Introduction and objectives ICS of differing particle size, due both to the formulation and propellant, may impact patient outcomes. This systematic review of randomised controlled trials compared asthma efficacy and safety outcomes from the use of fluticasone propionate (FP)-containing medications and alternative smaller ICS.

Methods English language published peer-reviewed literature (Jan 1, 1998-Feb 13, 2014) with FP-containing medications, yielded 1,655 potentially-relevant articles: 1,575 were excluded, 80 full-text articles were reviewed, and 25 were extracted for data with treatment comparisons (FP- vs. small particle ICS-containing medicines). Efficacy measures included lung function, asthma exacerbations, and rescue medication use. Safety endpoints included adverse events, growth and bone measures, and cortisol. Benefit-risk interval plots of risk differences with 95% confidence intervals were produced for FP vs. comparators.

Results Ten controlled trials compared the efficacy of FP with beclometasone dipropionate (BDP-HFA). Six studies found no appreciable differences in efficacy while four trials identified improvement in lung function with FP vs. BDP-HFA. In ten randomised trials comparing the efficacy of ciclesonide (CIC) with FP, CIC was found to be non-inferior or not statistically different from FP on numerous efficacy endpoints in the majority of the studies. Most safety assessments across nine trials did not differ between treatments. Results were similar for fixed dose combination therapies that contained FP and BDP-HFA (n = 3 trials).

Conclusions This systematic review suggests no differences in efficacy or safety between FP-containing medications and small particle size ICS medications for the treatment of asthma.

Poster sessions

**P239** EFFECT OF INHALED CORTICOSTEROID (ICS) PARTICLE SIZE ON ASTHMA EFFICACY AND SAFETY OUTCOMES: A SYSTEMATIC LITERATURE REVIEW


Introduction and objectives ICS of differing particle size, due both to the formulation and propellant, may impact patient outcomes. This systematic review of randomised controlled trials compared asthma efficacy and safety outcomes from the use of fluticasone propionate (FP)-containing medications and alternative smaller ICS.

Methods English language published peer-reviewed literature (Jan 1, 1998-Feb 13, 2014) with FP-containing medications, yielded 1,655 potentially-relevant articles: 1,575 were excluded, 80 full-text articles were reviewed, and 25 were extracted for data with treatment comparisons (FP- vs. small particle ICS-containing medicines). Efficacy measures included lung function, asthma exacerbations, and rescue medication use. Safety endpoints included adverse events, growth and bone measures, and cortisol. Benefit-risk interval plots of risk differences with 95% confidence intervals were produced for FP vs. comparators.

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Conclusions This systematic review suggests no differences in efficacy or safety between FP-containing medications and small particle size ICS medications for the treatment of asthma.
cough and 10 = worst cough) significantly improved from a baseline mean of 7.3 (SD=1.9) to 2.6 (SD=3) at 3 months and 3.9 (SD=3.1) long term (Figure 1). In the asthma group we also observed an improvement in the mean HRCQ (0 = no reflux, 70 = worst reflux) from 49.2 (SD 13.8) at baseline to 22 (SD 13.9) long-term, without corresponding improvement in FEV1.

**Conclusion** Anti-reflux surgery provides sustainable long-term benefit to patients with significant GORD and poorly controlled asthma or chronic cough. These data require further confirmation in controlled trials.

**Transplantation advances**

**P242 PIRFENIDONE AS A BRIDGE TO LUNG TRANSPLANTATION IN PATIENTS WITH PROGRESSIVE IPF**

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Introduction and objectives Lung transplantation provides a significant survival benefit to patients with advanced idiopathic pulmonary fibrosis (IPF). However, at this time, the transplant community is unable to meet the requirements on its services due to donor organ shortages. This results in an increased length of time spent on the waiting list and an increased risk of death prior to transplantation.

Pirfenidone has been reported to reduce the rate of disease progression in patients with IPF. However, this time, the transplant community is unable to meet the requirements on its services due to donor organ shortages. This results in an increased length of time spent on the waiting list and an increased risk of death prior to transplantation.

Pirfenidone has been reported to reduce the rate of disease progression in patients with IPF. However, this time, the transplant community is unable to meet the requirements on its services due to donor organ shortages. This results in an increased length of time spent on the waiting list and an increased risk of death prior to transplantation. Pirfenidone has been reported to reduce the rate of disease progression in patients with IPF. However, this time, the transplant community is unable to meet the requirements on its services due to donor organ shortages. This results in an increased length of time spent on the waiting list and an increased risk of death prior to transplantation.

Methods We retrospectively reviewed the medical records of all patients who had undergone lung transplantation for IPF from 2012–14 at our institution. Three patients who had been prescribed Pirfenidone prior to transplantation were identified. Each patient continued Pirfenidone until the day of transplantation. Patient demographics, lung function and post transplant data were collated.

Results Prior to the commencement of Pirfenidone the mean decline in forced vital capacity (FVC) was 52.2ml per month. Following Pirfenidone therapy, the mean decline in FVC was 29.2ml per month. The mean length of time from commencing Pirfenidone to transplantation was 419 days (range 190–768 days). The mean length of time spent on the transplant waiting list was 144 days (range 35–271 days).

With a mean follow up of 1.45 years, no episodes of acute or chronic rejection have occurred. Post-transplant survival is 100%. No adjustment in immunosuppressant induction or post-transplant therapy was necessitated. In the post-transplant period, Pirfenidone therapy was not linked to any adverse events.

Conclusion Pirfenidone has been reported to reduce disease progression in IPF. However, despite this, lung transplantation remains necessary in the management of this condition. For patients with IPF, in whom the transplant window is short, Pirfenidone may allow for valuable added time on the lung transplant waiting list.

**P243 A RETROSPECTIVE OBSERVATIONAL STUDY OF 20 YEAR LUNG TRANSPLANT SURVIVORS – A SINGLE CENTRE EXPERIENCE**

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Introduction and objectives Lung transplant patients have a reduced survival rate compared to other solid organ recipients. Chronic lung allograft dysfunction (CLAD) remains the main factor in limiting longevity in lung transplant patients, with 50% of recipients developing Bronchiolitis Obliterans Syndrome (BOS) by 5.6 years. There is a lack of published data on the