Continued treatment with nintedanib in patients with systemic sclerosis-associated interstitial lung disease (SSc-ILD): data from the SENSCIS-ON trial

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INTRODUCTION

- In the SENSCIS trial in patients with SSc-ILD, nintedanib reduced the rate of decline in forced vital capacity (FVC) (mL/year) over 52 weeks by 44% compared with placebo, with adverse events that were manageable for most patients.[1]
- SENSCIS-ON (NCT03313180) is an open-label extension study that is collecting data on the safety and efficacy of nintedanib over the longer term.

AIM

- To assess FVC decline and adverse events in patients treated with nintedanib in SENSCIS-ON.

METHODS

- Patients in SENSCIS-ON came from two parent trials:

1 SENSCIS trial[1]

- Patients remained on blinded treatment until the last patient had reached week 52 but for ≤100 weeks
- Patients who completed the SENSCIS trial on treatment and attended a follow-up visit were eligible to enter SENSCIS-ON

2 Open-label drug-drug interaction study of nintedanib and Microgynon (ethinylestradiol + levonorgestrel) in female patients with SSc-ILD (NCT03675581)

- Patients received nintedanib over a period of ≥14 days to approximately 28 days
- Patients who completed the study on treatment were eligible to enter SENSCIS-ON

- We analyzed changes in FVC (in mL and based on proposed thresholds for minimal clinically important differences[2]), adverse events, dose adjustments, and permanent treatment discontinuations over 52 weeks in SENSCIS-ON in:
  - Patients who had received nintedanib in the SENSCIS trial and continued nintedanib in SENSCIS-ON ("continued nintedanib" group)
  - Patients who had received placebo in the SENSCIS trial and initiated nintedanib in SENSCIS-ON, or who had received nintedanib for a short period in the drug-drug interaction study ("initiated nintedanib" group).

CONCLUSIONS

- The change in FVC in patients who received nintedanib over 52 weeks of SENSCIS-ON was similar to the change in FVC in patients who received nintedanib over 52 weeks of the SENSCIS trial.
- The safety profile of nintedanib over longer-term use was consistent with that reported over 52 weeks.
- These findings support a clinically meaningful benefit of nintedanib in slowing the progression of SSc-ILD with a safety profile that can be managed by dose adjustments.

RESULTS

Patients

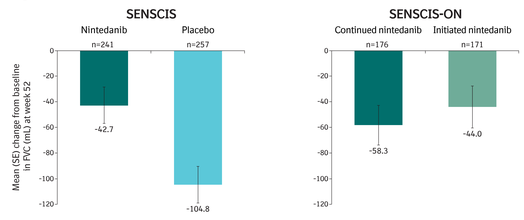
Baseline characteristics at inclusion in SENSCIS-ON

	Continued nintedanib (n=197)	Initiated nintedanib (n=247)
Mean age, years	55.8	54.4
Female, %	75.1	75.7
Mean body mass index, kg/m²	25.4	26.1
White, %	72.1	67.2
Mean FVC % predicted	70.4	70.8

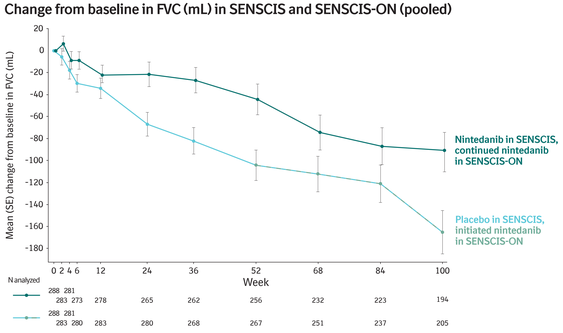
Mean (SD) FVC at the start of SENSCIS was 72.4 and 72.7 % predicted in the nintedanib and placebo groups, respectively.

Changes in FVC

Change from baseline in FVC (mL) at week 52 in SENSCIS and SENSCIS-ON

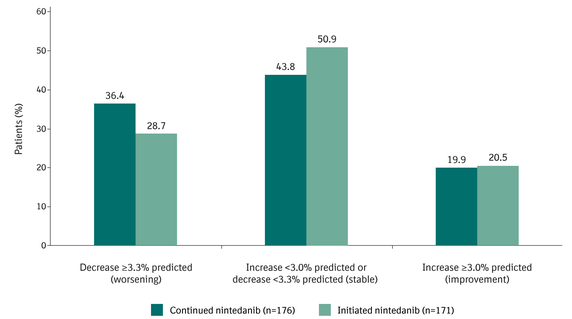


Change from baseline in FVC (mL) in SENSCIS and SENSCIS-ON (pooled)



Patients from the drug–drug interaction study were not included in this figure.
Mean (SD) off-treatment period between SENSCIS and SENSCIS-ON was 47.2 (17.9) and 49.6 (19.3) days in patients who continued and initiated nintedanib in SENSCIS-ON, respectively. From week 52, data from SENSCIS-ON were included in both arms as patients transitioned into the open-label study. For patients who initiated nintedanib in SENSCIS-ON, the duration of placebo treatment in SENSCIS was 52 to 100 weeks and the duration of nintedanib treatment in SENSCIS-ON was 0 to 48 weeks.

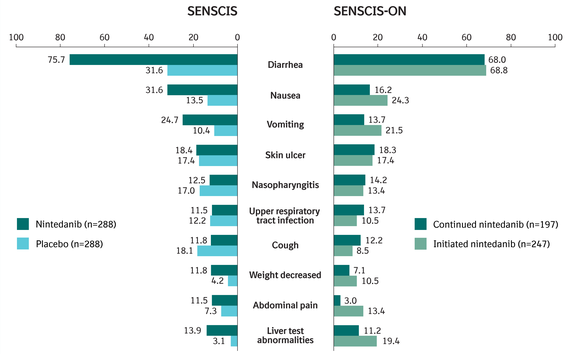
Proportions of patients who met proposed thresholds for worsening of FVC, stable FVC and improvement in FVC from baseline of SENSCIS-ON to week 52 of SENSCIS-ON



Proposed thresholds for worsening of FVC, stable FVC and improvement in FVC based on data from Scleroderma Lung Studies I and II, anchored to the health transition question from the Medical Outcomes Short Form-36.[2]

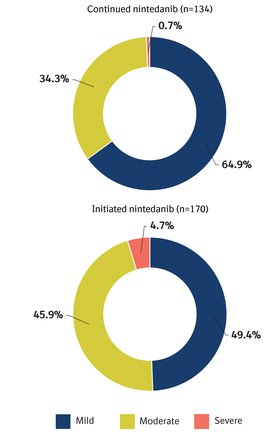
Adverse events

Adverse events (reported irrespective of causality) over 52 weeks in SENSCIS and SENSCIS-ON



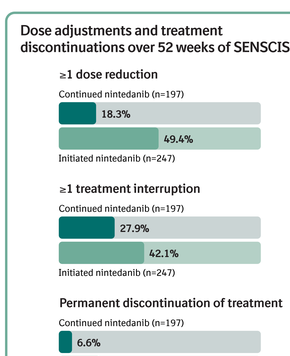
Adverse events were coded according to preferred terms in the Medical Dictionary for Regulatory Activities (MedDRA) except for "liver test abnormalities", which was based on the standardized MedDRA query "liver related investigations, signs and symptoms" (broad definition). Data are % of patients with ≥1 such event reported over 52 weeks (or until 28 days after last drug intake if earlier in SENSCIS, or until 7 days after last trial drug intake if earlier in SENSCIS-ON). Events reported in >10% of patients in either group in SENSCIS-ON are shown.

Intensity of worst diarrhea event over 52 weeks in SENSCIS-ON



Data are % of patients who had ≥1 diarrhea adverse event over 52 weeks (or until 7 days after last trial drug intake for patients who discontinued trial drug before week 52).

Dose adjustments and treatment discontinuations over 52 weeks of SENSCIS-ON



Permanent discontinuations were assessed up to week 52.

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1. Distler O et al. N Engl J Med 2019;380:2518–2528.
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