Abstract P283 Table 1 *Patient demographics and PEF/FVC correlation results

Demographics	PEF/FVC (mean ± SD)	PEF/FVC % Pred (mean ± SD)	Dependant Variable	Independent Variable	R (Pearson's)	R ²
N = 119 ♂ = 37 ♀ = 82						
ILD n = 96	2.96 (0.65) †‡	136.15 (31.42)	PEF/FVC	TLC (%)	−0.792	0.63
Obstructive n = 16	1.13 (0.30)*	59.90 (9.41)	PEF/FVC	RV (%)	−0.759	0.58
Normal n = 7	1.96 (0.26)	91.20 (9.18)	PEF/FVC	VA (%)	−0.665	0.44

† p <0.01 ILD vs COPD, ‡ <0.01 ILD vs Normal, * p <0.01 COPD vs Normal.

Conclusion Structural changes from TBX may cause stenting of the airways from fibrotic tissue, holding them open during forced expiration.² Our volume corrected PEF/FVC predicts reduced TLC and RV percent predicted, indicating reduced lung volumes and lung stiffness in patients with restrictive lung disease. The evidence of TBX on CT imaging supports the hypothesis that airways are held open during forced expiration, allowing increased efficiency of lung emptying in patients with a PEF/FVC >2.0. The magnitude of the ratio did not correlate with TBX severity but further work to determine a cut off ratio to predict future fibrosis is required. This index may be of use indicate a value beyond which TBX is likely to be present.

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P284 IDENTIFYING PATIENTS AT RISK OF ACUTE EXACERBATION OF IPF USING THE CPI SCORE

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Introduction Disease course in IPF is punctuated by acute declines, often termed acute exacerbations of IPF (AEIPF) and portends to a mortality of 80% within 3 months. The cause of AEIPF is poorly understood; and there is currently no effective treatment. There is an urgent need to understand the causes and to characterise the parameters that identify patients at risk of AEIPF. Because lung function (DLCO and FVC) and CT imaging are the most accessible (potential) methods for identification of patients at risk of AEIPF, we question if these could be used to identify patient at risk of AEIPF. We explored the utility of the CPI¹ (composite physiological index) for this purpose.

Methods Patients with IPF diagnosed by clinico-pathologic-radiological criteria, according to the 2011 ATS/ERS/JRS/ALAT guidelines, with definite or probable diagnosis of IPF were recruited over a one year period, and divided into stable (n = 12) and AEIPF (n = 8) groups. AEIPF was defined as: 1) deterioration in

dyspnoea over 30 days or less 2) new airspace infiltrates on HRCT (with or without evidence of infection) 3) exclusion of pulmonary emboli and heart failure. Lung function (FVC and DLCO) and CPI at 12 months before recruitment and rate of change of FVC within these 12 months were determined.

Results and discussion Patients with AE-IPF had a significantly higher CPI; (mean ± SD) – 62 ± 13 vs stable 45 ± 7; p = 0.001. In contrast, there was no significant difference in FVC levels between the two groups – 61 ± 4% predicted in AE-IPF group vs 72 ± 3% in stable; p = 0.07. CPI but not FVC or DLCO was worse 12 months prior to recruitment in the AEIPF group. Rate of loss in FVC in the year before AEIPF was not significantly different from those with stable disease

Conclusions Early findings suggest that in contrast to DLCO and FVC, high CPI is associated with occurrence of AEIPF within a year. Rate of FVC loss did not correlate with AEIPF in this small study. CPI could be a more sensitive predictor for AEIPF than FVC and DLCO but larger numbers and a prospective study will be required to test this concept.

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Drugs and Devices in COPD

P285 THE 'REAL-LIFE' COPD PATIENT IN THE AGE OF LABA/LAMAS: AN EXPANSION OF THE DACCORD STUDY

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Introduction The prospective, non-interventional DACCORD study collects data from a representative cohort of COPD outpatients across Germany who either initiated or changed COPD maintenance medication prior to entry. Initially, DACCORD consisted of two treatment groups (Glycopyrronium-based therapy vs. any other COPD maintenance medication with the exception of Glycopyrronium). Following the approval of LABA/LAMA fixed-dose combinations (FDC) in 2013, DACCORD was extended to follow an additional cohort of patients receiving any LABA/LAMA FDC over a period of 2 years.

Methods 5223 patients with complete baseline data (3815 LABA/LAMA FDC vs. 1408 standard treatment group) were analysed here. Baseline exacerbations were evaluated 6 months prior to study entry and were annualised for GOLD 2011 categorization; COPD symptoms were evaluated using the COPD Assessment Test (CAT) and the mMRC questionnaire. Prior and concomitant COPD medication were captured and analysed by substance class.

Results Baseline characteristics are summarised in Table 1. Based on FEV1 assessment, approx. 75% of patients suffered from moderate to severe COPD. Less than a quarter of patients reported a history of exacerbations and only 6.7% experienced ≥2 exacerbations in the 6 months prior to study