

INTERSTITIAL LUNG DISEASE

A PHASE 3 TRIAL OF PIRFENIDONE IN PATIENTS WITH IDIOPATHIC PULMONARY FIBROSIS (*King et al, N Engl J Med. 2014; 370(22):2083-92*)

<http://www.nejm.org/doi/full/10.1056/NEJMoa1402582>

This was an RCT of 555 patients with IPF randomised in a 1:1 fashion to receive pirfenidone 2403mg/day or matched placebo. There was a 47.9% relative risk reduction in the proportion of subjects dying or having a >10% decline in FVC (-280ml slope for the control arm and 164ml for the active arm). Combining this trial with the CAPACITY trial showed a significant survival advantage for pirfenidone

Final statement: *Pirfenidone shows a risk reduction in a >10% decline in FVC and a survival benefit.*

EFFICACY AND SAFETY OF NINTEDANIB IN IDIOPATHIC PULMONARY FIBROSIS (*Richeldi et al, N Engl J Med. 2014; 370(22):2701-82*)

<http://www.nejm.org/doi/full/10.1056/NEJMoa1402584>

This was a randomised placebo controlled trial where 1066 patients were randomised in a 3:2 ratio to either nintedanib 150mg BD or placebo. The annual rate of change in FVC was -114.7ml in the active arm and -239.9ml in the control. There was also a significant benefit with nintedanib in time to first acute exacerbation. There was a trend to a survival benefit and the most significant side effect was diarrhoea.

Final statement: *Nintedanib led to a slower decline in FVC, and a longer time to first acute exacerbation.*

LUNG MICROBIOME AND DISEASE PROGRESSION IN IDIOPATHIC PULMONARY FIBROSIS: AN ANALYSIS OF THE COMET STUDY (*Han et al. Lancet Respir Med. 2014; 2(7):548-56*)

[http://www.thelancet.com/journals/lanres/article/PIIS2213-2600\(14\)70069-4/abstract](http://www.thelancet.com/journals/lanres/article/PIIS2213-2600(14)70069-4/abstract)

In this study the lung microbiome in BAL samples from 55 patients with IPF was studied. Disease progression associated significantly with a higher burden of Streptococcus OUT 1345 and Staphylococcus OUT 1348.

Final statement: *IPF is linked to changes in the lung microbiome.*

RHEUMATOID ARTHRITIS-RELATED INTERSTITIAL LUNG DISEASE: ASSOCIATIONS, PROGNOSTIC FACTORS AND PHYSIOLOGICAL AND RADIOLOGICAL CHARACTERISTICS: A LARGE MULTICENTRE UK STUDY (*Kelly et al Rheumatology (Oxford). 2014; 53(9):1676-82*)

<http://rheumatology.oxfordjournals.org/content/53/9/1676.long>

This was a retrospective multi-centre study looking at patients with Rheumatoid arthritis ILD. Of the 230 patients identified, the median age at diagnosis was 64 with a higher incidence in women. Anti-CCP antibodies were the strongest predictor for RA-ILD. Other factors included male sex, older age of RA onset, smoking and positive rheumatoid factor. Most patients had a UIP pattern which predicted a worse outcome.

Final statement: *Factors associated with RA-ILD included Anti-CCP antibodies, high RH factor, male sex, older age of RA onset and smoking history.*