# Combined Immunosuppression and Radiotherapy in Thyroid Eye Disease

Submission date Recruitment status Prospectively registered 25/01/2006 No longer recruiting [X] Protocol [ ] Statistical analysis plan Registration date Overall study status 01/02/2006 Completed [X] Results Individual participant data **Last Edited** Condition category 14/02/2018 **Eve Diseases** 

#### Plain English summary of protocol

Not provided at time of registration

#### Study website

http://www.cirted.org

#### Contact information

#### Type(s)

Scientific

#### Contact name

Mr Richard Lee

#### Contact details

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# Additional identifiers

**EudraCT/CTIS** number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

# Study information

#### Scientific Title

Combined Immunosuppression and Radiotherapy in Thyroid Eye Disease

#### Acronym

**CIRTED** 

#### **Study objectives**

Primary hypotheses:

To test the following hypotheses in patients being treated with prednisolone for active Thyroid Eye Disease (TED):

- 1. Radiotherapy (compared with placebo) induces early remission and reduces long-term disease severity
- 2. Combined systemic immunosuppression with oral azathioprine (compared with placebo) reduces long-term disease severity

#### Secondary hypotheses:

- 1. To test the hypothesis that patients being treated with prednisolone for active TED, using radiotherapy and combined systemic immunosuppression with oral azathioprine, can improve patient-centred outcomes and quality of life scores
- 2. To validate the use of a new TED specific quality of life score in the UK population
- 3. To improve understanding of the extent and type of psychosocial distress experienced by TED patients
- 4. To conduct an economic evaluation of the cost of TED and its treatment to patients, the NHS and Society
- 5. To compare treatments using health-economic analysis
- 6. To report the safety and tolerability of combined systemic immunosuppression with oral azathioprine in TED patients

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Central & South Bristol Research Ethics Committe (reference: 05/Q2006/62), approval gained 5th May 2005 (amendment to inclusion and exclusion criteria approved on the 2nd June 2006).

#### Study design

Factorial randomised controlled trial

#### Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

#### Study setting(s)

Not specified

#### Study type(s)

#### Treatment

#### Participant information sheet

Patient information can be found at: http://www.cirted.org/patients.htm

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

Thyroid Eye Disease (TED)

#### Interventions

All the patients receive six months of oral prednisolone and then are randomly assigned to receive one of the following interventions:

- 1. Radiotherapy and azathioprine
- 2. Radiotherapy and placebo
- 3. Azathioprine and placebo
- 4. Control: placebo and placebo

#### Intervention Type

Drug

#### Phase

**Not Specified** 

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

Azathioprine

#### Primary outcome measure

Primary:

- 1. Binary composite clinical outcome measure
- 2. Ophthalmopathy index

#### Co-primary outcome measure:

1. Clinical activity score

#### Secondary outcome measures

- 1. Total Eye Score (TES)
- 2. Hospital Anxiety and Depression Scale (HADS) score
- 3. Derriford Appearance scale-short form score
- 4. Graves Ophthalmopathy Quality of Life (GO-QoL) score
- 5. World Health Organisation Brief Quality of Life (WHOQoL) assessment score
- 6. Open-ended responses to interview questions
- 7. Health economic measures

#### Overall study start date

01/01/2006

#### Completion date

01/12/2008

# **Eligibility**

#### Key inclusion criteria

- 1. Mourits' Clinical Activity Score more than or equal to four (worst eye) or more than two (worst eye) with a history of proptosis (defined as either subjective unilateral proptosis confirmed by asymmetry in exophthalmometry of more than 2 mm or subjective bilateral proptosis) or motility restriction (defined as intermittent, inconstant or constant diplopia grade) which is less than six months long
- 2. Past or present history of abnormal Thyroid Gland Function (TGF) or a clinical diagnosis of TED made and confirmed by more than two muscle involvement on Computed Tomography (CT) or Magnetic Resonance Imaging (MRI) scan plus a history of recent onset motility restriction and/or proptosis

#### Participant type(s)

Patient

#### Age group

Adult

#### Sex

Both

#### Target number of participants

100

#### Key exclusion criteria

- 1. Age less than 20 or greater than 75 years
- 2. Optic neuropathy
- 3. Mourits Clinical Activity Score more than four without proptosis or motility restriction
- 4. Pre-existing glaucoma with a characteristic optic disc appearance and associated visual field defect
- 5. Use of radioiodine within the last three months
- 6. Pre-existing diabetes mellitus (not simply steroid-induced disease from recent therapy)
- 7. Previous adverse event associated with, or contraindication to, either prednisolone or azathioprine
- 8. Within six months of pregnancy, women planning pregnancy
- 9. Lactation
- 10. Haemoglobin concentration, total white cell count or platelet count below the local laboratory's reference range
- 11. Low, intermediate or high Thiopurine Methyltransferase (TPMT) activity
- 12. Lymphocyte count less than  $0.8 \times 10^9/l$
- 13. Abnormal renal function (assessed by urea and creatinine levels above the local laboratorys reference range)
- 14. Abnormal liver function, specifically: bilirubin, alanine aminotransferase or alkaline phosphatase concentrations above the local laboratorys reference range
- 15. Malignant or pre-malignant (dysplastic) condition within the past five years
- 16. Previous tuberculosis
- 17. Shingles within the past three months
- 18. Human Immunodeficiency Virus (HIV)/Acquired Immune Deficiency Syndrome (AIDS)
- 19. Concurrent use of:
- a. Other immunosuppressive or cytotoxic agents

b. Allopurinol20. Live vaccines within the past three months21. Previous orbital irradiation

# **Date of first enrolment** 01/01/2006

Date of final enrolment 01/12/2008

# **Locations**

#### **Countries of recruitment** England

**United Kingdom** 

Study participating centre
Department of Clinical Sciences
Bristol
United Kingdom
BS1 2LX

# Sponsor information

#### Organisation

University of Bristol (UK)

#### Sponsor details

Research & Enterprise Development Senate House Tyndall Avenue Bristol England United Kingdom BS8 1TH

#### Sponsor type

University/education

#### **ROR**

https://ror.org/0524sp257

# Funder(s)

#### Funder type

Research organisation

#### **Funder Name**

The National Eye Research Centre, Bristol (UK)

#### Funder Name

Special trustees of Moorfields Eye Hospital (UK)

#### Funder Name

The Charitable Trusts for the United Bristol Hospitals (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

#### **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	31/01/2008		Yes	No
Results article	results	01/04/2018		Yes	No