Patterns of discontinuation in patients with IPF treated with open-label nintedanib: data from INPULSIS®-ON

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INTRODUCTION

The results of the two Phase III placebo-controlled INPULSIS trials showed that nintedanib reduced disease progression in patients with IPF by reducing the annual rate of decline in forced vital capacity.1

Aims

1. To examine patterns of discontinuation of nintedanib in INPULSIS®-ON.

METHODS

Patients received nintedanib in INPULSIS®-ON until they met a reason for discontinuation or were withdrawn from the trial. Predefined reasons for discontinuation included:

- Death
- Discontinued by investigational site
- Adverse event not related to IPF
- Failure to continue study drug
- Pregnancy
- Discontinued due to other reasons

Exposure

Nineteen (19) patients discontinued nintedanib in INPULSIS®, treated in Phase III trials were included in this analysis. The percentage of patients discontinuing nintedanib was 68.6% (295/430) at 120 weeks. Discontinuations due to diarrhoea occurred in a greater proportion of patients who discontinued nintedanib in INPULSIS®-ON (Figure 2).

RESULTS

A total of 735 patients were treated in INPULSIS®-ON, of whom 430 continued nintedanib (having taken at least 1 dose of nintedanib in INPULSIS®-ON) and 304 initiated nintedanib in INPULSIS®-ON. Baseline characteristics of the patient group in INPULSIS®-ON were similar to those given in Table 1.

Conclusions

1. Nintedanib discontinuations were most frequent in the first year of INPULSIS®-ON (Figure 1).

CONCLUSIONS

1. In INPULSIS®-ON, the most common reason for discontinuing nintedanib was adverse events unrelated to IPF. These occurred most frequently in the first year.

2. Discontinuations due to diarrhoea were most frequent in the first year of INPULSIS®-ON, which occurred in a greater proportion of patients who discontinued nintedanib in INPULSIS®-ON (Figure 2).

3. Continuous monitoring and prospective management of adverse events during nintedanib treatment, particularly in the first year, may help patients to IPF on nintedanib therapy.

Table 1: Baseline characteristics in INPULSIS®-ON

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>INPULSIS®-ON</th>
<th>INPULSIS®-ON (n=430)</th>
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<tbody>
<tr>
<td>Age, years</td>
<td>72 (17)</td>
<td>73 (119)</td>
</tr>
<tr>
<td>Male, n (%)</td>
<td>252 (58)</td>
<td>272 (63)</td>
</tr>
<tr>
<td>Race, n (%)</td>
<td>White</td>
<td>121 (29)</td>
</tr>
<tr>
<td>Weight, kg</td>
<td>76.4 (10.8)</td>
<td>77.4 (10.6)</td>
</tr>
<tr>
<td>Body mass index, kg/m²</td>
<td>27.3 (5.8)</td>
<td>27.4 (5.6)</td>
</tr>
<tr>
<td>Treatment interruption beyond defined periods</td>
<td>None</td>
<td>76.2 (30.8)</td>
</tr>
</tbody>
</table>

Table 2: Reasons for discontinuation in INPULSIS®-ON

<table>
<thead>
<tr>
<th>Reason for Discontinuation</th>
<th>INPULSIS®-ON (n=430)</th>
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Figure 1: Patients who discontinued nintedanib in INPULSIS®-ON by reason and year of discontinuation (Figure 5).

Some patients had >1 adverse event that led to discontinuation of nintedanib. Patients who discontinued nintedanib due to treatment-emergent AEs other than data related to IPF were the basis of the INPULSIS®-ON, including dosage errors and adverse events.

Figure 2: Nintedanib discontinuations due to adverse events not related to IPF (Figure 2).

Close monitoring and prospective management of adverse events during nintedanib treatment, particularly in the first year, may help patients with IPF on nintedanib therapy.

Reference

1. Boehringer Ingelheim. Nintedanib for the treatment of idiopathic pulmonary fibrosis (IPF): how to avoid gastrointestinal adverse events and how to manage them. EMA/2013/335/519

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