Meta-analysis of effect of nintedanib on reducing FVC decline across interstitial lung diseases (ILDs)

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Introduction

The effect of nintedanib on the rate of decline in FVC has been investigated in placebocontrolled trials in subjects with IPF, other progressive fibrosing ILDs and systemic sclerosisassociated ILD (SSc-ILD)

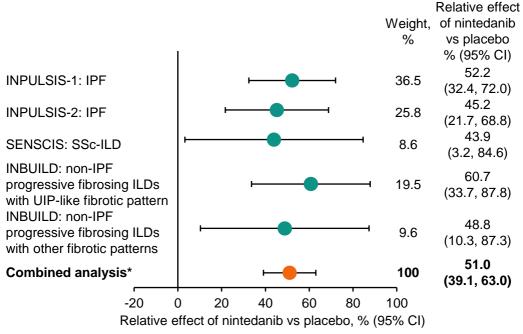
Aim

To assess whether the effect of nintedanib on slowing the rate of decline in FVC was consistent across a spectrum of fibrosing ILDs

Methods

Fixed effect and random effects meta-analyses were performed based on the relative treatment effect of nintedanib versus placebo on the rate of decline in FVC (mL/year) over 52 weeks in the INPULSIS, SENSCIS and INBUILD trials

Relative effect of nintedanib vs placebo on the rate of FVC decline (mL/year) over 52 weeks in the INPULSIS, SENSCIS and INBUILD trials



*Test for heterogeneity: $l^2=0\%$, $\tau^2=0$, p=0.93. Fixed and random effects meta-analyses were identical.

Conclusion

A meta-analysis of data from four placebo-controlled trials demonstrated that nintedanib approximately halved the rate of decline in FVC over 52 weeks across subjects with different forms of pulmonary fibrosis, with no evidence of heterogeneity in its relative treatment effect across patient populations

FVC, forced vital capacity. IPF, idiopathic pulmonary fibrosis. UIP, usual interstitial pneumonia.

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