A multicentre randomised trial of etanercept and methotrexate to induce remission in early inflammatory arthritis

Submission date	Recruitment status	Prospectively registered		
25/10/2006	No longer recruiting	☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
30/04/2007	Completed	[X] Results		
Last Edited	Condition category	Individual participant data		
10/09/2019	Musculoskeletal Diseases			

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Prof Paul Emery

Contact details

c/o Anne-Maree Keenan
Academic Unit of Musculoskeletal Disease
2nd Floor
Chapel Allerton Hospital
Chapeltown Road
Leeds
United Kingdom
LS7 4SA
+44 (0)113 392 3043
A.Keenan@Leeds.ac.uk

Additional identifiers

EudraCT/CTIS number 2005-005467-29

IRAS number

ClinicalTrials.gov number

NCT01303874

Secondary identifying numbers

RR05/7150

Study information

Scientific Title

A multicentre randomised trial of etanercept and methotrexate to induce remission in early inflammatory arthritis

Acronym

The EMPIRE Trial (Etanercept and Methotrexate in Patients to Induce Remission in Early arthritis)

Study objectives

Induction therapy with Etanercept (ETN) in addition to Methotrexate (MTX) can induce sustained remission in patients with persistent early inflammatory arthritis.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approval received from the local Ethics Committee on the 30th March 2006 (ref: 06/Q1206/7).

Study design

Multicentre, double blind, placebo -controlled randomised clinical trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Not specified

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

Early Inflammatory Arthritis

Interventions

Etanercept and methotrexate versus placebo and methotrexate.

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Etanercept, methotrexate

Primary outcome measure

To determine the number of patients in clinical remission at 12 months, as defined as the absence of symptoms and signs of inflammatory arthritis (i.e., Swollen Joint Count [SJC] zero; Tender Joint Count [TJC] zero).

Secondary outcome measures

- 1. The number of patients in clinical remission at 18 months (as defined as absence of symptoms and signs of clinical arthritis i.e., SJC zero; TJC zero)
- 2. Conventional disease activity measures (Visual Analogue Scale [VAS] pain/fatigue/global /physician, Early Morning Stiffness (EMS), TJC, SJC, C-Reactive Protein [CRP], Erythrocyte Sedimentation Rate [ESR])
- 3. Functional, work and quality of life assessments (Health Assessment Questionnaire [HAQ], WIS, WDA, EuroQoL [EQ-5d] instrument, Short Form health survey [SF-36])
- 4. Proportion of patients achieving 26 weeks of remission
- 5. Disease Activity Score (DAS) 28
- 6. The number of patients in drug-free remission at 12 and 18 months
- 7. The number of patients in etanercept-free remission at 12 and 18 months (ETN arm)
- 8. Remission by American College of Rheumatology (ACR) criteria
- 9. To compare the effects of the combination of ETN and MTX to MTX alone on radiographic change at 12 months and 18 months

Overall study start date

19/10/2006

Completion date

31/10/2008

Eligibility

Kev inclusion criteria

Subject must fulfill all of the following conditions or characteristics in order to be considered for study enrolment or participation:

- 1. Aged 18 to 80 years
- 2. Patients have articular synovitis, within three months of diagnosis (synovitis is defined as the presence soft tissue swelling and at least one of the following two criteria: tenderness or decreased range of motion)
- 3. Either Rheumatoid Factor (RF) antibody (positive) or Anti-Cyclic Citrullinated Peptide (Anti-CCP) antibody (positive) or Shared Epitope (SE) (positive)
- 4. Demonstrates a negative serum pregnancy test at screening if female of childbearing potential. A woman of childbearing potential is defined as one who is biologically capable of becoming pregnant. This includes women who are using contraceptives or whose sexual

partners are either sterile or using contraceptives. Sexually active women participating in the study must use a medically acceptable form of contraception during the study and for three months after the last dose of study medications. Medically acceptable forms of contraception for women include oral contraception, injectable or implantable methods, intrauterine devices, or properly used barrier contraception

- 5. Agrees to use a medically accepted form of contraception during the study and for three months after the last dose of study drug, if sexually active male. Medically acceptable forms of contraception for males are a properly used barrier contraceptive or sterilisation
- 6. Is capable of understanding and signing an informed consent form
- 7. Is able and willing to self-inject study drug or have a designee who can do so
- 8. Is able and willing to take oral medication
- 9. Is able to store injectable test article at 2°C to 8°C
- 10. Demonstrates a negative tuberculosis screening test

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Upper age limit

80 Years

Sex

Not Specified

Target number of participants

110

Key exclusion criteria

Subjects with any of the following conditions or characteristics will be excluded from study enrolment:

- 1. Received previous treatment with any Disease Modifying Anti-Rheumatic Drugs (DMARDs)
- 2. Received previous treatment with ETN or other Tumour Necrosis Factor (TNF) antagonist (e.g. a TNF monoclonal antibody or a soluble TNF receptor)
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- 3. Previous treatment with Interleukin-1 (IL-1) receptor antagonist
- 4. Chronic arthritis diagnosed before 16 years old
- 5. Received any investigational biological agent within three months of screening visit
- 6. Received treatment with any investigational drug of chemical nature within one month prior to study screening
- 7. Known Human Immunodeficiency Virus (HIV)
- 8. Presence of any contraindication to ETN or MTX
- 9. Has significant concurrent medical diseases including uncompensated congestive heart failure, myocardial infarction within 12 months, unstable angina pectoris, uncontrolled hypertension, severe pulmonary disease, or history of Human Immunodeficiency Virus (HIV) infection, immunodeficiency syndromes, Central Nervous System (CNS) demyelinating events suggestive of multiple sclerosis, renal or gastrointestinal conditions, which in the opinion of the investigator places the subject at an unacceptable risk for participation in the study

- 10. Has cancer or a history of cancer (other than resected cutaneous basal cell carcinoma, and in situ cervical cancer) within five years of entering the screening period
- 11. Current crystal or infective arthritis
- 12. Chronic infection of the upper respiratory tract (e.g., sinusitis), chest (e.g., bronchiectatic lung disease), urinary tract or skin (e.g., paronychia, chronic ulcers, open wounds)
- 13. Any ongoing or active infection or any major episode of infection requiring hospitalisation or treatment with intravenous (IV) antibiotics within the preceding 30 days and/or orally administered antibiotics in the preceding 15 days
- 14. Demonstrates liver function abnormality (Aspartate Transaminase [AST]/Alanine Transaminase [ALT] more than 2 x Upper Limit of Normal [ULN]) or bilirubin more than 51 µmol/L
- 15. Has renal disease (creatinine level more than 133 µmol/L)
- 16. Has leukopaenia (white blood cells less than 3000×10^6 /L)
- 17. Has thrombocytopaenia (platelets less than $125 \times 10^9/L$)
- 18. Has a haemoglobin level of less than 9 g/L for males and less than 85 g/L for females
- 19. Is pregnant or breast-feeding
- 20. Joint surgery within preceding two months (at joints to be assessed within this study)
- 21. Received anti-CD4, diphtheria Interleukin-2 (IL-2) fusion protein, anti-Interleukin-6 (anti-IL-6), rituxamab or other immunosuppressive biologic during the last six months before screening, and treatment with such agents more than six months before screening if there are persistent signs of immunosuppression (with a subsequent abnormal absolute T-cell count) at screening visit
- 22. Received any live (attenuated) vaccines within four weeks of screening visit
- 23. Received cyclophosphamide within six months of screening visit
- 24. Any corticosteroids within 28 days prior to screening
- 25. Uses a dose of Non-Steroidal Anti-Inflammatory Drug (NSAID) greater than the maximum recommended dose in the product information at the screening visit
- 26. Has a history of confirmed blood dyscrasia
- 27. Has any condition judged by the physician to cause this study to be detrimental to the subject
- 28. Has a history of drug abuse or psychiatric disease that would interfere with the ability to comply with the study protocol
- 29. Has a history of alcohol abuse or excessive alcohol beverage consumption
- 30. Has a history of known liver cirrhosis, fibrosis, or fatty liver
- 31. Has a history of any viral hepatitis within one year of screening

Date of first enrolment 19/10/2006

Date of final enrolment 31/10/2008

Locations

Countries of recruitment

England

United Kingdom

Study participating centre c/o Anne-Maree Keenan Leeds

Sponsor information

Organisation

University of Leeds (UK)

Sponsor details

c/o Jonathan Gower
Senior Research Manager
Faculty of Medicine and Health, Room 7.11
Level 7 - Worsley Building
Clarendon Way
Leeds
England
United Kingdom
LS2 9NL
+44 (0)113 343 3264
j.gower@leeds.ac.uk

Sponsor type

University/education

Website

http://www.leeds.ac.uk/

ROR

https://ror.org/024mrxd33

Funder(s)

Funder type

Industry

Funder Name

Wyeth Pharmaceuticals Ltd (UK) - Investigator-initiated study funding grant

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

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/03/2010		Yes	No
Results article	results	01/06/2014		Yes	No