# A double blind, randomised, placebocontrolled trial evaluating efficacy and safety of oral nintedanib treatment for at least 52 weeks in patients with Systemic Sclerosis associated Interstitial Lung Disease (SSc-ILD)

Published: 24-08-2015 Last updated: 19-04-2024

The objective of the trial is to assess the efficacy and safety of nintedanib in the treatment of SSc with ILD at a dose of 150 mg bid compared to placebo.

**Ethical review** Approved WMO **Status** Recruitment stopped

**Health condition type** Lower respiratory tract disorders (excl obstruction and infection)

**Study type** Interventional

## **Summary**

#### ID

NL-OMON47379

#### Source

ToetsingOnline

#### **Brief title**

Nintedanib in SSc-ILD

#### Condition

- Lower respiratory tract disorders (excl obstruction and infection)
- Cornification and dystrophic skin disorders

#### **Synonym**

scar formation in the lungs caused by systemic sclerosis, systemic sclerosis associated lung fibrosis

#### **Research involving**

Human

### **Sponsors and support**

Primary sponsor: Boehringer Ingelheim

Source(s) of monetary or material Support: Boehringer Ingelheim

#### Intervention

Keyword: efficacy, nintedanib, safety, sclerosis

#### **Outcome measures**

#### **Primary outcome**

to demonstrate a reduction in the annual rate of decline in FVC in mL over 52 weeks in the nintedanib treatment group compared to the placebo group

#### **Secondary outcome**

The main secondary objectives are to demonstrate efficacy in regard to skin

fibrosis as

assessed by the modified Rodnan Skin Score at week 52 and to demonstrate an

improvement

of patient\*s symptoms as measured by the SGRQ (Saint George\*s Respiratory

Questionnaire)

total score at week 52.

Other objectives are to assess safety and tolerability, mortality, the effects

on different

systemic organ manifestations of SSc, pharmacokinetics and the effects of

nintedanib on

## **Study description**

#### **Background summary**

As no approved SSc-ILD treatment is available, and internal organ fibrosis, especially lung

fibrosis, leads to severe loss of function and ultimately results in death, there is a high unmet

medical need to stop the fibrotic remodeling and thus prevent loss of organ function.

As a common practice, immunosuppressive agents (e.g. mycophenolate mofetil, cyclophosphamide, methotrexate, azathioprine, prednisone) are widely used to address the

organ-specific manifestations. Currently no approved treatment is available addressing the

interstitial lung manifestation of the disease.

Based upon the mechanism of action and the similarities of pathophysiology resulting in the

same pro-fibrotic cascade described in both SSc-ILD and IPF (P14-07919), the pharmacological rationale for multiple tyrosine kinase inhibition in SSc-ILD is sound and

promising. Pre-clinical evidence of anti-fibrotic activity of nintedanib in SSc and clinical

evidence in IPF with an acceptable safety profile support the rationale of performing a trial in

patients with SSc-ILD.

SSc-ILD is expected to be a co-manifestation with varying degrees of involvement of skin

and other organs. From a mechanistic point of view and based on preclinical data, an effect of

nintedanib on manifestations of the disease outside of the lung, for example skin effects, is

also expected.

The rationale to conduct this Phase III trial in SSc-ILD can be summarized as follows:

High unmet medical need

Preclinical evidence for efficacy in SSc and SSc-ILD

Anti-fibrotic efficacy of nintedanib proven in IPF patients (similar pattern regarding

lung fibrosis)

From a mechanistic point of view, treatment with nintedanib may also be beneficial

on the disease outside of the lung, for example skin.

#### Study objective

The objective of the trial is to assess the efficacy and safety of nintedanib in the treatment of

SSc with ILD at a dose of 150 mg bid compared to placebo.

#### Study design

multi-centre, multi-national, prospective, double blind, randomised, placebo controlled.

#### Intervention

56 to 104 weeks of treatment, witht nintedanib 150 mg twice daily or placebo 150 mg twice daily.

#### Study burden and risks

Blood samples (every visit), pregnancy test in blood or urine (every visit), PK assessment (2 visits), ECG (4 visits), filling in 6 questionnaires (4 visits), maintaining menses calendar (every visit), filling in PK card (12 times over 6 days), mRSS assessment (7 visits), digital ulcer assessment (7 visits), autoantibody assessment (3 visits), biomarker blood sample (4 visits), farmacogenomic blood sample (1 visit), SpO2 test (4 visit), spirometry (12 visits), DLCO test (5 visits), echo of the hart (2 visits). If necessary a HRCT scan; when no HRCT is available, less than 1 year old.

The risks of treatment with nintedanib have been well delineated in patients with the fibrotic lung disease IPF. These risks are primarily related to the gastrointestinal tract (nausea, vomiting, diarrhoea, abdominal pain), and are usually managed with supportive therapy and with temporary or permanent dose reduction to 100 mg bid. In some cases, temporary interruption or permanent drug discontinuation is necessary. A reduction in appetite and weight decrease has also been reported in patients treated with nintedanib. Patients with SSc may already suffer from gastrointestinal symptoms and will be monitored for such events. Parenteral fed patients will be excluded from the trial. Increases in liver enzymes and bilirubin have been reported with the use of nintedanib and liver enzymes and must be followed closely during treatment (see also Section 4.2.1.2). Nintedanib must be dose-reduced, or interrupted in the event of hepatic toxicity and further treatment withheld until recovery of the abnormal laboratory parameters.

Risk associated to the HRCT: The more radiation received over the course of a life, the greater risk of having cancerous tumors or of inducing changes in

genes. The changes in genes possibly could cause abnormalities or disease in your future offspring. The radiation in this study is not expected to greatly increase these risks, but the exact increase in such risks is not known. You also may feel uncomfortable in the described tunnel. However, the scanner is open at both ends, and an intercom allows you to talk with the trial doctor and the staff. The scan can be stopped at any time at your request, but the scan may not be complete.

### **Contacts**

#### **Public**

Boehringer Ingelheim

Comeniusstraat 6 Alkmaar 1817 MS NL

**Scientific** 

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## **Trial sites**

#### **Listed location countries**

**Netherlands** 

## **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

#### **Inclusion criteria**

- Age > = 18 years
- 2013 ACR / EULAR classification criteria for SSc fulfilled
- SSc disease onset (defined by first non-Raynaud symptom) within 7
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#### years

- SSc related Interstitial Lung Disease confirmed by HRCT; Extent of fibrotic disease in the lung ><=10%
- FVC ><= 40% of predicted normal
- DLCO 30% to 89% of predicted normal

#### **Exclusion criteria**

- AST, ALT > 1.5 x ULN;- Bilirubin > 1.5 x ULN;- Creatinine clearance < 30 mL/min;- Airway obstruction (pre-bronchodilator FEV1/FVC < 0.7);- Other clinically significant pulmonary abnormalities;- Significant pulmonary hypertension ;- Cardiovascular diseases;- More than 3 digital fingertip ulcers, or a history of severe digital necrosis requiring hospitalization or severe other ulcers at discretion of the investigator.;- Bleeding risk (such as predisposition to bleeding, fibrinolysis, full-dose anticoagulation, high dose antiplatelet therapy, history of hemorrhagic central nervous system (CNS) event within last year;- international normalised ratio (INR) > 2, prolongation of prothrombin time (PT) and partial thromboplastin time (PTT) by  $> 1.5 \times ULN$ );- History of thrombotic event within last year;- Known hypersensitivity to the trial medication or its components (i.e. soya lecithin);- Clinical signs of malabsorption or needing parenteral nutrition;- Previous treatment with nintedanib or pirfenidone;- Treatment with prednisone > 10 mg/day, azathioprine, hydroxychloroguine, colchizine, D-penicillamine, sulfasalazine, cyclophosphamide, rituximab, tocilizumab, abatacept, leflunomide, tacrolimus, newer anti-arthritic treatments like tofacitinib and ciclosporine A, potassium paraaminobenzoate;- Unstable background therapy with either mycophenolate mofetil or methotrexate; - Previous or planned hematopoietic stem cell transplantation; - Patients with underlying chronic liver disease (Child Pugh A, B, C hepatic impairment);- Patient with a history of Scleroderma renal crisis

## Study design

## Design

Study phase: 3

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Placebo

Primary purpose: Treatment

#### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 08-12-2015

Enrollment: 17

Type: Actual

### Medical products/devices used

Product type: Medicine

Brand name: Ofev

Generic name: nintedanib

Registration: Yes - NL outside intended use

## **Ethics review**

Approved WMO

Date: 24-08-2015

Application type: First submission

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek

(Assen)

Approved WMO

Date: 02-11-2015

Application type: First submission

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek

(Assen)

Approved WMO

Date: 20-05-2016

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek

(Assen)

Approved WMO

Date: 31-08-2016

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek

(Assen)

Approved WMO

Date: 24-10-2016

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek

(Assen)

Approved WMO

Date: 03-11-2016

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek

(Assen)

Approved WMO

Date: 22-12-2016

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek

(Assen)

Approved WMO

Date: 07-03-2017

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek

(Assen)

Approved WMO

Date: 16-03-2017

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek

(Assen)

Approved WMO

Date: 10-05-2017

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek

(Assen)

Approved WMO

Date: 21-02-2018

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek

(Assen)

Approved WMO

Date: 16-03-2018

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek

(Assen)

Approved WMO

Date: 16-08-2018

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek

(Assen)

Approved WMO

Date: 31-08-2018

Application type: Amendment

Review commission: BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek

(Assen)

## **Study registrations**

## Followed up by the following (possibly more current) registration

No registrations found.

## Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register ID

EudraCT EUCTR2015-000392-28-NL

ClinicalTrials.gov NCT02597933 CCMO NL54693.056.15