CFS of ≥ 6 (scale 1–9 with a high score indicating greater frailty)

Results 35 patients received AFM and 10 (29.4%) were intolerant of treatment at 4 months. Patients without frailty were more likely to be tolerant of treatment than those with frailty (86.4% *versus* 33.3%, $p=0.0074$) Patients with a BMI in the upper three quartiles of the sample were more likely to be tolerant of treatment than those in the lowest quartile, but this trend did not reach statistical significance (80.7% *versus* 44.4%, $p=0.081$), and there was no difference in tolerance between patients over 80 years of age and younger patients (77.8% *versus* 75.0%, $p\geq 0.99$)

Conclusions Frailty and low BMI may predict treatment intolerance with AFM in IPF, whereas age does not appear to influence this outcome. Clinicians should consider a patient's frailty when considering this therapy. Further analysis of a larger dataset and a prospective study are warranted.

P154 GENDER AND HEIGHT DRIVE VARIATION BETWEEN FORCED VITAL CAPACITY REFERENCE EQUATIONS: IMPLICATIONS FOR IPF TREATMENT

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Introduction NICE guidance mandates that anti-fibrotic therapy for interstitial pulmonary fibrosis (IPF) is only recommended as an option for people with a forced vital capacity (FVC) between 50%–80% predicted. The guidance recognises different reference values are used across the UK to calculate predicted FVC but does not specify which should be utilised. We were interested to see how different formulas impacted on eligibility for these treatments.

Methods We reviewed all patients with a diagnosis of IPF or possible IPF attending our ILD clinic for the time period 2016–2017. Baseline demographics were recorded and % predicted FVC (ppFVC) was calculated using both the European Society for Coal and Steel (ESCS) and Global Lung Initiative 2012 (GLI) formulas.

Results We identified 97 patients from our database and complete data was available for 96 (median age [range] 71.2 years (42–89), 62.5% male, median FVC 2.39 L). Overall the ESCS formula resulted in a higher ppFVC compared to GLI (+6.2% FVC, $p<0.001$). There was considerably less difference between the formulas in males than females (+3.7% *vs.* +11.6%, $p<0.0001$). We observed a strong inverse correlation between variation in ppFVC and height ($Rho -0.7$, $p<0.0001$). No relationship was observed between age and variation. For the 24 patients with GLI ppFVC within 10% of the upper and lower thresholds for treatment, 15 (62.5%) would have their eligibility for anti-fibrotic treatments changed by use of the ESCS formula.

Conclusions Females and those with shorter height saw the greatest variation between the two formulas. A significant proportion of patients with borderline eligibility for anti-fibrotic treatments have their status changed by the use of a different formula. Clinicians must be aware of their local reference values and how this may affect patients' eligibility for IPF treatment.

P155 USE OF MYCOPHENOLATE MOFETIL AND AZATHIOPRINE IN PATIENTS WITH CHRONIC HYPERSENSITIVITY PNEUMONITIS

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Background The optimal pharmacological management of chronic hypersensitivity pneumonitis (cHP) is unknown. Corticosteroids are often used as first line therapy but can be associated with side effects. There is a paucity of data examining the role of DLCO but not FVC (Morisset J *et al.* *Chest*. 2017). We aimed to determine the effect of steroid-sparing agents in cHP. A recent retrospective study demonstrated that treatment with either mycophenolate mofetil (MMF) or azathioprine (AZA) was associated with improvements in FVC of MMF and AZA on lung function and prednisolone dose in cHP patients. **Methods** Patients initiated on either MMF or AZA following a MDT diagnosis of cHP were retrospectively identified from the ILD service Papworth Hospital, Cambridge. Changes in lung function in the 9–12 months before and after treatment initiation were analysed. Daily prednisolone dose at initiation and 9–12 months treatment was recorded.

Results Twenty eight patients were identified between 2008 and 2016; 20 were treated with MMF (1–2 g daily) and 8 with AZA (25–150 mg daily). The mean age at drug initiation was 59.6 ± 1.7 years and 61% were female. The mean duration from diagnosis to commencing MMF or AZA was 30.9 ± 5.5 months. Twenty patients remained on either drug at 9–12 months and were included in the effectiveness analysis (FVC and TLCO data were available for 20 and 13 patients respectively). Five patients discontinued treatment due to drug side effects. Treatment with either MMF or AZA resulted in a significant reduction in prednisolone dose from 16.1 ± 2.1 mg to 8.0 ± 0.8 mg ($p<0.001$). MMF or AZA treatment for 9–12 months was associated with a significant improvement in TLCO (-0.62 ± 0.3 *vs.* $+0.32\pm 0.17$ mmol/kPa/min, $p<0.05$). Although treatment reduced rate of FVC decline (-100 ± 65 *vs.* -30 ± 66 mls), it was not significant ($p=0.4$).

Conclusions In our cohort of cHP, treatment with either MMF or AZA was associated with an improvement in TLCO consistent with findings of a previous retrospective study. Moreover, the addition of MMF or AZA enabled a significant reduction in prednisolone dose.

P156 MAINTAINING PATIENTS WITH IDIOPATHIC PULMONARY FIBROSIS (IPF) ON ANTIFIBROTIC THERAPY; THE NURSES' CHALLENGE

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Pirfenidone and nintedanib are the first licensed drugs for IPF. Both reduce the rate of disease progression but have significant intolerance issues limiting long-term use. This study aims to identify areas where changes in practice might improve outcomes. We compared baseline characteristics of disease severity with the reasons for stopping treatment and the proportion stopping treatment within the first 4 weeks,