

# **Identification of predictive factors in synovial samples for the clinical response to TNF-alpha blockade in rheumatoid arthritis.**

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Can predictors of reponse to anti-TNF therapy be identified by immunohistochemical analysis of synovial tissue obtained before initiation of treatment?

<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving gestopt
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## **Samenvatting**

### **ID**

NL-OMON28799

### **Bron**

Nationaal Trial Register

### **Verkorte titel**

N/A

### **Aandoening**

Rheumatoid arthritis.

### **Ondersteuning**

**Primaire sponsor:** AMC, Division of Clinical Immunology and Rheumatology.

**Overige ondersteuning:** Health Care Efficiency Research Program grant from the Netherlands Organization for Health Research and Development (ZonMw) in assignment of the Netherlands Organization for Scientific Research (NWO).  
The Dutch Arthritis Association

### **Onderzoeksproduct en/of interventie**

## **Uitkomstmaten**

### **Primaire uitkomstmaten**

1. Primary immunohistologic outcome:<br>

TNF-alpha expression in synovial tissue as shown by immunohistochemistry and quantified by digital image analysis;<br>

2. Primary clinical outcome:<br>

Clinical response at week 16 assessed using the DAS28.

## **Toelichting onderzoek**

### **Achtergrond van het onderzoek**

A multicenter fase IV prospective study in patients with rheumatoid artrhitis investigating potential predictors of response to anti-TNF therapy. Synovial biopsies obtained pre-treatment were studied by immunohistochemistry to identify such predictors. All patients received active treatment with infliximab according to the normal regimen. Clinical response was assessed every 4 weeks from baseline up to week 24.

### **Doel van het onderzoek**

Can predictors of reponse to anti-TNF therapy be identified by immunohistochemical analysis of synovial tissue obtained before initiation of treatment?

### **Onderzoeksopzet**

N/A

### **Onderzoeksproduct en/of interventie**

Infliximab therapy (3mg/kg i.v.) at week 0, 2, 6, 14 and every 8 weeks. Clinical efficacy assessments are performed at baseline and subsequently every 4 weeks up to week 24. Serum samples are drawn on these visits. At baseline synovial biopsies are obtained from a maximally inflamed joint.

## **Contactpersonen**

## **Publiek**

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## **Wetenschappelijk**

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## **Deelname eisen**

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

1. Men/women suffering from rheumatoid arthritis, based on the American Rheumatism Association (ARA) 1987 criteria, who failed at least one DMARD including methotrexate will be included in the study;
2. Patients in ARA functional classes I, II, and III may be included;
3. In addition the patients must fulfill the following criteria at baseline:
  - a. DAS 28 >3.2;
  - b. Patients global evaluation of his/her rheumatoid condition assessed as fair, poor or very poor;and

investigators global evaluation of patients rheumatoid condition assessed as fair, poor or very poor;

- c. Be > 18 years of age and <= 85 years;
- d. Use concurrent methotrexate treatment (5 - 30 mg/week; stable since at least 28 days before initiation) during the study. Subjects may be taking nonsteroidal anti-inflammatory drugs, provided the dose and frequency have been stable for at least 28 days. Subjects may be receiving prednisone therapy <=10 mg/day provided that the dosage has been stable for at least 2 months prior to entry.

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

- 1. Pregnancy;
- 2. Breastfeeding;
- 3. A history of or acute inflammatory joint disease of different origin e.g. mixed connective tissue disease, seronegative spondylarthropathy, psoriatic arthritis, Reiter's syndrome, systemic lupus erythematosus or any arthritis with onset prior to age 16 years;
- 4. Acute major trauma;
- 5. Previous therapy at any time with: TNF-alpha directed monoclonal antibodies or p75 TNF receptor fusionprotein;
- 6. Therapy within the previous 60 days with:
  - a. Any experimental drug;
  - b. Alkylating agents, e.g. cyclophosphamide, chlorambucil;
  - c. Antimetabolites;
  - d. Monoclonal antibodies;
  - e. Growth factors;
  - f. Other cytokines;
- 7. Therapy within the previous 28 days with:
  - a. Parenteral or intraarticular corticoid injections;
  - b. Oral corticosteroid therapy exceeding a prednisone equivalent of 10 mg daily;
  - c. Present use of DMARDs other than methotrexate;

8. A history of hypersensitivity to the study medication or to drugs with similar chemical structure;
9. Fever (orally measured  $> 38^{\circ}\text{C}$ ), chronic infections or infections requiring anti-microbial therapy;
10. Known positive reaction to hepatitis B surface antigen;
11. Other active medical conditions such as inflammatory bowel disease, bleeding diathesis, or severe unstable diabetes mellitus;
12. Manifest cardiac failure (stage III or IV according to NYHA classification);
13. Progressive fatal disease/terminal illness;
14. Impaired coagulation;
15. A congenital or acquired (known HIV-positive status) immunodeficiency, a history of cancer or lymphoproliferative disease or treatment with total lymphoid irradiation.  
(The known HIV-positive status may be defined either by a positive blood test or clinical diagnosis.)  
a haematopoietic disease;
16. A white cell count less than  $3.5 \times 10^9/\text{l}$ ;
17. Platelet count less than  $100 \times 10^9/\text{l}$ ;
18. Haemoglobin of less than  $5.3 \text{ mmol/l}$ ;
19. Body weight of less than 45 kg;
20. History of drug or alcohol abuse;
21. Any concomitant medical condition which would in the investigators opinion compromise the patients ability to tolerate, absorb, metabolize or excrete the study medication;
22. Inability to give informed consent;
23. Mental condition rendering the patient unable to understand the nature, scope and possible consequences of the study and/or evidence of an uncooperative attitude.

## Onderzoeksopzet

## Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Anders
Toewijzing:	Niet-gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

## Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	01-04-2001
Aantal proefpersonen:	143
Type:	Werkelijke startdatum

## Ethische beoordeling

Positief advies	
Datum:	08-01-2007
Soort:	Eerste indiening

## 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	ID
NTR-new	NL845

<b>Register</b>	<b>ID</b>
NTR-old	NTR859
Ander register	: N/A
ISRCTN	ISRCTN36847425

## Resultaten

### Samenvatting resultaten

Ann Rheum Dis. 2007 Nov 29. [Epub ahead of print]