# A randomised trial of the EURopean and AMerican Osteosarcoma Study group to optimize treatment strategies for resectable osteosarcoma based on histological response to pre-operative chemotherapy

<b>Submission date</b> 24/08/2004	<b>Recruitment status</b> No longer recruiting	<ul><li>Prospectively registered</li><li>Protocol</li></ul>
Registration date 30/09/2004	Overall study status Completed	<ul><li>Statistical analysis plan</li><li>[X] Results</li></ul>
<b>Last Edited</b> 19/10/2018	<b>Condition category</b> Cancer	[] Individual participant data

## Plain English summary of protocol

http://www.cancerhelp.org.uk/trials/a-trial-looking-at-treatment-after-surgery-for-people-with-osteosarcoma

## Study website

http://www.ctu.mrc.ac.uk/euramos/euramos\_i\_trial.asp

## **Contact information**

## Type(s)

Scientific

#### Contact name

Dr Jeremy Whelan

#### Contact details

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# Additional identifiers

**EudraCT/CTIS** number

#### **IRAS** number

ClinicalTrials.gov number

NCT00134030

Secondary identifying numbers

N/A

# Study information

#### Scientific Title

A randomised trial of the EURopean and AMerican Osteosarcoma Study group to optimize treatment strategies for resectable osteosarcoma based on histological response to preoperative chemotherapy

#### **Acronym**

**EURAMOS 1** 

## Study objectives

Study hypothesis added as of 10/09/2008:

## Primary objectives:

- 1. To examine, in a randomised controlled trial, whether the addition of ifosfamide and etoposide (IE) to post-operative chemotherapy with cisplatin, doxorubicin and methotrexate improves event-free survival for patients with resectable osteosarcoma and a poor histological response to 10 weeks of pre-operative chemotherapy.
- 2. To examine, in a randomised controlled trial, whether the addition of interferon-alpha ifn) as maintenance therapy after post-operative chemotherapy with cisplatin, doxorubicin and methotrexate improves event-free survival for patients with resectable osteosarcoma and a good histological response to 10 weeks of pre-operative chemotherapy.

## Secondary objectives:

- 3. To investigate whether the addition of IE to post-operative therapy for poor responders, and the addition of ifn as maintenance therapy for good responders, leads to an improvement in overall survival, short-term toxicity, long-term toxicity and quality of life.
- 4. To investigate whether the addition of IE to post-operative therapy for poor responders, and the addition of ifn as maintenance therapy for good responders, leads to an improvement in event-free and overall survival in patients with localized osteosarcoma at entry.
- 5. To investigate whether biological or clinical correlates to histological response and outcome can be identified.
- 6. To establish whether this international cooperation in clinical trials for osteosarcoma is feasible.

Please note that the target number of participants has been added as of 10/09/2008.

On 08/02/2011 the overall trial end date was changed from 30/03/2009 to 30/06/2011.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Trent Multi-centre Research Ethics Committee, 07/01/2005, ref: 04/MRE04/79

## 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

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

Osteosarcoma

#### **Interventions**

All patients who are registered on this study will receive pre-operative chemotherapy with MAP for about 10 weeks. Following surgery for the primary tumour, the histological response to pre-operative chemotherapy will be assessed. Good responders (<10% viable tumor) will be randomized to receive either MAP or MAPIFn. Poor responders (≥10% viable tumor) will be randomized to receive either MAP or MAPIE.

MAP = methotrexate, doxorubicin and cisplatin

MAPifn = methotrexate, doxorubicin and cisplatin followed by pegylated interferon alpha MAPIE = methotrexate, doxorubicin, cisplatin, ifosfamide and etoposide

## Intervention Type

Drug

#### Phase

Not Applicable

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

Methotrexate, doxorubicin, cisplatin, pegylated interferon alpha, ifosfamide, etoposide

## Primary outcome measure

Added as of 10/09/2008:

Event-free survival

## Secondary outcome measures

## Added as of 10/09/2008:

- 1. Overall survival
- 2. Toxicity as measured by CTCAE v3.0
- 3. Quality of life

## Overall study start date

30/03/2004

## Completion date

30/06/2011

# **Eligibility**

## Key inclusion criteria

Eligible patients will be registered, then following assessment of histological response of primary tumor, may be eligible for randomisation.

Patients must fulfill the following criteria for registration into the trial:

- 1. Histological evidence of high grade osteosarcoma of the extremity or axial skeleton including those arising as second malignancies
- 2. Resectable disease
- 3. Aged 40 years or less at date of diagnostic biopsy
- 4. Registration within 30 days of diagnostic biopsy
- 5. Start chemotherapy within 30 days of diagnostic biopsy
- 6. Neutrophils more than or equal to 1.5 x 10^9/L (or white blood cell count [WBC] more than or equal to 3 x 10^9/L if neutrophils are not available) and platelet count more than or equal to 100 x  $10^9$ /L
- 7. Glomerular Filtration Rate more than or equal to 70 ml/min/1.73 m^2
- 8. Serum bilirubin more than or equal to 1.5 x Upper Limit of Normal [ULN]
- 9. Sufficient cardiac function to receive anthracyclines: shortening fraction (SF) more than or equal to 28% or ejection fraction (EF) more than or equal to 50%
- 10. Adequate performance status (Karnofsky score more than or equal to 60 or World Health Organisation [WHO] less than or equal to two for patients [aged 16 or over], Lansky score more than or equal to 60 [aged under 16]). Patients whose performance status is adversely affected by a pathologic fracture but who are able to undergo treatment are eligible.
- 11. Patient fit to undergo protocol treatment and follow-up
- 12. Written informed consent

## Participant type(s)

Patient

## Age group

Mixed

## Sex

Both

## Target number of participants

1,400

## Key exclusion criteria

- 1. Unresectable disease, primary or metastatic or both
- 2. Low grade osteosarcoma
- 3. Juxtacortical (periosteal, parosteal) osteosarcoma
- 4. Craniofacial osteosarcoma
- 5. Any previous treatment for osteosarcoma
- 6. Any previous chemotherapy for any disease
- 7. Any other medical condition precluding treatment with protocol chemotherapy (for example Human Immunodeficiency Virus [HIV], psychiatric disorder etc.)
- 8. Pregnant or lactating women

Patients must fulfill the following criteria for randomisation into the trial:

- 1. Assessment of histological response in primary tumor within 35 days of definitive surgery
- 2. Exactly two courses of cisplatin and doxorubicin must have been administered before surgery
- 3. At least two courses and no more than six courses of methotrexate must have been administered before surgery
- 4. Recovery from prior therapy allowing administration of chemotherapy
- 5. No progression of metastatic disease or new metastatic disease
- 6. Macroscopically complete surgical resection of the primary tumor
- 7. In patients with metastatic disease, complete removal of all metastases or complete removal planned and deemed feasible
- 8. Age more than or equal to five for patients with good response
- 9. Essential data collection will be provided
- 10. Written consent to undergo randomisation

## Date of first enrolment

30/03/2004

Date of final enrolment

30/06/2011

## Locations

Austria

Belgium

Canada

Czech Republic

England

**Finland** 

Ireland

New Zealand

Puerto Rico

#### **Switzerland**

**United Kingdom** 

United States of America

Study participating centre The Middlesex Hospital London United Kingdom W1T 3AA

# Sponsor information

## Organisation

Medical Research Council (UK)

## Sponsor details

c/o Ian Viney MRC Centre London Stehenson House 158-160 North Gower Street London United Kingdom NW1 2DA

## Sponsor type

Government

#### Website

http://www.mrc.ac.uk

#### **ROR**

https://ror.org/03x94j517

# Funder(s)

## Funder type

Research organisation

## **Funder Name**

European Science Foundation (ESF)

## Alternative Name(s)

**ESF** 

## **Funding Body Type**

Private sector organisation

## **Funding Body Subtype**

International organizations

#### Location

France

#### **Funder Name**

Clinical Trials Awards and Advisory Committee (UK)

#### **Funder Name**

Deutsche Krebshilfe (Germany)

#### **Funder Name**

Swedish Cancer Society and Nordic Cancer Union (Scandinavian countries)

#### **Funder Name**

Childrens Oncology Group (USA)

## **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?
Plain English results No Yes

Results article	results	01/02/2015	Yes	No
Results article	results	10/07/2015	Yes	No