# T-cell mediated immunity against Aspergillus fumigatus

Published: 23-06-2011 Last updated: 28-04-2024

To study the mechanisms by which T-cells can contribute to the defense against Aspergillus fumigatus. To study the role of the immune system and the role of Aspergillus antigens in the switch from a Th1 to a Th2 profile in patients with ABPA.

Ethical review Approved WMO
Status Recruitment stopped
Health condition type Allergic conditions

Study type Observational invasive

# **Summary**

#### ID

NL-OMON35724

#### Source

**ToetsingOnline** 

#### **Brief title**

T-Af

#### **Condition**

- Allergic conditions
- Fungal infectious disorders

#### Synonym

Aspergillosis, fungal infection

#### Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Leids Universitair Medisch Centrum

Source(s) of monetary or material Support: Ministerie van OC&W

#### Intervention

**Keyword:** Aspergillus, T cell

#### **Outcome measures**

#### **Primary outcome**

Frequency and cytokineprofile of Aspergillus-specific T-cells in blood and

broncho-alveolar lavage fluid

Presence and type of Aspergillus-specific antibodies

#### **Secondary outcome**

nvt

# **Study description**

#### **Background summary**

Invasive aspergillosis is a common and life-threatening infectious complication in patients with hematological diseases, in patients after stem cell transplantation or solid organ transplantation and in patients with the primary immune deficiency Chronic Granulomatous Disease. It is known that patients with granulocytopenia have an increased risk of invasive aspergillosis, but in recent years there is increasing evidence that T-cells also play an essential role in the defense against Aspergillus fumigatus.

Another patient group, patients with Allergic Bronchopulmonary Aspergillosis (ABPA) exhibit an allergic overreaction to Aspergillus fumigatus. The Aspergillus-specific T-cells in these patients have a Th2 profile. It is unknown what the cause is of the switch from a Th1 to a Th2 profile.

#### Study objective

To study the mechanisms by which T-cells can contribute to the defense against Aspergillus fumigatus.

To study the role of the immune system and the role of Aspergillus antigens in the switch from a Th1 to a Th2 profile in patients with ABPA.

## Study design

Observational mechanistic study

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#### Study burden and risks

At one to three time points 50 ml of blood will be drawn, if possible during an existing vena puncture. When a broncho-alveolar lavage is performed BAL-fluid will be collected for this research project.

No benefit for the participants is expected, neither any negative effects.

## **Contacts**

#### **Public**

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NL

#### **Scientific**

Leids Universitair Medisch Centrum

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# **Trial sites**

#### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

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

#### Inclusion criteria

Diagnosis Invasive Aspergillosis or suspected for this diagnosis Diagnosis allergic reaction to Aspergillus

## **Exclusion criteria**

< 18 year of age Not able to get informed consent

# Study design

## **Design**

Study type: Observational invasive

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Primary purpose: Basic science

## Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 30-08-2012

Enrollment: 150

Type: Actual

## **Ethics review**

Approved WMO

Date: 23-06-2011

Application type: First submission

Review commission: METC Leiden-Den Haag-Delft (Leiden)

metc-ldd@lumc.nl

# **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

CCMO NL35939.058.11

# **Study results**

Date completed: 02-11-2015

Actual enrolment: 9

## **Summary results**

Trial is onging in other countries