI (median)	26.3 (17.6—45.7)	29.1 (22.3—42.9)	26.6 (19.3—34.4)
Ischaemic heart disease (IHD)	22/38 (58%)	18 (41%)	7 (50%)
IHD diagnosed pre-IPF	18/22 (82%)	12/18 (67%)	6/7 (86%)
IHD diagnosed post-IPF	4/22 (18%)	6/18 (33%)	1/7 (14%)
ST elevation myocardial infarction	8 (21%)	5 (11%)	1 (7%)
CABG (bypass grafting)	4 (10.5%)	6 (13.6%)	4 (30.8%; n=13)
Cerebrovascular ischaemia (TIA or infarct (CVA)	7 (18%)	2 (4.5%)	0
Statin use at time of IPF diagnosis	20 (53%)	23 (52%)	8 (57%)
Cardiovascular co-morbidities			
Diabetes mellitus (DM)	9 (24%)	13 (30%)	3 (23%; n=13)
Hypertension (HTN)	27 (71%)	29 (66%)	9 (69%)
Hypercholesterolaemia	20 (53%)	24 (55%)	9 (69%)
Surgical lung biopsy rate	4/38 (11%)	10/44 (23%)	3/14 (21%)

key determinants of smoking, gender, DM, HTN, hypercholesterolaemia and BMI. On univariate analysis, BMI was significantly higher in the NSIP subgroup (p=0.025 vs UIP or INDET). Rates of STEMI and strokes were highest in UIP cases (n/s) whereas that of CABG was highest in the INDET subgroup. These observations were corrected for IPF severity in so far as FVC and  $\rm DL_{CO}$  were decreased comparably across all three radiological subgroups. Evaluation of co-existing COPD was not undertaken; however, mean FEV $_1$  did not differ between groups.

**Conclusions** Amongst patients with clinical IPF, UIP morphology correlates with the highest risk of cardiovascular morbidity compared to NSIP. A tendency for ischaemic heart disease to precede IPF in the majority of cases suggests the possibility that broader systemic or cardiac-specific factors may influence the pathogenesis of these pulmonary disorders.

#### S135

# A RETROSPECTIVE MULTI-CENTRE STUDY OF THE EFFECTS OF ALLOGENEIC HAEMATOPOIETIC STEM CELL TRANSPLANTATION ON PULMONARY FUNCTION

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**Introduction** Allogeneic haematopoietic stem cell transplantation (HSCT) is often complicated by serious pulmonary complications including severe infections, drug toxicity and graft vs host disease. However, there is limited data on the prevalence of significant lung function defects in long-term survivors.

**Method** We undertook a UK wide, multi-centre, retrospective study of the effects on pulmonary function in adult patients undergoing HSCT over a 4-year period. Pulmonary function tests (PFT) were evaluated at baseline (pre-transplant) and 12 months post-transplant. Impaired pulmonary function was defined as  $FEV_1$  or FVC less than 80% predicted.

Results 532 allogeneic HSCTs were registered in the BSBMT database, having been performed at 6 centres over the 4-year study period. 157 patients underwent PFT pre-HSCT and at least 6 months post-BMT, with 12-month data available for 90 patients (Abstract S135 table 1). The median age was 42 years (range 18–69) and 59% of patients were male. Median FEV<sub>1</sub> and FVC were 98.9% and 101% predicted respectively for patients pre-HSCT, with 25 (15.9%) patients having impaired lung function pre-HSCT. For patients with normal PFT pre-HSCT, 13 (10%) had impaired PFT at 12 months with median reduction in FEV<sub>1</sub> of 1.33 L (33.5%) (range 0.59-2.25) and FVC of 1.29 L (28.9%) (range 0.17-3.33). 38% had obstructive, 46% restrictive and 15% mixed picture spirometry pattern. 69% of patients with newly impaired PFT had acute graft vs host disease, (p=0.068). No statistically significant predictive factors were identified for newly impaired PFT: age, sex, total body irradiation, Alemtuzumab treatment, transplant intensity and type of donor. For patients with impaired PFT at baseline, 11 (44%) remained impaired at 12 months with no significant fall in spirometry values (median FEV<sub>1</sub> fell 2% and FVC rose 2%).

Abstract S135 Table 1 PFT data pre and 12 months post-HSCT

PFT	Normal PFT n	Impaired PFT n	Median FEV <sub>1</sub> Litres (% predicted)	Median FVC Litres (% predicted)	
Pre-transplant (baseline)	132	25	3.33 (98.9)	4.25 (101)	
At 12 months					
Normal	63	3	3.26 (98.9)	4.16 (105.5)	
Impaired	13	11	2.36 (67.5)	3.38 (72.3)	
Died	3	0	NA	NA	
Unknown	53	11	NA	NA	

**Conclusion** Although these data represent only a proportion of patients undergoing allogeneic HSCT, we found 10% of patients developed impaired PFT at 12 months with large falls in FEV $_1$  and FVC. These data suggest there may be as many as 60 to 120 HSCT recipients each year developing major impairment of lung function. Multi-centre prospective studies are required to fully characterise the frequency and risk factors for impaired PFT post-HSCT.

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## THE ASSOCIATION BETWEEN COUGH REFLEX SENSITIVITY AND SERUM ACE LEVEL IN PATIENTS WITH SARCOIDOSIS

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**Introduction** Up to 80% of patients with sarcoidosis report a chronic cough. The aim of this study was to investigate whether heightened cough reflex sensitivity (CRS) is an important mechanism and to