Continued Treatment with Nintedanib in Patients with Progressive Fibrosing Autoimmune Disease-Related Interstitial Lung Diseases: Data from INBUILD-ON

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INTRODUCTION

- In the INBUILD trial in patients with progressive fibrosing interstitial lung diseases (ILDs) other than idiopathic pulmonary fibrosis (IPF), nintedanib reduced the rate of decline in forced vital capacity (FVC) compared with placebo, with a safety profile characterized mainly by gastrointestinal events, both in the overall population and in the subgroup with autoimmune disease-related ILDs.[1-3]
- INBUILD-ON (NCT03820726) is an open-label extension of the INBUILD trial that is collecting data on adverse events and FVC decline in patients treated with nintedanib over the longer term.

AIM

- To assess adverse events and FVC decline in patients with autoimmune disease-related ILDs treated with open-label nintedanib in INBUILD-ON.

METHODS

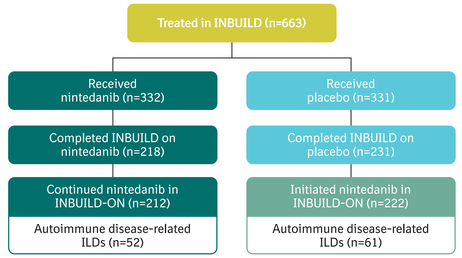
- Patients had diffuse fibrosing ILD (reticular abnormality with traction bronchiectasis, with or without honeycombing) of >10% extent on HRCT, FVC ≥45% predicted, DLco ≥30%–<80% predicted. Patients with IPF were excluded.
- Patients met criteria for ILD progression at any point within the 24 months before screening, despite management deemed appropriate in clinical practice.[1]
- Patients were randomized to receive nintedanib or placebo, stratified by fibrotic pattern on HRCT (usual interstitial pneumonia [UIP]-like fibrotic pattern or other fibrotic patterns).
- Patients who were still on treatment at the end of INBUILD could enter INBUILD-ON:
  - Patients who had received nintedanib in INBUILD and continued nintedanib in INBUILD-ON comprised the "continued nintedanib" group.
  - Patients who had received placebo in INBUILD and initiated nintedanib in INBUILD-ON comprised the "initiated nintedanib" group.
- We analyzed adverse events and the change in FVC from baseline to week 60 of INBUILD-ON in patients with autoimmune disease-related ILDs based on a data snapshot taken on 15 October 2020. Analyses were descriptive.

CONCLUSIONS

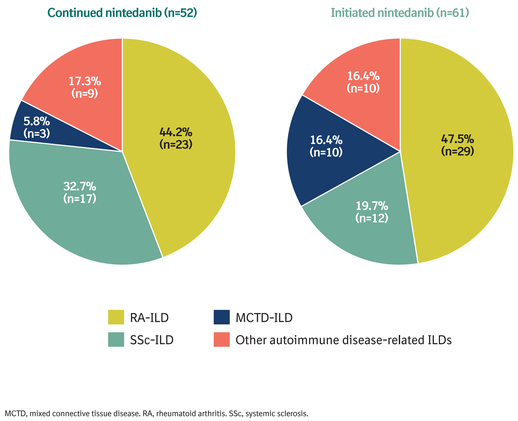
- The adverse event profile of nintedanib over longer-term use in patients with autoimmune disease-related ILDs participating in INBUILD-ON was characterized mainly by gastrointestinal events and was consistent with that reported over 52 weeks in INBUILD.
- The rate of decline in FVC in patients with autoimmune disease-related ILDs receiving nintedanib was similar during INBUILD and INBUILD-ON.
- These findings support a clinically meaningful benefit of nintedanib in slowing the progression of autoimmune disease-related ILDs and a consistent safety profile over longer-term use.

RESULTS

Disposition of patients



Patients with autoimmune disease-related ILDs in INBUILD-ON

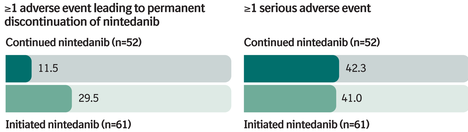


MCTD, mixed connective tissue disease. RA, rheumatoid arthritis. SSc, systemic sclerosis.

Baseline characteristics at inclusion in INBUILD-ON

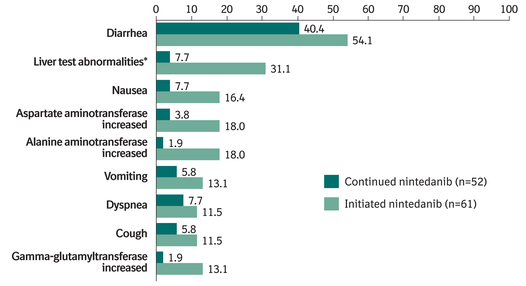
	Continued nintedanib (n=52)	Initiated nintedanib (n=61)
Mean (SD) age, years	63.9 (10.4)	64.7 (11.6)
Female (%)	61.5	54.1
Mean body mass index, kg/m²	25.2 (5.3)	27.5 (4.8)
White, %	55.8	55.7
Current or former smoker, %	44.2	50.8
Mean (SD) years since diagnosis of ILD	6.9 (4.9)	5.2 (3.8)
UIP-like fibrotic pattern on HRCT, %	76.9	68.9
Mean (SD) FVC % predicted	64.5 (13.6)	66.7 (17.0)

Adverse events in INBUILD-ON



Data are % of patients with ≥1 such adverse event with onset between first nintedanib intake and last intake plus 28 days.

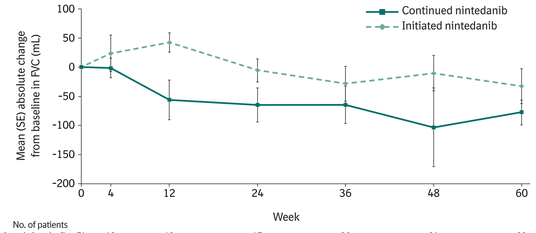
Most frequent adverse events in INBUILD-ON



*The adverse events shown (reported irrespective of causality) were based on individual preferred terms in the Medical Dictionary for Regulatory Activities (MedDRA) except for "liver test abnormalities", which was based on the standardized MedDRA query "liver related investigations, signs and symptoms" (broad definition). Data are % of patients with ≥1 such adverse event with onset between first nintedanib intake and last intake plus 28 days. Adverse events reported in >10% of patients in either treatment group are shown.

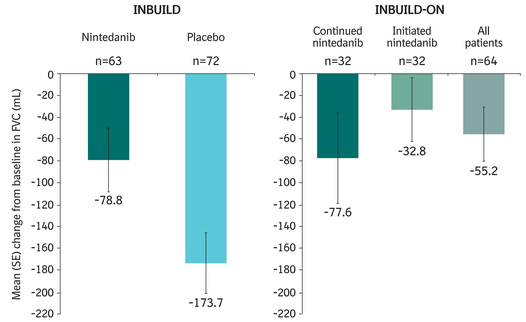
Absolute change from baseline in FVC (mL) in patients with autoimmune disease-related ILDs in INBUILD-ON

The last patient was enrolled in INBUILD-ON in July 2019. Based on the data snapshot taken on 15 October 2020, at weeks 36, 48, and 60, respectively, 33.6%, 40.7% and 43.4% of patients had missing FVC values. These high rates of missing data were mainly due to the COVID-19 pandemic.



No. of patients							
Continued nintedanib	51	48	48	47	36	31	32
Initiated nintedanib	60	59	52	50	39	36	32

Change from baseline in FVC (mL) at week 52 in INBUILD and week 60 in INBUILD-ON in patients with autoimmune disease-related ILDs



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