Idiopathic Pulmonary Fibrosis Therapy

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ANNUAL RATE OF FVC DECLINE IN VARIOUS PATIENT SUB-GROUPS WITH IDIOPATHIC PULMONARY FIBROSIS TREATED WITH PIRFENIDONE: POOLED ANALYSIS FROM 3 PIVOTAL STUDIES

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Introduction Pirfenidone has been shown to decrease the annual rate of decline in forced vital capacity (FVC) volume in patients with idiopathic pulmonary fibrosis (IPF). This analysis explored this effect in various patient subgroups.

Methods Patients randomised to pirfenidone 2403 mg/d or placebo in the CAPACITY or ASCEND studies were included. The annualised rate of decline in FVC volume from baseline through 12 months was estimated using a mixed-effects model, with study, time-by-treatment, age-by-sex and height-by-sex as fixed effects and patients and time-by-patient (slope) as random effects. The annual rate of FVC decline was estimated from the slope within the subgroups, defined by demographics and baseline disease activity measures.

Results A total of 623 patients in the pirfenidone group and 624 in the placebo group were included in the pooled analysis. Overall, the adjusted annual rate (SE) of FVC decline from baseline to 12 months was -109.0 (13.6) mL for pirfenidone vs -207.5 (13.7) mL for placebo, a difference of 98.5 (17.5) mL. The annual rate of FVC decline favoured pirfenidone over placebo across various baseline demographic and lung function subgroups (Figure 1).

Conclusions Patients with IPF treated with pirfenidone, regardless of baseline demographic or lung function, had a significantly lower annual rate of decline in FVC volume vs those treated with placebo after 12 months.

Abstract S97 Figure 1 Difference in Annual Rate of FVC Decline (mL) Between Treatment Group and 95% CI