

Hypothesis generating study to identify the changes in synovial tissue early after initiation of infliximab therapy

Submission date 23/08/2007	Recruitment status No longer recruiting	☐ Prospectively registered
Registration date 23/08/2007	Overall study status Completed	☐ Protocol
Last Edited 07/10/2021	Condition category Musculoskeletal Diseases	☐ Statistical analysis plan
		☒ Results
		☐ Individual participant data

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
N/A

Study information

Scientific Title

Hypothesis generating study to identify the changes in synovial tissue early after initiation of infliximab therapy

Study objectives

Exploratory study to investigate the effects of Tumour Necrotising Factor (TNF) targeted therapy with infliximab on the synovial cell infiltrate, and the induction of apoptosis.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics approval received from the Medical ethical committee of the Academic Medical Center /University of Amsterdam on the 1st October 2003 (ref: MEC 01/086).

Study design

Non-randomised, non-controlled, exploratory study

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Rheumatoid arthritis

Interventions

Infliximab therapy (3 mg/kg intravenous [i.v.]) according to the normal regimen. At baseline and 1 hour (n = 5) or 24 hours (n = 5) after the first infliximab infusion synovial biopsies were obtained from an inflamed knee joint. Peripheral blood mononuclear cells were obtained before and 1 and 24 hours after infliximab infusion in 20 patients (10 only blood, 10 with paired synovial biopsies). Serum was drawn at similar timepoints.

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Infliximab

Primary outcome(s)

1. Primary immunohistological outcome: detection of apoptosis in synovial tissue within 1 or 24 hours after initiation of treatment. Analysis by immunohistochemical staining and electron microscopy
2. Primary serological outcome: To determine whether TNF targeted therapy with infliximab results in apoptosis of peripheral blood mononuclear cells within 1 or 24 hours after initiation of treatment

Key secondary outcome(s)

To determine whether TNF targeted therapy with infliximab results in decreased synovial cellularity.

Completion date

01/09/2006

Eligibility

Key inclusion criteria

1. Rheumatoid Arthritis (RA) patients with active disease at baseline assessed by the Disease Activity Score (DAS-28)
2. Be more than or equal to 18 years of age
3. Use concurrent methotrexate treatment (7.5 - 30 mg/week; stable since greater than or equal to 28 days before initiation) during the study. Subjects may be taking non-steroidal anti-inflammatory drugs, provided the dose and frequency have been stable for at least 28 days. Subjects may be receiving prednisone therapy less than or equal to 10 mg/day provided that the dosage has been stable for at least a months prior to entry

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

Not Specified

Key exclusion criteria

1. Pregnancy
2. Breastfeeding
3. A history of or acute inflammatory joint disease of different origin, e.g., mixed connective tissue disease, seronegative spondyloarthropathy, 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:
 - 5.1. TNF-directed monoclonal antibodies
 - 5.2. p75 TNF receptor fusion protein
6. Therapy within the previous 45 days with:
 - 6.1. Any experimental drug
 - 6.2. Alkylating agents, e.g. cyclophosphamide, chlorambucil
 - 6.3. Anti-metabolites
 - 6.4. Monoclonal antibodies
 - 6.5. Growth factors
 - 6.6. Other cytokines

7. Therapy within the previous 28 days with:
- 7.1. Parenteral or intraarticular corticoid injections
 - 7.2. Oral corticosteroid therapy exceeding a prednisone equivalent of 10 mg daily
 - 7.3. Present use of Disease Modifying Anti-Rheumatic Drugs (DMARDs) other than methotrexate
8. Fever (orally measured greater than 38°C), chronic infections or infections requiring anti-microbial therapy
9. Manifest cardiac failure (stage III or IV according to New York Heart Association [NYHA] classification)
10. Progressive fatal disease/terminal illness
11. A hematopoietic disease
12. Body weight of less than 45 kg

Date of first enrolment

01/10/2003

Date of final enrolment

01/09/2006

Locations

Countries of recruitment

Netherlands

Study participating centre

Academic Medical Centre (AMC)

Amsterdam

Netherlands

1100 DD

Sponsor information

Organisation

Academic Medical Centre (AMC) (The Netherlands)

ROR

<https://ror.org/03t4gr691>

Funder(s)

Funder type

Industry

Funder Name

Centocor Inc. (USA)

Results and Publications

Individual participant data (IPD) sharing plan**IPD sharing plan summary**

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		30/10/2008	07/10/2021	Yes	No