

# MARVEL: Modification by Adalimumab of Rheumatoid arthritis Vascular and Endothelial function

<b>Submission date</b> 01/02/2008	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 14/02/2008	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 07/06/2017	<b>Condition category</b> Musculoskeletal Diseases	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
RJ1 04/0027

# Study information

## Scientific Title

Modification of vascular disease markers in active rheumatoid arthritis with fully human monoclonal anti-TNF-alpha antibody (Humira® [adalimumab])

## Acronym

Marvel

## Study objectives

The primary objective of the study is that measures of vascular dysfunction measured by flow mediated dilatation and pulse wave velocity and analysis, will improve after 13 weeks of adalimumab treatment.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Guy's Hospital Research Ethics Committee, ref: 2004/01/06

## Study design

Longitudinal single-centre open-label observational study

## Primary study design

Observational

## Secondary study design

Longitudinal

## Study setting(s)

Hospital

## Study type(s)

Treatment

## Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

## Health condition(s) or problem(s) studied

Rheumatoid arthritis

## Interventions

All participants under observation receive 40 mg adalimumab subcutaneously every other week (This trial investigates the changes in outcomes below from baseline).

## Intervention Type

Drug

**Phase**

Not Applicable

**Drug/device/biological/vaccine name(s)**

Humira® (adalimumab)

**Primary outcome measure**

The following will be assessed pre-therapy and at week 0 (i.e. twice pre-therapy), then weeks 13 and 25:

1. Flow-mediated dilatation
2. Pulse wave velocity
3. Pulse wave analysis

**Secondary outcome measures**

1. Vascular remodeling assessed by carotid artery ultrasound after 25 weeks of treatment
2. Serum risk factors of vascular disease: Fasting lipids, Low Density Lipoprotein (LDL) subclasses, homocysteine, Homeostasis Model Assessment (HOMA) assessment for insulin resistance, Heat Shock Proteins (HSPs), and BiP (immunoglobulin binding protein), assessed pre-therapy and at week 0 (i.e. twice pre-therapy), then weeks 13 and 25
3. Measures of activated endothelial cell activity: Soluble InterCellular Adhesion Molecule (ICAM) and Vascular Cell Adhesion Molecule (VCAM), assessed pre-therapy and at week 0 (i.e. twice pre-therapy), then weeks 13 and 25

**Overall study start date**

01/09/2004

**Completion date**

30/09/2008

**Eligibility****Key inclusion criteria**

1. Subjects who fulfill the British Society of Rheumatology guidelines for TNF blocking therapy in Rheumatoid Arthritis (RA)
2. Subjects who have abnormal vascular function as assessed at the screening visit
3. Men and women  $\geq 18$  years of age, with RA as defined by the 1987-revised American College of Rheumatology (ACR) diagnostic criteria, with a Disease Activity Score (DAS) greater than 5.1
4. Men and women of childbearing potential must use adequate birth control measures (e.g., abstinence, oral contraceptives, intrauterine device, barrier method with spermicide, or surgical sterilization) for the duration of the study
5. Patient must be able to adhere to the study visit schedule
6. The patient must be capable of giving informed consent and the consent must be obtained prior to any screening procedures
7. Must have a chest X-ray within 3 months prior to commencement of adalimumab with no evidence of malignancy, infection or fibrosis

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

24

**Key exclusion criteria**

1. Women who are pregnant or breast feeding.
2. Use of any investigational drug within 1 month prior to screening or within 5 half-lives of the investigational agent, whichever is longer.
3. Treatment with any other therapeutic agent targeted at reducing TNF (e.g., pentoxifylline, thalidomide, etanercept, etc.) within 3 months of screening.
4. History of diabetes mellitus.
5. History of ischemic heart disease or peripheral vascular disease.
6. Serious infections (such as pneumonia or pyelonephritis) in the previous 3 months. Less serious infections (such as acute upper respiratory tract infection [colds] or simple urinary tract infection) need not be considered exclusions at the discretion of the investigator.
7. Have active TB or have evidence of latent TB (old or latent TB on chest x-ray, without adequate therapy for TB initiated prior to first dose of study drug). Also excluded are patients with evidence of an old or latent TB infection without documented adequate therapy. Patients with a current close contact with an individual with active TB and patients who have completed treatment for active TB within the previous 2 years are explicitly excluded from the trial. Patients with a household member who has a history of active pulmonary TB should have had a thorough evaluation for TB prior to study enrollment as recommended by a local infectious disease specialist or published local guidelines of TB control agencies.
8. Presence of a transplanted organ (with the exception of a corneal transplant >3 months prior to screening).
9. Malignancy within the past 5 years (except for squamous or basal cell carcinoma of the skin that has been treated with no evidence of recurrence).
10. History of lymphoproliferative disease including lymphoma, or signs and symptoms suggestive of possible lymphoproliferative disease, such as lymphadenopathy of unusual size or location (such as nodes in the posterior triangle of the neck, infra-clavicular, epitrochlear, or periaortic areas), or splenomegaly.
11. Known recent substance abuse (drug or alcohol).
12. Poor tolerability of venepuncture required for blood sampling during the study period.

**Date of first enrolment**

01/09/2004

**Date of final enrolment**

30/09/2008

**Locations**

**Countries of recruitment**

England

United Kingdom

**Study participating centre**

**Guy's Hospital**

London

United Kingdom

SE1 9RT

## **Sponsor information**

**Organisation**

Guy's and St Thomas' NHS Foundation Trust (UK)

**Sponsor details**

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**Sponsor type**

Hospital/treatment centre

**Website**

<http://www.guysandstthomas.nhs.uk>

**ROR**

<https://ror.org/00j161312>

## **Funder(s)**

**Funder type**

Industry

**Funder Name**

Abbott UK

# Results and Publications

## Publication and dissemination plan

Not provided at time of registration

## Intention to publish date

## Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration