# COSTAR - a multicentre randomised study of COchlear Sparing intensity modulated radiotherapy versus conventional Radiotherapy in patients with parotid tumours

Submission date	Recruitment status No longer recruiting Overall study status	[X] Prospectively registered		
29/09/2006		☐ Protocol		
Registration date		Statistical analysis plan		
29/09/2006	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
27/10/2021	Cancer			

#### Plain English summary of protocol

http://www.cancerhelp.org.uk/trials/a-trial-looking-at-standard-radiotherapy-and-intensity-modulated-radiotherapy-for-people-with-parotid-gland-cancer

# Study website

http://www.icr.ac.uk/research/research\_sections/clinical\_trials/clinical\_trials\_list/9731\_disease.shtml

# Contact information

# Type(s)

Scientific

#### Contact name

Dr Christopher Nutting

#### Contact details

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# Additional identifiers

#### **EudraCT/CTIS** number

#### **IRAS** number

# ClinicalTrials.gov number

NCT01216800

### Secondary identifying numbers

N0258171463

# Study information

#### Scientific Title

COSTAR - a multicentre randomised study of COchlear Sparing intensity modulated radiotherapy versus conventional Radiotherapy in patients with parotid tumours

### **Acronym**

**COSTAR** 

### **Study objectives**

To determine in a randomised controlled trial the potential of intensity-modulated radiotherapy (IMRT) to reduce the incidence of sensori neural hearing loss in patients having radiotherapy to the parotid region.

### Ethics approval required

Old ethics approval format

# Ethics approval(s)

Royal Marsden Local Research Ethics Committee (UK), 07/03/2006, ref: 05/Q0801/183

# Study design

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 below to request a patient information sheet

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

Cancer: Parotid

#### **Interventions**

Randomised study testing interventional (COchlear Sparing intensity modulated radiotherapy) vs standardised intervention, non-blinded (Phase III)

#### Intervention Type

Other

#### Phase

Phase III

#### Primary outcome measure

Is the proportion of patients developing sensori-neural hearing loss at bone conduction assessed using audiograms at 4000 Hz, one year after treatment?

#### Secondary outcome measures

Added 30 July 2008:

- 1. Auditory assessment at 6 and 12 months following radiotherapy and annually thereafter to 5 years
- 2. Vestibular assessment at baseline, at 6 and 12 months following radiotherapy and annually thereafter to 5 years
- 3. Quality of life at 6 and 12 months following radiotherapy and annually thereafter for 5 years
- 4. Local and regional tumour control (a quantitative description of sites of relapse will be performed)
- 5. Time to tumour progression and overall survival
- 6. Acute and late side effects of radiotherapy (NCI CTCAE scale v3.0, for acute and late side effects and LENT SOMA and late radiotherapy scoring systems)

### Overall study start date

01/07/2008

#### Completion date

01/08/2016

# Eligibility

#### Key inclusion criteria

Prior to July 2008:

- 1. Histologically confirmed malignant tumours involving he parotid glands
- 2. Metastases from squamous cell carcinoma of the head and neck to the parotid gland
- 3. Benign tumours requiring post operative radiotherapy

#### Modified 30 July 2008:

- 1. Histologically confirmed malignant tumours of the parotid glands
- 2. High risk of radiation induced sensori-neural hearing loss with conventional radiotherapy due to the irradiation of the parotid bed to a dose equivalent of 60 Gy in 2 Gy fractions with photon beams, using the wedge pair technique
- 3. Radiotherapy as post-operative therapy (adjuvant irradiation)

- 4. WHO Performance Status 0-1
- 5. All patients must be suitable to attend regular follow-up and undergo audiograms and toxicity monitoring and be available for long term follow-up

#### Participant type(s)

Patient

#### Age group

Adult

#### Sex

**Both** 

#### Target number of participants

A total of 84 participants including 20 RMH participants.

#### Key exclusion criteria

Prior to July 2008:

- 1. Previous radiotherapy to the head and neck region
- 2. Previous malignancy except non-melanoma skin cancer
- 3. Pre-existing hearing loss or significant auditory pathology
- 4. Previous or concomitant illness, which in the investigators opinion would interfere with either completion of therapy or follow-up
- 5. Concomitant chemotherapy is not permitted

#### Modified 30 July 2008:

- 1. Previous radiotherapy to the head and neck region
- 2. Parotid tumours requiring primary radiation
- 3. Metastases from squamous cell carcinoma of the head and neck to the parotid gland
- 4. Benign tumours requiring post operative radiotherapy
- 5. Hearing loss >60dB at time of study entry (the test is unreliable below this threshold)
- 6. Previous or concurrent illness, which in the investigators opinion would interfere with either completion of therapy or follow-up
- 7. Patients requiring concomitant chemotherapy

#### Date of first enrolment

29/08/2008

#### Date of final enrolment

31/01/2013

# Locations

#### Countries of recruitment

England

United Kingdom

# Study participating centre

#### Royal Marsden NHS Trust

London United Kingdom SW3 6JJ

# Sponsor information

#### Organisation

Institute of Cancer Research (UK)

#### Sponsor details

123 Old Brompton Road London United Kingdom SW7 3RP

#### Sponsor type

Research organisation

#### Website

http://www.icr.ac.uk/index.shtml

#### **ROR**

https://ror.org/043jzw605

# Funder(s)

# Funder type

Charity

#### **Funder Name**

Cancer Research UK

#### Alternative Name(s)

CR\_UK, Cancer Research UK - London, CRUK

#### **Funding Body Type**

Private sector organisation

## **Funding Body Subtype**

Other non-profit organizations

#### Location

United Kingdom

# **Results and Publications**

# Publication and dissemination plan

Not provided at time of registration

# Intention to publish date

# Individual participant data (IPD) sharing plan

Not provided at time of registration

# 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	01/11/2018	29/01/2019	Yes	No
Plain English results		27/10/2021	27/10/2021	No	Yes