Radiation versus observation following surgical resection of atypical meningioma

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
19/05/2014		[X] Protocol		
Registration date 19/05/2014 Last Edited 26/07/2022	Overall study status Ongoing Condition category Cancer	Statistical analysis plan		
		[_] Results		
		Individual participant data		
		[] Record updated in last year		

Plain English summary of protocol

https://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/a-trial-of-radiotherapy-after-surgery-for-a-type-of-brain-tumour-called-meningioma-roam-eortc-1308

Study website

http://www.roam-trial.org.uk/

Contact information

Type(s) Scientific

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Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers HTA 12/173/14

Study information

Scientific Title

Radiation versus Observation following surgical resection of Atypical Meningioma: a randomised controlled trial (the ROAM trial)

Acronym

ROAM

Study objectives

Current hypothesis as of 03/05/2017:

To determine whether early adjuvant fractionated radiotherapy reduces the risk of tumour recurrence or death due to any cause compared to active monitoring in newly diagnosed atypical meningioma.

Previous hypothesis:

To determine whether early adjuvant fractionated external beam radiotherapy reduces the risk of tumour recurrence compared to active monitoring in newly diagnosed atypical meningioma.

Ethics approval required

Old ethics approval format

Ethics approval(s) NRES Committee North East - Newcastle & North Tyneside 2, 12/02/2015, ref: 15/NE/0013

Study design Two-arm multi-centre randomised controlled trial **Primary study design** Interventional

Secondary study design

Randomised controlled trial

Study setting(s) Hospital

Study type(s) Treatment

Participant information sheet

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

Health condition(s) or problem(s) studied

Atypical meningioma

Interventions

The trial will randomise patients who have undergone gross total surgical resection of atypical (grade II) meningioma in a 1:1 ratio to either early radiotherapy (intervention) or active monitoring (comparator). Web-based randomisation will be used in this trial. Patients will be followed up for 60 months post randomisation by collecting information on signs/symptoms of tumour recurrence, 6 monthly MRI, recording of adverse events, quality of life questionnaires and cognitive function tests.

Intervention Type

Device

Phase

Phase III

Primary outcome measure

Current primary outcome measure as of 05/04/2019:

Time to MRI evidence of tumour recurrence or death due to any cause (disease free survival [DFS]). (DFS will be counted from the date of surgery until the date of MRI evidence of tumour recurrence or death due to any cause. Only clear dural thickening as identified by the investigator is to be considered tumour.)

Previous primary outcome measure:

Time to MRI evidence of tumour recurrence [disease free survival (DFS)] is assessed at baseline, 6 and 12 months following surgery and annually thereafter for a minimum of 5 years post-surgery.

Secondary outcome measures

Current secondary outcome measures as of 05/04/2019:

 Toxicity of radiotherapy assessed by CTCAE (Common Terminology Criteria for Adverse Events)
Quality of life

- 3. Neurocognitive function (UK sites only)
- 4. Time to second line (salvage) treatment (surgery, radiotherapy, radiosurgery)
- 5. Time to death (overall survival [OS])
- 6. Health economic analysis (incremental cost per QALY gained) (UK sites only)

Previous secondary outcome measures:

- 1. Time to second line (salvage) treatment (surgery, radiotherapy, radiosurgery)
- 2. Time to death [overall survival (OS)]
- 3. Toxicity assessed by Common Terminology Criteria for Adverse Events (CTCAE)
- 4. Quality of life is measured using the EORTC C30 and BN20 questionnaires
- 5. Neurocognitive function is measured using patient testing at baseline and 24 months
- 6. Health economic analysis (incremental cost per QALY gained) (UK sites only)

Patients will be assessed at baseline, 6 and 12 months following surgery and annually thereafter for a minimum of 5 years post-surgery unless otherwise stated.

Overall study start date

01/09/2014

Completion date

31/03/2026

Eligibility

Key inclusion criteria

Current inclusion criteria as of 03/05/2017:

1. Histologically confirmed newly diagnosed solitary atypical meningioma (WHO grade II) based

- on the 2016 WHO criteria
- 2. Age >/= 16 years
- 3. All anatomical locations allowed except optic nerve sheath tumour
- 4. Complete resection (Simpson 1, 2 or 3) as assessed by the surgeon
- 5. Able to commence radiotherapy between within 12 weeks of surgery (ideally 8-12 weeks)
- 6. WHO performance status 0, 1 or 2

7. Women of reproductive potential must use effective contraception for the whole duration of the treatment

8. Absence of any psychological, familial, sociological or geographical condition potentially hampering compliance with the study protocol and follow-up schedule; those conditions should be discussed with the patient before registration in the trial

Previous inclusion criteria:

1. Histologically confirmed newly diagnosed solitary atypical meningioma (WHO grade II) based on the 2007 WHO criteria

- 2. Age 16 years or over
- 3. All anatomical locations allowed except optic nerve sheath tumour
- 4. Complete resection (Simpson grade I, II or III) as assessed by the surgeon
- 5. Able to commence radiotherapy between 8 and 12 weeks after surgery
- 6. WHO performance status 0-2

Participant type(s)

Patient

Age group

Adult

Sex Both

Target number of participants 190

Total final enrolment

157

Key exclusion criteria

Current exclusion criteria as of 05/04/2019:

- 1. Neurofibromatosis type II (NF-2)
- 2. Optic nerve sheath tumours
- 3. Multiple meningiomas
- 4. Radiation-induced meningioma

5. Clinical evidence of second malignancy, except for cervix carcinoma in situ or basal cell carcinoma, and history of invasive malignancy unless treated with curative intent and the patient has been disease free for the last five years

- 6. Previous intracranial tumour in the last 10 years treated with radiotherapy or chemotherapy
- 7. Pregnant or lactating women.

Previous exclusion criteria as of 03/05/2017:

- 1. Neurofibromatosis type II (NF-2)
- 2. Optic nerve sheath tumours
- 3. Multiple meningiomas
- 4. Radiation-induced meningioma

5. Clinical evidence of second malignancy, except for cervix carcinoma in situ or basal cell carcinoma, and history of invasive malignancy unless treated with curative intent and the patient has not been disease free for the last five years

6. Previous intracranial tumour

7. Pregnant or lactating women

Previous exclusion criteria:

- 1. Neurofibromatosis type II (NF-2)
- 2. Multiple meningiomas

3. Previous radiotherapy to the brain or meninges interfering with the protocol treatment plan

4. Clinical evidence of second malignancies, except a history of cervix carcinoma in situ and/or basal cell carcinoma

5. Pregnant or lactating women

Date of first enrolment 28/04/2016

Date of final enrolment 26/05/2021

Locations

Countries of recruitment

Australia

Austria

Belgium

England

France

Germany

Ireland

Italy

New Zealand

Northern Ireland

Scotland

Spain

Switzerland

United Kingdom

Wales

Study participating centre The Walton Centre Liverpool United Kingdom L9 7LJ

Study participating centre Queen's Hospital Romford United Kingdom RM7 0AG

Study participating centre CHU UCL Namur – Site Sainte-Elisabeth Namur Belgium 5000

Study participating centre Nottingham City Hospital Nottingham United Kingdom NG5 1PB

Study participating centre Addenbrooke's Hospital Cambridge United Kingdom CB2 0QQ

Study participating centre Churchill Hospital Oxford United Kingdom OX3 7LE

Study participating centre Salford Royal Hospital Manchester United Kingdom M6 8HD

Study participating centre Hopitaux Universitaires Bordet-Erasme - Institut Jules Bordet Brussels Belgium 1000

Study participating centre University College London Hospital London United Kingdom NW1 2BU

Study participating centre Western General Hospital Edinburgh United Kingdom EH4 2XU

Study participating centre Bristol Haematology and Oncology Centre Bristol United Kingdom BS2 8ED

Study participating centre Universitaur Ziekenhuis Antwerpen Antwerp Belgium 2650

Study participating centre Medical University Vienna - General Hospital AKH Vienna Austria 1090

Study participating centre Charing Cross Hospital (Imperial College) London United Kingdom W6 8RF

Study participating centre Onze Lieve Vrouw Ziekenhuis Aalst Belgium

Study participating centre

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University Hospital Southampton NHS Foundation Trust

Southampton General Hospital Tremona Road Southampton United Kingdom SO16 6YD

Study participating centre King's College Hospital NHS Foundation Trust Denmark Hill Brixton London United Kingdom SE5 9RS

Study participating centre Complejo Hospitalario de Navarra Pamplona Spain

Study participating centre Plymouth Hospitals NHS Trust Derriford Road Crownhill Plymouth United Kingdom PL6 8DH

Study participating centre Institut Catala d'Oncologia - ICO Badalona - Hospital Germans Trias i Pujol Barcelona Spain

Study participating centre Royal Brisbane and Women's Hospital Brisbane Australia **Study participating centre Institut Catala d'Oncologia - ICO Girona - Hospital Doctor Josep Trueta** Girona Spain -

Study participating centre Liverpool Hospital Sydney Australia

Study participating centre Newcastle upon Tyne Hospitals NHS Foundation Trust Freeman Hospital Freeman Road High Heaton Newcastle upon Tyne United Kingdom NE7 7DN

Study participating centre Assistance Publique - Hopitaux de Paris - La Pitie Salpetriere Paris France

Study participating centre UniversitaetsSpital Zurich Zurich Switzerland

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Study participating centre Sheffield Teaching Hospitals NHS Foundation Trust Royal Hallamshire Hospital Glossop Rd Sheffield United Kingdom S10 2JF

Study participating centre CHRU Lille Lille France

Study participating centre NHS Greater Glasgow & Clyde 1055 Great Western Rd Glasgow United Kingdom G12 0XH

Study participating centre Universitaetsspital Basel Basel Switzerland

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Study participating centre Royal North Shore Hospital Sydney Australia

Study participating centre SLRON Beaumont Dublin Ireland

Study participating centre

Peter MacCallum Cancer Centre Melbourne Australia

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Study participating centre CHU Lyon - Hopital neurologique Pierre Wertheimer Lyon France

Study participating centre Waikato Hospital Hamilton New Zealand

Study participating centre Christchurch Hospital Christchurch New Zealand

Study participating centre Ospedale Bellaria Bologna Italy

Study participating centre Paracelsus Kliniken Germany

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Study participating centre University Hospitals Birmingham NHS Foundation Trust Queen Elizabeth Hospital Birmingham Mindelsohn Way Edgbaston Birmingham United Kingdom B15 2GW

Study participating centre Belfast Health and Social Care Trust Belfast City Hospital Lisburn Road Belfast United Kingdom BT9 7AB

Study participating centre Hôpitaux universitaires de Genève - HUG - site de Cluse-Roseraie Geneva Switzerland

Study participating centre Calvary Mater Newcastle Newcastle Australia

Study participating centre Princess Alexandra Hospital Sydney Australia

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Study participating centre ROPART (Radiation Oncology Princess Alexandra Hospital Raymond Terrace) Brisbane Australia

Study participating centre GasthuisZusters Antwerpen - Sint-Augustinus Antwerp

Belgium

Study participating centre University Hospitals of North Midlands NHS Trust Royal Stoke University Hospital Newcastle Road Stoke-on-Trent United Kingdom ST4 6QG

Study participating centre Cliniques Universitaires Saint-Luc Brussels Belgium

Study participating centre Velindre NHS Trust Unit 2 Charnwood Court Heol Billingsley Parc Nantgarw Cardiff United Kingdom CF15 7QZ

Study participating centre Westmead Hospital Sydney Australia

Study participating centre Centre Hospitalier Universitaire Vaudois - Lausanne Lausanne Switzerland

Study participating centre

Fondazione IRCCS Istituto Neurologico Carlo Besta Milan Italy

Study participating centre Institut Catala d'Oncologia - Hospital Duran i Reynals Barcelona Spain

Study participating centre Chris O'Brien Lifehouse Sydney Australia

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Study participating centre Sir Charles Gairdner Hospital Nedlands Australia

Study participating centre Universitaetsklinikum Bonn Bonn Germany

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Study participating centre Hospital Universitario 12 De Octubre Madrid Spain

Study participating centre Royal Marsden NHS Foundation Trust Fulham Road London United Kingdom SW3 6JJ

Study participating centre Innsbruck Universitaetsklinik Innsbruck Austria

Sponsor information

Organisation The Walton Centre NHS Foundation Trust (UK)

Sponsor details Lower Lane Fazakerley Liverpool England United Kingdom L9 7LJ

Sponsor type Hospital/treatment centre

Website https://www.thewaltoncentre.nhs.uk

ROR https://ror.org/05cvxat96

Funder(s)

Funder type Government

Funder Name Health Technology Assessment Programme

Alternative Name(s) NIHR Health Technology Assessment Programme, HTA Funding Body Type Government organisation

Funding Body Subtype National government

Location United Kingdom

Results and Publications

Publication and dissemination plan

The communication and dissemination strategy will actively involve participating centres, their staff, service users and the professional bodies involved (Society of British Neurological Surgeons, British Neuro-Oncology Society) and relevant charitable organisations (brainstrust, The Brain Tumour Charity, MeningiomaUK), in discussing the proposed trial prior to its implementation and reviewing trial progress and results. Communication and dissemination of results, including findings from the embedded qualitative study relevant to clinical trial methodology, will be assisted by members of the study team, several of whom have leading roles in research and quality of practice activities across the NHS. Findings of the trial will be presented at National and International meetings of relevant professional bodies and research groups. The results of the trial will be published in peer-reviewed journals. Publication is anticipated in 2024/2025. Updates on trial progress will be presented at conferences throughout the recruitment period.

Intention to publish date

30/09/2026

Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study outputs					
Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	14/11/2015		Yes	No
Other publications	qualiatative analysis	01/04/2020	12/02/2020	Yes	No
HRA research summary			28/06/2023	No	No