The Clinical Impact of Antifibrotics: Pulmonary Fibrosis and Beyond

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It has been over a decade since antifibrotics first became available to us. Since then, a substantial body of evidence regarding their effectiveness has accumulated. Indeed, antifibrotics have significantly impacted our clinical practice in the field of pulmonary fibrosis. For example, in addition to reducing the decline in FVC, as demonstrated in clinical trials, registry data indicated that antifibrotics may also prolong survival in patients with idiopathic pulmonary fibrosis (IPF). However, a definitive survival benefit of antifibrotic therapy in IPF has not yet been fully established, as previous survival data have been subject to major biases such as immortal time bias. Using data from the National Database of Japan (NDB Japan), the world's largest claim-based database, we carefully analyzed the survival effects of antifibrotic therapy while minimizing immortal time bias, and our findings indicated a potential survival benefit. Furthermore, antifibrotics may also reduce the incidence of acute exacerbations, potentially altering the causes of death in patients with IPF. Patients with IPF are recognized to have an elevated risk of lung cancer compared with the general population. Notably, data from both our cohorts and the NDB Japan suggested that antifibrotic therapy was linked to a lower cumulative incidence of lung cancer in this population. In addition, analysis of the NDB Japan revealed that nintedanib, unlike pirfenidone, was associated with a reduced risk of malignancies other than lung cancer. In this symposium, I would like to summarize the clinical impacts of antifibrotics on ILD practice, thereby contributing to a more thorough understanding of their role in ILD management.