Lung function trajectories in patients with idiopathic pulmonary fibrosis

Background

IPF is a progressive fibrosing interstitial lung disease characterised by decline in lung function

Aim

To evaluate trajectories of FVC and DLco in patients with IPF

Methods

Patients with IPF that was diagnosed or confirmed at the enrolling centre in the last 6 months were enrolled in the IPF-PRO Registry

Mean trajectories of FVC and DLco % predicted, in all patients and in subgroups by characteristics at enrolment, were estimated using a joint model that accounted for factors such as disease severity and visit patterns

Key results

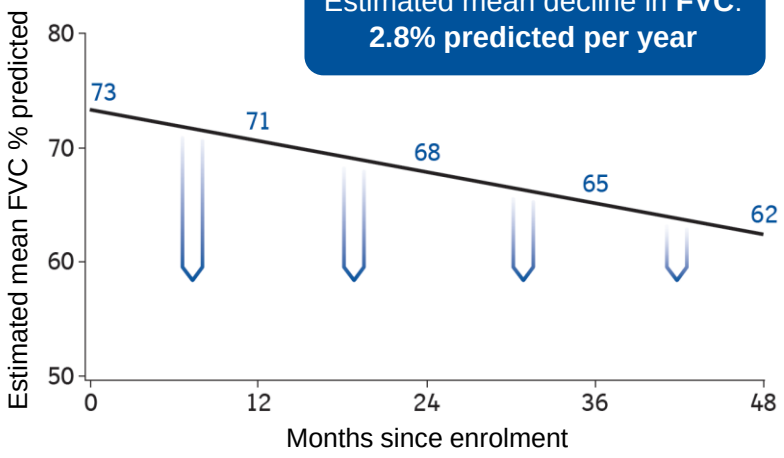
941 patients with FVC and/or DLco data

Median follow-up: **35.1** months

Median time from enrolment to last measurement: **FVC: 21.6 months**, **DLco: 20.7 months**

FVC

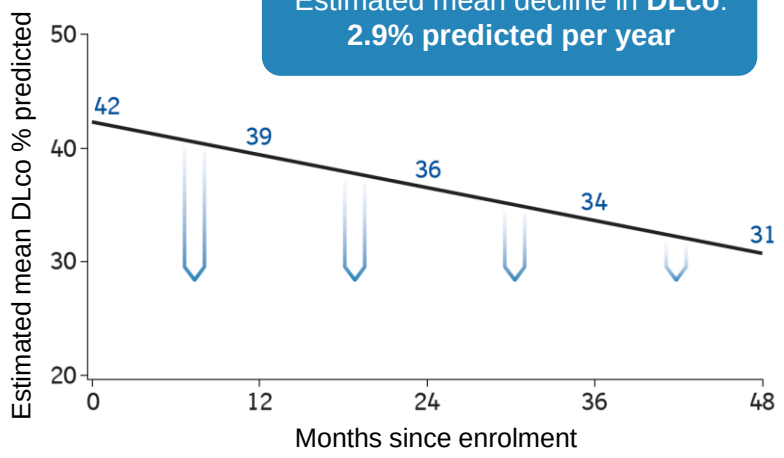
Estimated mean decline in **FVC**: **2.8% predicted per year**



Patients with greater rates of decline: Male, White, Oxygen use, Family history of ILD, Antifibrotic drug use

DLco

Estimated mean decline in **DLco**: **2.9% predicted per year**



Patients with greater rates of decline: Male, White

Conclusions

Data from the IPF-PRO Registry suggest a constant rate of decline in lung function over a prolonged period. These findings illustrate the inexorably progressive nature of IPF.

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DLco, diffusing capacity of the lungs for carbon monoxide; FVC, forced vital capacity. Idiopathic pulmonary fibrosis