# Adalimumab dose reduction aiming low serum concentration with control of disease activity (ADDORA-LOW): a single blind, non-inferiority, randomised clinical trial

Published: 18-10-2019 Last updated: 10-04-2024

Primary objective: to evaluate the disease activity after dose reduction, aiming adalimumab concentration of 2 mg/L or 5 mg/L, in rheumatoid arthritis patients responding to adalimumab. Secondary objectives: to evaluate whether reducing adalimumab...

**Ethical review** Approved WMO

**Status** Pending

**Health condition type** Autoimmune disorders

Study type Interventional

## **Summary**

#### ID

**NL-OMON55177** 

#### Source

ToetsingOnline

**Brief title** 

ADDORA-low

#### Condition

Autoimmune disorders

#### **Synonym**

Rheumatoid arthritis

#### Research involving

Human

### **Sponsors and support**

**Primary sponsor:** Reade

Source(s) of monetary or material Support: ZonMw

#### Intervention

Keyword: Adalimumab, Dose reduction, Rheumatoid arthritis

#### **Outcome measures**

#### **Primary outcome**

The primary study endpoint is the difference in mean time weighted DAS28-CRP between week 0 and 24.

#### **Secondary outcome**

Difference in mean time weighted DAS28-CRP between study groups after 12 weeks

Direct medical costs (medication, non-scheduled visits due flares, cost TDM

testing) over 24 weeks

Agreement between algorithm predicted and measured adalimumab concentrations at week 24.

Number of flares and dose-interval shortenings after 24 weeks.

# **Study description**

#### **Background summary**

Several prior studies have shown that dose reduction or discontinuation of tumor necrosis factor (TNF)-inhibitors, like adalimumab, is possible in substantial number of patients with a rheumatic disease without an increase in disease activity. Prior studies showed that patients with concentrations higher than 5 mg/L are overexposed to adalimumab and can safely reduce the dose. In the first phase of treatment, an adalimumab concentration of 5mg/L is needed to achieve adequate clinical response. However to control disease activity after 28 weeks, lower concentration than 5 mg/L are probably sufficient. Recent published data suggest that concentrations of 0.1-0.5 mg/L are enough to

control TNF blockade in this state. Yet, a study which investigates the lowest effective drug serum concentration is missing so far. We hypothesize that serum adalimumab concentration of 2 mg/L is sufficient to control disease activity.

#### Study objective

Primary objective: to evaluate the disease activity after dose reduction, aiming adalimumab concentration of 2 mg/L or 5 mg/L, in rheumatoid arthritis patients responding to adalimumab.

Secondary objectives: to evaluate whether reducing adalimumab dose aiming a concentration of 2 mg/L is superior in costs savings compared to dose tapering aiming adalimumab concentration of 5 mg/L; to evaluate the algorithm used to achieve target concentration of 2 mg/L or 5 mg/L; to study the difference in cumulative incidence of flares between the two study groups

#### Study design

single blinded randomized, non-inferiority, trial

#### Intervention

Patients are randomly assigned to dose reduction aiming a drug level of respectively 2 mg/L or 5 mg/L

#### Study burden and risks

We hypothesize that dose reduction aiming a drug level of 2 mg/L is possible with disease activity remaining stable, however, an increased disease activity risk cannot be excluded.

## **Contacts**

#### **Public**

Reade

dr jan van breemenstraat 2 Amsterdam 1056 AB NL

#### Scientific

Reade

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## **Trial sites**

#### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

Adolescents (16-17 years) Adults (18-64 years)

#### Inclusion criteria

Rheumatoid arthritis patient, according to ACR 1987/2010 criteria; Treated for at least 28 weeks with adalimumab Adalimumab trough concentration >5mg/L Who has agreed to participate (written informed consent); Age 16 years or older.

#### **Exclusion criteria**

Scheduled surgery during the follow-up of the study or other pre-planned reasons for treatment discontinuation
Life expectancy shorter than follow-up period of the study;
No other disease that might flare if adalimumab is tapered like psoriasis, inflammatory bowel disease

# Study design

## **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Single blinded (masking used)

Control: Active

Primary purpose: Treatment

#### Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 15-05-2019

Enrollment: 89

Type: Anticipated

## Medical products/devices used

Product type: Medicine

Brand name: Humira, Amgevita, Hulio, Hyrimoz, Imraldi, Amgevita

Generic name: Adalimumab

Registration: Yes - NL intended use

## **Ethics review**

Approved WMO

Date: 18-10-2019

Application type: First submission

Review commission: METC Amsterdam UMC

Approved WMO

Date: 05-11-2019

Application type: First submission

Review commission: METC Amsterdam UMC

Approved WMO

Date: 12-01-2022

Application type: Amendment

Review commission: METC Amsterdam UMC

Approved WMO

Date: 25-01-2022

Application type: Amendment

Review commission: METC Amsterdam UMC

# **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 EUCTR2019-001793-28-NL

CCMO NL69883.029.19