Poster

Efficacy and safety of nintedanib in elderly patients with progressive fibrosing interstitial lung diseases (ILDs)

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Efficacy and safety of nintedanib in elderly patients with progressive fibrosing interstitial lung diseases (ILDs)

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INTRODUCTION

- In the INBUILD trial in patients with progressive fibrosing ILDs other than idiopathic pulmonary fibrosis (IPF), nintedanib slowed the rate of decline in FVC (mL/year) over 52 weeks by 57% compared with placebo, with adverse events that were manageable for most patients.[1]
- Elderly patients with IPF are more likely to be frail and to have comorbidities that complicate their care[2] and may be more likely to discontinue antifibrotic treatment.[3,4]

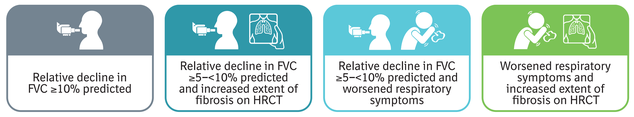
AIM

- To investigate the efficacy and safety of nintedanib in elderly patients with progressive fibrosing ILDs other than IPF.

METHODS

Trial design[1]

- Patients in the INBUILD trial had diffuse fibrosing ILD (reticular abnormality with traction bronchiectasis, with or without honeycombing) of >10% extent on HRCT, FVC ≥45% predicted. Patients with IPF were excluded.
- Patients met ≥1 of these criteria for ILD progression at any time within the 24 months before screening, despite management deemed appropriate in clinical practice:



- Patients were randomized to receive nintedanib 150 mg bid or placebo. Dose reductions to 100 mg bid and treatment interruptions were permitted to manage adverse events.
- Patients continued to receive randomized treatment until all patients had completed the trial.

Analyses

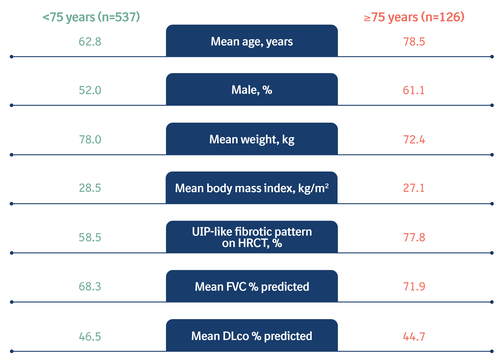
- In subgroups by age <75 vs ≥75 years at baseline, we analyzed the rate of decline in FVC (mL/year) over 52 weeks and the time to absolute decline in FVC ≥10% predicted or death over the whole trial.
- Interaction p-values were calculated to assess potential heterogeneity in the effect of nintedanib versus placebo between subgroups.
- Incidence rates of adverse events are calculated based on the number of patients with each event divided by the time at risk, expressed as the rate per 100 patient-years.

CONCLUSIONS

- In patients with progressive fibrosing ILDs other than IPF, the course of disease in the placebo group was numerically worse in patients aged ≥75 years than <75 years.
- Nintedanib reduced the rate of decline in FVC both in patients aged ≥75 years and in younger patients, with a greater treatment effect in the patients aged ≥75 years.
- Serious adverse events, adverse events leading to dose reduction of nintedanib, and adverse events leading to treatment discontinuation were more frequent in patients aged ≥75 than <75 years. Proactive management of adverse events is important to help maintain patients on antifibrotic therapy.

RESULTS

Baseline characteristics

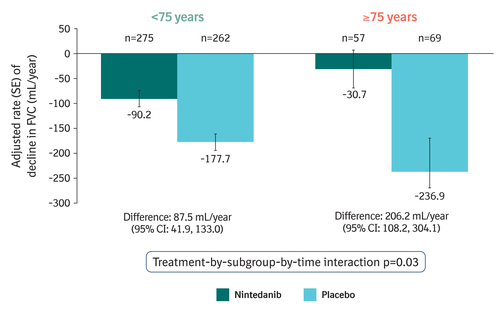


One patient aged <75 years had missing data for body mass index, and 9 patients (8 aged <75 years and 1 aged ≥75 years) had missing data for DLco. UIP, usual interstitial pneumonia.

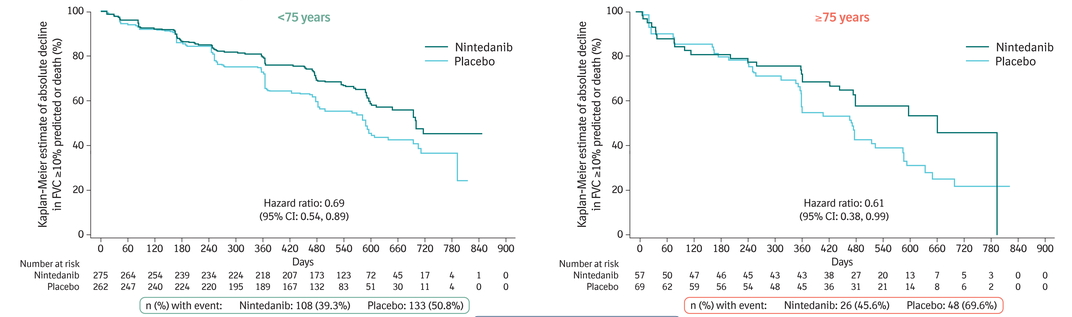
Mean (SD) exposure to trial drug (months)

	<75 years	≥75 years
Nintedanib	16.0 (6.9)	13.5 (8.3)
Placebo	16.9 (5.7)	16.4 (6.4)

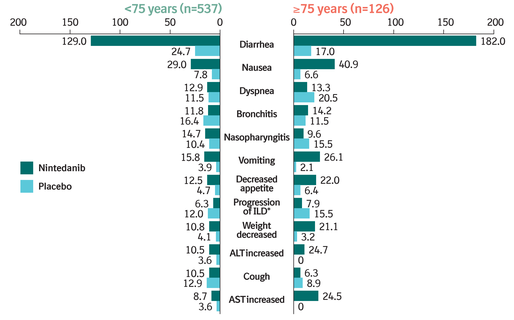
Rate of decline in FVC (mL/year) over 52 weeks



Time to absolute decline in FVC ≥10% predicted or death

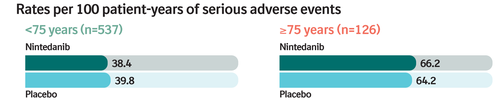


Rates per 100 patient-years of most frequent adverse events



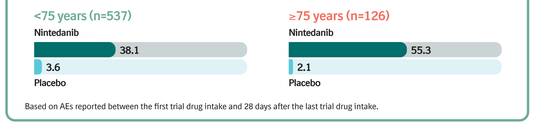
Adverse events (AEs) were coded using preferred terms in the Medical Dictionary for Regulatory Activities (MedDRA). Based on AEs reported between the first trial drug intake and 28 days after the last trial drug intake. AEs with an incidence rate of >10 patients per 100 patient-years in the nintedanib or placebo group in the total trial population are shown. *Corresponded to MedDRA preferred term "interstitial lung disease". ALT, alanine aminotransferase. AST, aspartate aminotransferase.

Rates per 100 patient-years of serious adverse events



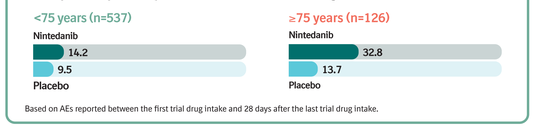
Based on AEs reported between the first trial drug intake and 28 days after the last trial drug intake. Serious adverse events were defined as events that resulted in death, were life-threatening, resulted in hospitalization or prolonged hospitalization, resulted in persistent or clinically significant disability or incapacity, were a congenital anomaly or birth defect, or were deemed serious for any other reason.

Rates per 100 patient-years of adverse events leading to permanent dose reduction



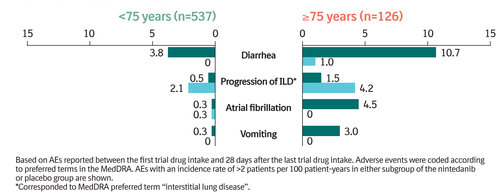
Based on AEs reported between the first trial drug intake and 28 days after the last trial drug intake.

Rates per 100 patient-years of adverse events leading to treatment discontinuation



Based on AEs reported between the first trial drug intake and 28 days after the last trial drug intake.

Rates per 100 patient-years of most frequent adverse events leading to treatment discontinuation



Based on AEs reported between the first trial drug intake and 28 days after the last trial drug intake. Adverse events were coded according to preferred terms in the MedDRA. AEs with an incidence rate of >2 patients per 100 patient-years in either subgroup of the nintedanib or placebo group are shown.
*Corresponded to MedDRA preferred term "interstitial lung disease".

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