

# An exploratory study to assess the effect of benralizumab on small airway obstruction in patients with severe asthma using functional respiratory imaging

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The aim of this study is to use Functional Respiratory Imaging (FRI) as a biomarker to get a deeper insight into regional changes in the distal bronchial and central bronchial airways of asthmatic patients on benralizumab treatment.

<b>Ethische beoordeling</b>	Niet van toepassing
<b>Status</b>	Werving nog niet gestart
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Observationeel onderzoek, zonder invasieve metingen

## Samenvatting

### ID

NL-OMON26915

### Bron

Nationaal Trial Register

### Verkorte titel

TBA

### Aandoening

asthma

## Ondersteuning

**Primaire sponsor:** Ciro

**Overige ondersteuning:** Astra Zeneca

## Onderzoeksproduct en/of interventie

## **Uitkomstmaten**

### **Primaire uitkomstmaten**

The primary objective of this study is to investigate the effect (and the onset of this effect) of benralizumab on specific Functional Respiratory Imaging parameters in patients with severe eosinophilic asthma after 4 and 12 weeks treatment.

## **Toelichting onderzoek**

### **Achtergrond van het onderzoek**

Benralizumab has been demonstrated to be an effective therapy for patients with severe eosinophilic asthma (SEA) as it reduces annual exacerbation rates and maintenance oral corticosteroid (OCS) doses and improves pulmonary function. This treatment has been accepted as standard care. Not all patients are responders to this therapy. There are no studies available looking at the locoregional effects on the small airways. The aim of this study is getting locoregional insights by using Functional respiratory Imaging (FRI), this could be helpful in choosing the most adequate treatment approach.

### **Doel van het onderzoek**

The aim of this study is to use Functional Respiratory Imaging (FRI) as a biomarker to get a deeper insight into regional changes in the distal bronchial and central bronchial airways of asthmatic patients on benralizumab treatment.

### **Onderzoeksopzet**

The objectives will be evaluated at baseline, after 4 and 12 weeks of treatment. High Resolution Computed Tomography (HRCT) scans are taken at two different lung volumes, i.e. TLC and FRC. Other objectives are measured by lung function, blood eosinophil count, questionnaires (dyspnoea) and exercise tolerance by 6MWT.

## **Contactpersonen**

### **Publiek**

CIRO  
bita hajian

0031639804621

## **Wetenschappelijk**

CIRO  
bita hajian

0031639804621

## **Deelname eisen**

### **Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)**

Patients eligible for treatment with benralizumab will be aged 18 - 75 years and have a confirmed diagnosis of severe eosinophilic asthma according to ERS/ATS guidelines. Pre-bronchodilator FEV1 of  $\leq$  80% predicted and history of physician-diagnosed asthma requiring treatment with medium-to-high dose ICS ( $>250\mu\text{g}$  fluticasone dry powder formulation equivalents total daily dose) and a LABA, for at least 12 months prior to Visit 1. All patients will show persistent blood eosinophilia of  $>0.3 \times 10^9/\text{L}$  despite treatment with high doses of inhaled corticosteroids ( $>500 \text{ ug/day}$  fluticasone equivalent), or  $>0.15 \times 10^9/\text{L}$  despite chronic oral corticosteroid treatment at baseline.

At least 2 documented asthma exacerbations in the 12 months prior to the date informed consent.

Females of childbearing potential must have a negative pre-treatment urine pregnancy test. Subjects are allowed to use their own inhalation therapy during this study. Subjects who are steroid dependent and maintained on an equivalent of  $\leq 10 \text{ mg}$  oral prednisone per day for at least 3 months prior to Visit 1 are eligible, providing the dose of oral steroids remains stable during the run-in period.

### **Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)**

Current smokers or former smokers with a smoking history of  $\geq 15$  pack years. A former smoker is defined as a subject who quit smoking at least 6 months prior to Visit 1

Chronic pulmonary disorders other than asthma

Current malignancy or previous malignancy in remission  $<12$  months

Prior use of anti IL5 or anti IL5 Receptor monoclonal Antibodies. For patients treated with omalizumab there is a wash out period of 3 month.

Any other condition that, according to the investigator, may affect the outcome of the study

# Onderzoeksopzet

## Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

## Deelname

Nederland	
Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-03-2021
Aantal proefpersonen:	20
Type:	Verwachte startdatum

## Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Ja

## Ethische beoordeling

Niet van toepassing	
Soort:	Niet van toepassing

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

## In overige registers

### Register

NTR-new  
Ander register

### ID

NL9103  
METC AzM : METC

## Resultaten