EFFECTIVENESS AND TOXICITY PROFILE ANALYSIS OF ANTIFIBROTIC AGENTS IN IDIOPATHIC PULMONARY FIBROSIS

Arrieta-Loitegui M¹, García-Muñoz C¹, Caro-Teller JM¹, Rosas-Espinoza C¹, Ferrari-Piqué JM¹
¹Hospital Universitario 12 de Octubre, Pharmacy, Madrid, Spain

**Objectives**

Nintedanib and pirfenidone are the only antifibrotic agents commercialized for the treatment of idiopathic pulmonary fibrosis (IPF). Both were approved after being compared to placebo, so comparative studies are needed.

- To evaluate effectiveness and safety of nintedanib and pirfenidone in patients with IPF in real clinical practice.

**Study Design**

- A retrospective observational study including all patients with IPF who started treatment with nintedanib or pirfenidone (March 2015-June 2018) was carried out.
- Demographic (age, sex), clinical (forced vital capacity (FVC)) and safety (dose reductions, adverse effects (AEs)) variables were collected. Differences in FVC at the end of the study were evaluated with the t-student test.
- Statistical analysis was carried out using Stata®14.

**Results**

N = 67 patients (37.3% nintedanib)

- 11 patients excluded for lack of monitoring (6 with nintedanib)
- Mean age 71.4 ± 8 years
- 70% men
- Median FVC 70 ± 19%

**EFFECTIVENESS**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Median FVC% change at the end of the study (p=0.48)</th>
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<tbody>
<tr>
<td>Nintedanib</td>
<td>-4.1±9.9%</td>
</tr>
<tr>
<td>Pirfenidone</td>
<td>-2.1±10.2%</td>
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- 12% patients discontinued nintedanib due to AEs
- +16% of patients needed a dose reduction to manage EAs
- 26% patients discontinued pirfenidone due to AEs
- +26% of patients needed a dose reduction to manage EAs

**SAFETY PROFILE**

Nintedanib: Most common AEs
- Hepatotoxicity 32%
- Weight loss 32%
- Diarrhea 60%

Pirfenidone: Most common AEs
- Cutaneous toxicity 26%
- Gastrointestinal intolerance 33%
- Hepatotoxicity 38%

**Conclusions**

- In our study, nintedanib and pirfenidone have similar effectiveness.
- Differences in toxicity may be decisive in the choice of either treatment.