

**P194 THE USE OF METHOTREXATE AS A STEROID SPARING AGENT IN SEVERE ASTHMA: A MULTI CENTRE RETROSPECTIVE ANALYSIS**

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10.1136/thoraxjnl-2013-204457.346

**Background** Methotrexate (MTX) immunosuppressive therapy is selectively used to assist with the reduction of the oral corticosteroid demand thereby decreasing the risk of potential side effects in individuals with steroid dependant asthma. Previous reported data has demonstrated similar significant reduction in corticosteroid load, asthma exacerbation and hospital admission rate. This study aims to compare similar variables collated from UK severe asthma specialist centres to further generate evidence for the continued use of MTX as an effective aid in the reduction of corticosteroid burden in a severe asthma cohort.

**Methods** A retrospective data collection was performed across two UK severe asthma centres with data from a third pending. Patients included had a confirmed diagnosis of severe asthma and had been treated with MTX for at least 12 months to allow sufficient analysis. Variables assessed included mean average daily corticosteroid dose, overall percentage reduction of corticosteroid, exacerbation frequency and acute admission events both twelve months prior to and post commencement of MTX therapy. Data collection was examined for each individual centre then combined and examined for consistency of results.

**Results** N = 29 (21/8) Average daily corticosteroid dose was reduced by 6 mg combined across both centres [ $p = 0.004$ ] (6.4 mg/5 mg) a percentage of overall reduction of corticosteroid equated to 34.8% jointly across both centres and 39.3% and 30.0% individually. Exacerbation frequency decreased from 4.8 to 2.5 annually combined across both centres [ $p = 0.003$ ] although conflict in result is identified as one centre reports a 1.0 increase in exacerbations compared to 3.4 decrease in the other centre. Combined admission decreased from 1.3 to 0.3 annually [ $p = 0.004$ ] 1.1 and 0.4 decrease in each individual centre.

**Conclusion** When monitored and supervised in the correctly chosen severe asthma patient, MTX can significantly reduce the demand for corticosteroids and consequently reduce steroid related side effects, admission and exacerbation this has been demonstrated across two specialist centres with correlating data.

**P195 PLUME CHARACTERISTICS OF FLUTICASONE PROPIONATE/FORMOTEROL PMDI COMPARED WITH FLUTICASONE PROPIONATE/SALMETEROL PMDI**

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10.1136/thoraxjnl-2013-204457.347

**Background** It has been suggested that aerosol inhaler characteristics such as fine particle size distribution, low plume velocity, and long duration of the aerosol cloud may assist coordination of inhalation with actuation, improve lung deposition, and reduce oropharyngeal deposition. This study compared 2 ICS/LABA combination HFA pMDI inhalers: fluticasone propionate/formoterol 125/5 µg (FP/FORM; *flutiform*®) and fluticasone propionate/salmeterol 125/50 µg (FP/SAL; *Seretide*® *Evohaler*®).

**Methods** Inhalers were operated according to their respective patient information leaflets, and were fired into still air. Plume data were recorded using an Oxford Lasers EnVision Pharma system with high speed CMOS camera and short-pulse laser light source. VidPIV 4.6 & EnVision 1.1.5 software was used to analyse the data and assess velocity and other characteristics of the plume at set intervals from the actuator (up to 9.5 cm which is representative of the distance from mouth to throat).

**Results** FP/FORM pMDI had slower maximum velocity of plume than did FP/SAL at the distances measured (table). Furthermore, the duration of plume lasted approximately 50% longer over the distance measured with FP/FORM than with FP/SAL.

**Conclusion** FP/FORM has a slower and more prolonged plume compared with FP/SAL. This may help synchronise aerosol availability and inhalation and may lead to less oropharyngeal deposition and better lung deposition.

**Abstract P195 Table 1.**

	FP/FORM	FP/SAL
Plume Duration over 95mm (ms)	168.3	114.0
Max velocity @ 30mm (m/s)	20.3	26.5
Max velocity @ 60mm (m/s)	15.2	21.8
Max velocity @ 95mm (m/s)	10.1	15.6

## Clinical ILD and OLD

**P196 HEALTHCARE UTILISATION BY PATIENTS WITH IDIOPATHIC PULMONARY FIBROSIS; OBSERVATIONS FROM THE UK PIRFENIDONE NAMED PATIENT PROGRAMME**

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10.1136/thoraxjnl-2013-204457.348

**Introduction and Objectives** There are limited data on the healthcare resource use that arises as a consequence of idiopathic pulmonary fibrosis (IPF). Navaratnam *et al*<sup>1</sup> have recently reported rising hospital admissions due to IPF but utilisation of other health related services by individuals with IPF is unknown. As part of a real world assessment of the clinical experience of pirfenidone via the UK Named Patient Program data were collected to determine the burden placed on healthcare resources as a consequence of IPF.

**Methods** A multi-centre, retrospective, cohort review was undertaken across 4 NHS Trusts. Hospital resource use data were collected from the clinical records of individuals starting pirfenidone for IPF through the NPP before June 2012.

**Results** Data were available from 100 patients (76% male) at baseline and 67 through to nine months from baseline. At baseline, the mean  $\pm$  S.D. age was  $69.3 \pm 7.5$  years, mean  $\pm$  S.D. FVC% predicted was  $70\% \pm 19\%$  and 62 patients were on oxygen therapy. In the first 6 months from baseline, 11 patients had 15 IPF-related hospitalisations of which 6 were for an acute exacerbation. One patient was hospitalised in the 6–9 months period. The mean  $\pm$  S.D. and median (IQR) hospital bed days in