Balancing Benefits and Burdens of Anti-fibrotic Treatment in Interstitial Lung Disease

Syazatul Syakirin Sirol Aflah

Organization Institut Perubatan Respiratori
Current Position Consultant Respiratory Physician, Doctor

Educational background

2017	Fellowship of Respiratory, Malaysia
2010	Membership Royal College of Physician, UK
1998-2003	M.D., Universiti Kebangsaan Malaysia, Kuala Lumpur Malaysia

Professional experience

2023-Present	KPJ Tawakkal Hospital, Private Practice
2017-Present	Consultant Respiratory Physician In Institut Perubatan Respiratori

The management of progressive fibrotic interstitial lung disease (ILD) has advanced significantly with the introduction of anti-fibrotic (AF) therapies, namely nintedanib and pirfenidone. Landmark randomized controlled trials including INPULSIS, SENSCIS and INBUILD for nintedanib, and CAPACITY and ASCEND for pirfenidone have consistently demonstrated a reduction in the annual rate of forced vital capacity (FVC) decline, thereby slowing disease progression and improving clinical outcomes.

Despite these benefits, the use of AF agents is accompanied by treatment-related burdens, primarily in the form of adverse drug reactions (ADRs). Gastrointestinal side effects are most common, with diarrhoea and nausea frequently reported with nintedanib, while pirfenidone is often associated with nausea, dyspepsia, anorexia, photosensitivity, and fatigue. Hepatic enzyme elevations may occur with both agents and require monitoring. Risk factors for developing ADRs include advanced age, low body mass index, pre-existing gastrointestinal disorders, polypharmacy, and impaired hepatic function.

Management of ADRs is crucial to maintaining adherence and maximizing therapeutic benefit. Strategies include dose adjustment, temporary interruption, symptomatic treatment and patient education on lifestyle modifications. In selected cases, switching between agents may be appropriate when intolerance persists.

In balancing the benefits and burdens of AF therapy, careful patient selection, shared decision-making, and proactive monitoring are essential. While AF agents do not cure ILD, they represent a critical advance in slowing fibrosis and preserving lung function. Optimizing tolerability through individualized management of ADRs ensures patients derive maximal benefit while minimizing treatment-related harms.