



## Mortality benefit with antifibrotics in idiopathic pulmonary fibrosis: real world evidence or bias?

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Study from the INSIGHTS-IPF registry is affected by immortal time bias, which greatly exaggerates the reported effectiveness of pirfenidone and nintedanib on lowering mortality by 37% in patients with IPF. https://bit.ly/2Xp7XTr

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## To the Editor:

We read with interest the analysis conducted by Behr *et al.* [1] of the INSIGHTS-IPF registry of patients with idiopathic pulmonary fibrosis (IPF), particularly of the effectiveness of antifibrotic treatment on mortality. It showed that users of antifibrotics, namely pirfenidone and nintedanib, have a significantly lower risk of death (hazard ratio 0.63, 95% CI 0.45–0.87; p=0.005) compared with non-users. This 37% reduction in all-cause mortality is quite remarkable for an observational study in the context of regular clinical practice, despite the short mean duration of follow-up of 1.2 years and the expected confounding by indication inherent in such studies. We believe that this reported reduction in mortality with antifibrotic treatment is more likely the result of immortal time bias [2].