Severity and Impact of Gastrointestinal Symptoms in Patients with SSc-ILD Treated with Nintedanib: Data from SENSCIS-ON

Dinesh Khanna,[1] Elizabeth R Volkmann,[2] Kristin B Highland,[3] Yannick Allanore,[4] Stéphane Jouneau,[5] James R Seibold,[6] Alexandra James,[7] Margarida Alves,[8] Oliver Distler[9] on behalf of the SENSCIS trial investigators

[1]Division of Rheumatology, Department of Internal Medicine, Scleroderma Program, University of Michigan, Ann Arbor, MI, USA; [2]Department of Medicine, Division of Rheumatology, University of California, David Geffen School of Medicine, Los Angeles, CA, USA; [3]Cleveland Clinic, Cleveland, OH, USA; [4]Department of Rheumatology A, Descartes University, APHP, Cochin Hospital, Paris, France; [5]Department of Respiratory Medicine, Competences Centre for Rare Pulmonary Diseases, Univ Rennes, CHU Rennes, Inserm, EHESP, Irset (Institut de recherche en santé, environnement et travail) - UMR_S 1085, F-35000 Rennes, France; [6]Scleroderma Research Consultants LLC, Aiken, SC, USA; [7]Elderbrook solutions GmbH, Bietigheim-Bissingen, Germany; [8]Boehringer Ingelheim International GmbH, Ingelheim am Rhein, Germany; [9]Department of Rheumatology, University Hospital Zurich, University of Zurich, Zurich, Switzerland.

INTRODUCTION

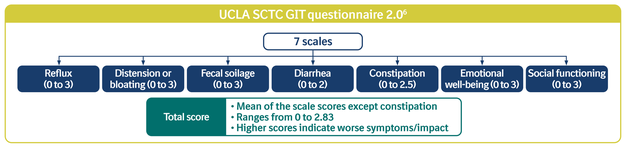
- Gastrointestinal (GI) symptoms are frequent in patients with systemic sclerosis (SSc), either as a manifestation of the disease or as a side-effect of pharmacological treatment.[1,2]
- GI symptoms can have a negative impact on quality of life in patients with SSc.[3]
- In the randomized placebo-controlled SENSCIS trial in patients with SSc-associated interstitial lung disease (SSc-ILD), nintedanib reduced the rate of decline in forced vital capacity, with an adverse event profile characterized predominantly by gastrointestinal events.[4]
- SENSCIS-ON (NCT03313180) is an open-label extension of the SENSCIS trial that is collecting data on the safety and efficacy of nintedanib over the longer term.

AIM

- To assess the severity of gastrointestinal symptoms and their impact on quality of life in patients treated with nintedanib in SENSCIS-ON.

METHODS

- Patients in SENSCIS-ON came from two parent trials:
  - SENSCIS, in which patients with SSc-ILD received nintedanib or placebo until the last patient had reached week 52 but for ≤100 weeks
  - Open-label drug–drug interaction study of nintedanib and Microgynon (ethinylestradiol and levonorgestrel) (NCT03675581) in which female patients with SSc-ILD received nintedanib for ≥14 days to approximately 28 days
- Recommendations for the management of adverse events were provided to the investigators.[5]
- To measure the severity and impact of GI symptoms, the UCLA Scleroderma Clinical Trial Consortium Gastrointestinal Tract (UCLA SCTC GIT) questionnaire 2.0[6] was completed at baseline and weeks 24 and 52 of SENSCIS-ON.



- We analyzed changes in UCLA SCTC GIT questionnaire scores from baseline to week 52 of SENSCIS-ON in:
  - Patients who received nintedanib in SENSCIS and continued it in SENSCIS-ON ("continued nintedanib" group)
  - Patients who received placebo in SENSCIS or received nintedanib for a short period in the drug-drug interaction study ("initiated nintedanib" group).

CONCLUSIONS

- Scores on the UCLA SCTC GIT 2.0 questionnaire suggest that the majority of patients with SSc-ILD had no or mild gastrointestinal symptoms at baseline of SENSCIS-ON.
- Overall, a small worsening in gastrointestinal symptoms was observed over 52 weeks of nintedanib treatment in SENSCIS-ON; however, a few patients experienced more pronounced changes. Diarrhea had the greatest impact, reflecting the adverse event profile of nintedanib.
- These findings support the implementation of recommendations for the management of diarrhea in patients treated with nintedanib.

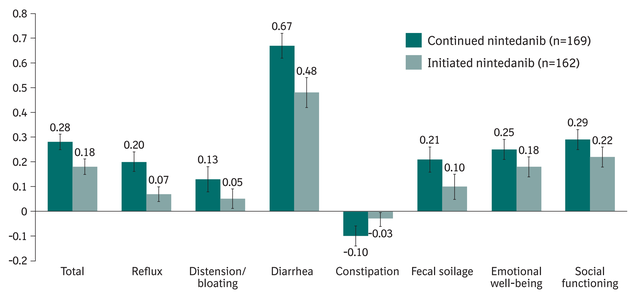
RESULTS

UCLA SCTC GIT scores at baseline

	Continued nintedanib (n=179)	Initiated nintedanib (n=218)
Total (0 to 2.83)	0.33 (0.33)	0.33 (0.34)
Reflux (0 to 3)	0.43 (0.43)	0.47 (0.47)
Distension/bloating (0 to 3)	0.70 (0.73)	0.64 (0.68)
Diarrhea (0 to 2)	0.24 (0.43)	0.36 (0.52)
Constipation (0 to 2.5)	0.38 (0.50)	0.25 (0.40)
Fecal soilage (0 to 3)	0.16 (0.52)	0.13 (0.43)
Emotional well-being (0 to 3)	0.21 (0.39)	0.19 (0.42)
Social functioning (0 to 3)	0.23 (0.35)	0.21 (0.34)

Data are mean (SD).
n=178 for UCLA SCTC GIT total score and diarrhea scale score in the continued nintedanib group.

Changes in UCLA SCTC GIT scores from baseline to week 52 of SENSCIS-ON



Data are mean (SE).
n=168 for changes in UCLA SCTC GIT total score and diarrhea scale score in the continued nintedanib group.

Changes in severity and impact of GI symptoms based on UCLA SCTC GIT total score between baseline and week 52 of SENSCIS-ON

Continued nintedanib

		Baseline				
		None or mild	Moderate	Severe or very severe	Missing	Total
Week 52	None or mild	81 (41.1)	5 (2.5)	0	4 (2.0)	90 (45.7)
	Moderate	38 (19.3)	10 (5.1)	0	1 (0.5)	49 (24.9)
	Severe or very severe	13 (6.6)	14 (7.1)	7 (3.6)	1 (0.5)	35 (17.8)
	Missing	6 (3.0)	3 (1.5)	1 (0.5)	13 (6.6)	23 (11.7)
	Total	138 (70.1)	32 (16.2)	8 (4.1)	19 (9.6)	197 (100)

Initiated nintedanib

		Baseline				
		None or mild	Moderate	Severe or very severe	Missing	Total
Week 52	None or mild	87 (35.2)	6 (2.4)	1 (0.4)	4 (1.6)	98 (39.7)
	Moderate	35 (14.2)	12 (4.9)	2 (0.8)	3 (1.2)	52 (21.1)
	Severe or very severe	8 (3.2)	7 (2.8)	4 (1.6)	1 (0.4)	20 (8.1)
	Missing	37 (15.0)	15 (6.1)	4 (1.6)	21 (8.5)	77 (31.2)
	Total	167 (67.6)	40 (16.2)	11 (4.5)	29 (11.7)	247 (100)

Data are n (%) of patients. None or mild=scores of 0 to 0.49; moderate=scores of 0.5 to 1; severe or very severe=scores of 1.01 to 3.

Changes in severity of diarrhea symptoms based on UCLA SCTC GIT diarrhea scale score between baseline and week 52 of SENSCIS-ON

Continued nintedanib

		Baseline				
		None or mild	Moderate	Severe or very severe	Missing	Total
Week 52	None or mild	35 (17.8)	6 (3.0)	0	1 (0.5)	42 (21.3)
	Moderate	50 (25.4)	17 (8.6)	2 (1.0)	4 (2.0)	73 (37.1)
	Severe or very severe	34 (17.3)	22 (11.2)	2 (1.0)	1 (0.5)	59 (29.9)
	Missing	6 (3.0)	2 (1.0)	2 (1.0)	13 (6.6)	23 (11.7)
	Total	125 (63.5)	47 (23.9)	6 (3.0)	19 (9.6)	197 (100)

Initiated nintedanib

		Baseline				
		None or mild	Moderate	Severe or very severe	Missing	Total
Week 52	None or mild	31 (12.6)	15 (6.1)	2 (0.8)	3 (1.2)	51 (20.6)
	Moderate	39 (15.8)	22 (8.9)	3 (1.2)	3 (1.2)	67 (27.1)
	Severe or very severe	23 (9.3)	21 (8.5)	6 (2.4)	2 (0.8)	52 (21.1)
	Missing	32 (13.0)	19 (7.7)	5 (2.0)	21 (8.5)	77 (31.2)
	Total	125 (50.6)	77 (31.2)	16 (6.5)	29 (11.7)	247 (100)

Data are n (%) of patients. None or mild=scores of 0 to 0.49; moderate=scores of 0.5 to 1; severe or very severe=scores of 1.01 to 2.

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