# A PHASE 1, DOUBLE-BLIND, RANDOMIZED, PLACEBO-CONTROLLED TRIAL IN HEALTHY VOLUNTEERS TO DETERMINE THE SAFETY, TOLERABILITY AND PHARMACOKINETICS OF ESCALATING MULTIPLE DOSES OF MMI-0100 OR PLACEBO ADMINISTERED BY PULMONARY DELIVERY

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The purpose of the study is to investigate to what extent MMI-0100 is tolerated after multiple administrations. It will also be investigated how quickly and to what extent MMI-0100 is absorbed and eliminated from the body (this is called...

Ethical reviewApproved WMOStatusRecruitment stoppedHealth condition typeOther conditionStudy typeInterventional

## Summary

#### ID

NL-OMON43064

Source

ToetsingOnline

**Brief title** 

MMI-0100 MAD study

#### **Condition**

- Other condition
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#### **Synonym**

Idiopathic pulmoary fibrosis, pulmonary diseases

#### **Health condition**

Idiopathische Fibrose

#### Research involving

Human

### **Sponsors and support**

**Primary sponsor:** Moerae Matrix, Inc

Source(s) of monetary or material Support: farmaceutische industrie

#### Intervention

**Keyword:** Fribrotic indications, MMI-0100

#### **Outcome measures**

#### **Primary outcome**

To determine the safety and tolerability of pulmonary administered MMI-0100 with daily doses for 7 days, as assessed by adverse events (AE), vital signs, physical exam, clinical laboratory safety assessments, pulmonary function tests and 12-lead electrocardiogram (ECG) parameters

#### **Secondary outcome**

To characterize the systemic pharmacokinetics (PK) of MMI-0100 by inhaled delivery

# **Study description**

#### **Background summary**

MMI-0100 is a new investigational compound that may eventually be used for the treatment of idiopathic pulmonary fibrosis and other fibrotic and inflammatory indications. Fibrosis is associated with an increase of fibrous tissue in

organs. This inflammatory pulmonary disease is affected by a cascade reaction which synthesize and release of pro-inflammatory cytokines (a cytokine is a small protein involved in the most defense mechanisms associated with infections). MMI-0100 inhibits a part of this cascade reaction and therefore may inhibit the inflammation process in the lungs. MMI-0100 is in development and is not registered as a drug but has been given to humans before.

#### **Study objective**

The purpose of the study is to investigate to what extent MMI-0100 is tolerated after multiple administrations.

It will also be investigated how quickly and to what extent MMI-0100 is absorbed and eliminated from the body (this is called pharmacokinetics). In addition, the effect of MMI-0100 on the lung function will be investigated (this is called safety).

#### Study design

The study will consist of 1 period during which the subject will receive MMI-0100 or placebo once daily for 7 days. MMI-0100 and placebo will be given as in the form of an inhalation.

#### Intervention

Group 1: multiple pulmonary doses of 5.0 mg MMI-0100 (n=6) or matching placebo (n=2) once daily for 7 days

Group 2: multiple pulmonary doses of 10.0 mg MMI-0100 (n=6) or matching placebo (n=2) once daily for 7 days

Group 3: multiple pulmonary doses of 20.0 mg MMI-0100 (n=6) or matching placebo (n=2) once daily for 7 days

Group 4\*: multiple pulmonary doses of 40.0 mg MMI-0100 (n=6) or matching placebo (n=2) once daily for 7 days

\* Based on the results obtained from Group 1, 2 and 3, it may be decided to decrease the 40 mg dose level in Group 4.

#### Study burden and risks

All potential drugs cause adverse effects; the extent to which this occurs differs. MMI-0100 has been given to humans in 2 studies to date. In a single dose study the most frequently observed adverse effect was cough but this may well be associated to the method of administration as cough was reported more often by volunteers receiving placebo then by volunteers receiving active medication. MMI-0100 was well tolerated in man and there were no adverse effects reported more than once.

MMI-0100 was well tolerated when given via inhalation in animals. Most adverse 3 - A PHASE 1, DOUBLE-BLIND, RANDOMIZED, PLACEBO-CONTROLLED TRIAL IN HEALTHY VOLUNTE ... 24-06-2025

events were only observed after direct injection in the body cavity. The most frequent adverse effects were: hypotension (low blood pressure) and vascular inflammation.

## **Contacts**

#### **Public**

Moerae Matrix, Inc

55 Madison Ave Suite 400 Morristown NJ 07960 US

#### Scientific

Moerae Matrix, Inc

55 Madison Ave Suite 400 Morristown NJ 07960 US

## **Trial sites**

#### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

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

#### Inclusion criteria

healthy male or female

Age: between 18 and 55 years of age, inclusive BMI: between 19.0 and 30.0 kilograms/meter2 Body weight: between 50.0 and 100.0 kg, inclusive

#### **Exclusion criteria**

Suffering from hepatitis B, hepatitis C, cancer or HIV/AIDS. In case of participation in another drug study within

90 days before the start of this study or being a blood donor within 60 days from the start of the study. In case of

donating more than 1.5 liters of blood in the 10 months prior the start of this study.

## Study design

## **Design**

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): 17-03-2016

Enrollment: 32

Type: Actual

## Medical products/devices used

Product type: Medicine
Brand name: MMI-0100
Generic name: MMI-0100

# **Ethics review**

Approved WMO

Date: 11-02-2016

Application type: First submission

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

(Assen)

Approved WMO

Date: 26-02-2016

Application type: First submission

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 EUCTR2015-005595-17-NL

CCMO NL56730.056.16