

Combined Immunosuppression and Radiotherapy in Thyroid Eye Disease

Submission date 25/01/2006	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
Registration date 01/02/2006	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 14/02/2018	Condition category Eye Diseases	<input type="checkbox"/> 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
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 Committee (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

Study type(s)

Treatment

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(s)

Primary:

1. Binary composite clinical outcome measure
2. Ophthalmopathy index

Co-primary outcome measure:

1. Clinical activity score

Key secondary outcome(s)

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

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

Healthy volunteers allowed

No

Age group

Adult

Sex

All

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. Allopurinol
20. Live vaccines within the past three months
21. Previous orbital irradiation

Date of first enrolment

01/01/2006

Date of final enrolment

01/12/2008

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Department of Clinical Sciences
Bristol
United Kingdom
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Sponsor information

Organisation
University of Bristol (UK)

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

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				

Results article		01/04/2018		Yes	No
Protocol article	protocol	31/01/2008		Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes