

# **Nintedanib (Ofev) for Idiopathic Pulmonary Fibrosis**

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**Steward**

## **Nintedanib**

**Mechanism of action**

**Evidence supporting its use – impact upon lung function  
and symptoms**

**Tolerability**

**Management of side effects**

## **Nintedanib**

**capsule, usually 150mg taken twice daily, though available at 100mg strength**

### **Tyrosine kinase inhibitor**

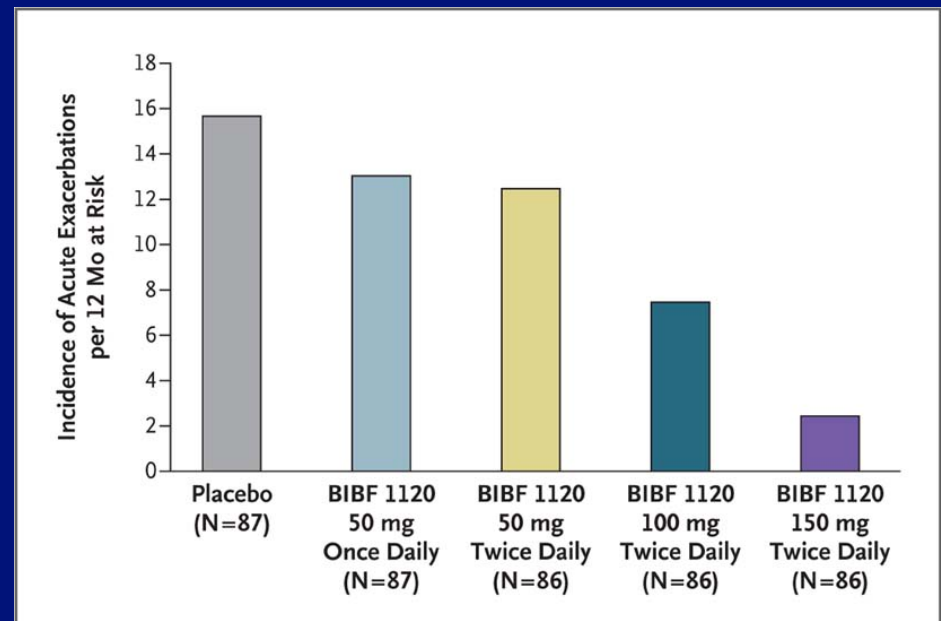
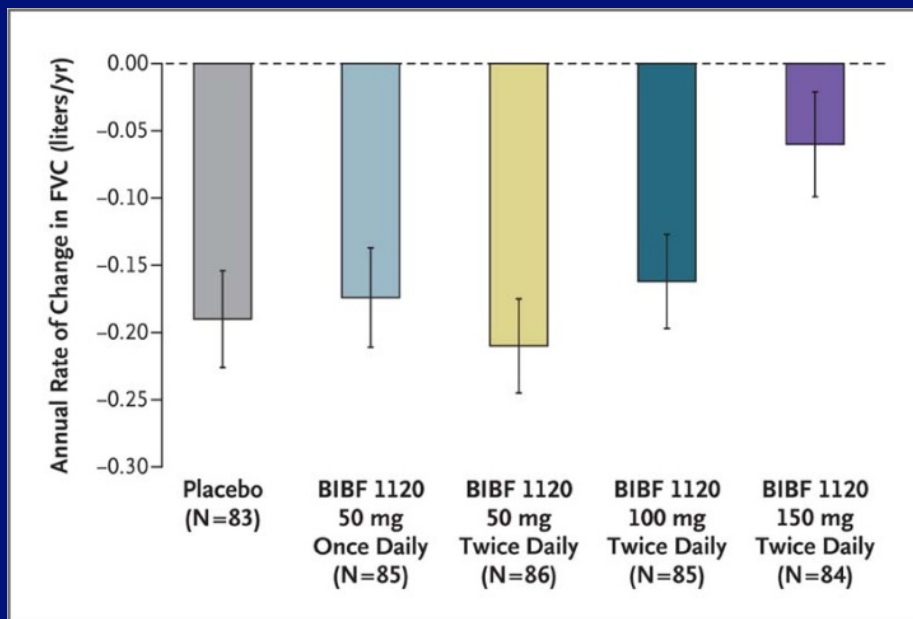
- There are a number of important proteins and lipids that play a role in the fibrosis process**
- These include the PDGF, FGF and VEGF families**
- nintedanib blocks the action of these proteins, slowing the development of further fibrosis**

**First investigated nearly 10 years ago as a potential cancer treatment – still being studied as therapy for lung, colon, breast and other cancers**

**Approved in Europe for treatment of lung cancer**

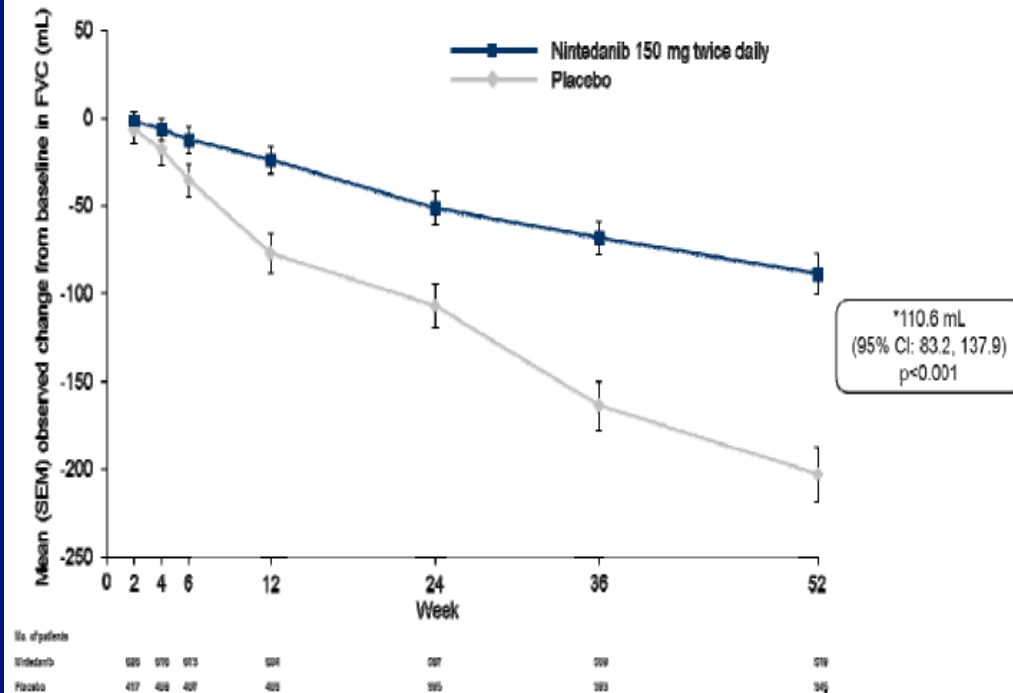
# Nintedanib (BIBF 1120) – phase II trial published 4 years ago

Slowed the loss of lung function and decreased the likelihood of developing an IPF exacerbation

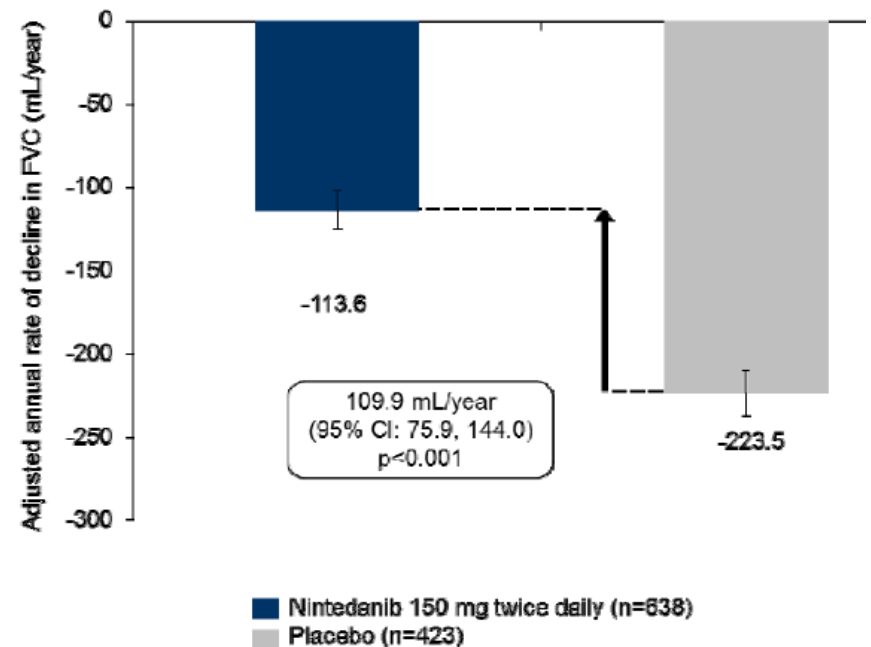


# IMPULSIS Vital Capacity Results

## Change from baseline



## Annual decline



49% relative reduction

Major finding was that nintedanib slowed the loss of lung function due to IPF over the course of a year

**Did that translate into an improved health related quality of life?**

**St. George's Respiratory Questionnaire : 0-100 scale, measures symptoms, exercise limitations and the social and psychological impact of illness (the lower the better)**

**Both the nintedanib and the placebo group experienced an increase in their SGRQ score, the nintedanib group increased to a lesser extent, however the difference between the 2 groups was not statistically significant**

## Tolerability

### **IMPULSIS:**

**treatment stopped because of adverse events  
(not including respiratory events)**

**nintedanib 16.1%**

**placebo 6.4%**

	<u>nintedanib</u>	<u>placebo</u>
<b>Diarrhea</b>	<b>62%</b>	<b>18%</b>
<b>Nausea</b>	<b>25%</b>	<b>7%</b>
<b>Liver test abnormalities</b>	<b>14%</b>	<b>3%</b>
<b>Vomiting</b>	<b>12%</b>	<b>3%</b>
<b>Decreased appetite</b>	<b>10%</b>	<b>6%</b>
<b>Weight loss</b>	<b>10%</b>	<b>3%</b>

**Important to follow liver function tests (LFTs)**

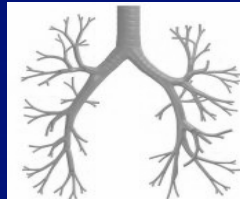
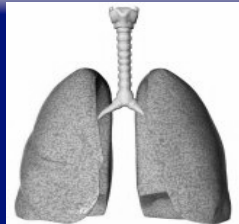
## Strategies for dealing with side effects

**Diarrhea - will often resolve over a handful of weeks**

- **review your other medications, make sure no other culprits**
- **loperamide (Imodium)**
- **BRAT diet**
- **consider reducing dose**
- **keep yourself hydrated**

**Nausea**

- **small, frequent meals, familiar foods**
- **keep yourself hydrated**
- **avoid strong, unpleasant smells**
- **anti-nausea medications are available**



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