# Influence of B cell depletion therapy (rituximab) on (risk factors of) comorbidity in rheumatoid arthritis

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The objective of this study is to investigate whether there is a change in lipids and bonemarkers and what the frequency of occurence of (riskfactors for) cardiovascular disease, osteoporosis and antibodies during treatment with rituximab.

**Ethical review** Approved WMO **Status** Recruiting

Health condition type Cardiac disorders, signs and symptoms NEC

**Study type** Observational invasive

## **Summary**

#### ID

NL-OMON31299

#### Source

ToetsingOnline

#### **Brief title**

B cell depletion therapy in rheumatoid arthritis and comorbidity

#### **Condition**

- Cardiac disorders, signs and symptoms NEC
- Autoimmune disorders
- · Joint disorders

#### Synonym

rheumatoid arthritis

#### Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Vrije Universiteit Medisch Centrum

1 - Influence of B cell depletion therapy (rituximab) on (risk factors of) comorbidi ... 9-05-2025

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

## Intervention

**Keyword:** comorbidity, rheumatoid arthritis, rituximab

#### **Outcome measures**

#### **Primary outcome**

Primary study variables will be a change in lipids (total cholesterol, HDL, LDL and TG) and lipoproteins (Lp-a, Apo-A1, Apo-B), bonemineral densitiy (DEXA) and bonemarkers (osteocalcine, OPG, \*-CTx and RANKL) and antibodyformation.

## **Secondary outcome**

Secundary study variables will be a change in disease activity (DAS 28), functional capacity (HAQ-score), radiologic progression (Sharp van der Heyde score) and B cell count.

# **Study description**

### **Background summary**

Since the year 2000 rheumatoid arthritis (RA) can be treated with immunomodulating drugs (biologicals). One of these agents is rituximab, which results in B cell depletion by binding selectively on the celmembraneprotein CD 20. Recently it was found that B cells play a major role in the pathogenesis of rheumatoid arthritis. In rheumatoid arthritis there is a high prevalence and incidence of comorbidity, i.e. osteoporosis and cardiovascular diseases. It is unclear what the influence of rituximab is on (these riskfactors for) this comorbidity in rheumatoid arthritis. Moreover, it's unknown whether antibodies against rituximab will appear during the treatment with rituximab.

## Study objective

The objective of this study is to investigate whether there is a change in lipids and bonemarkers and what the frequency of occurence of (riskfactors for) cardiovascular disease, osteoporosis and antibodies during treatment with

rituximab.

## Study design

prospective observational multicentre study

## Study burden and risks

Patients will be seen eight times for collecting data (including questionnaires, laboratory and radiologic tests) during the 2 years follow up.

## **Contacts**

#### **Public**

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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

According to the thesis of the Dutch association of rheumatology (NVR): treatment with rituximab of rheumatoid arthritis patients:

- rheumatoid arthritis diagnosed according to the ACR criteria 1987
- active rheumatoid arthritis
- previous failure of TNF alpha blocking

## **Exclusion criteria**

- malignity
- active tuberculosis or other active infection
- pregnancy and lactation
- severe heart failure (NYHA IV) or other cardiac disease
- hypersensitivity to one of the active substances of rituximab or murine proteins

## Study design

## **Design**

Study type: Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled
Primary purpose: Basic science

### Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 03-03-2008

Enrollment: 50

Type: Actual

## **Ethics review**

Approved WMO

Application type: First submission

# **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 NL18857.029.07