

# Evaluating sorafenib in combination with transarterial chemoembolisation (TACE) in patients with unresectable hepatocellular carcinoma (HCC)

<b>Submission date</b>	<b>Recruitment status</b>	<input checked="" type="checkbox"/> Prospectively registered
18/06/2010	No longer recruiting	<input type="checkbox"/> Protocol
<b>Registration date</b>	<b>Overall study status</b>	<input type="checkbox"/> Statistical analysis plan
18/06/2010	Completed	<input checked="" type="checkbox"/> Results
<b>Last Edited</b>	<b>Condition category</b>	<input type="checkbox"/> Individual participant data
26/10/2022	Cancer	

## Plain English summary of protocol

<https://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/a-trial-looking-combining-two-treatments-for-cancer-liver-TACE-2>

## Contact information

### Type(s)

Scientific

### Contact name

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## Additional identifiers

### Clinical Trials Information System (CTIS)

2008-005073-36

### ClinicalTrials.gov (NCT)

NCT01324076

**Protocol serial number**

5347

## Study information

### Scientific Title

TACE-2: a randomised placebo-controlled, double blinded, phase III trial evaluating sorafenib in combination with transarterial chemoembolisation (TACE) in patients with unresectable hepatocellular carcinoma (HCC)

### Acronym

TACE-2

### Study objectives

The aim of this study is to determine whether the addition of sorafenib to transarterial chemoembolisation (TACE) (performed according to a standardised protocol with doxorubicin eluting beads) is superior to TACE alone in the treatment of hepatocellular carcinoma (HCC).

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

South East Research Ethics Committee, 18/03/2010, ref: 09/H1102/114

### Study design

Multicentre randomised interventional treatment trial

### Primary study design

Interventional

### Study type(s)

Treatment

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

Topic: National Cancer Research Network; Subtopic: Upper Gastro-Intestinal Cancer; Disease: Liver

### Interventions

TACE using DC Bead loaded with doxorubicin plus sorafenib. Patient will commence oral sorafenib (400 mg twice daily) on the day of randomisation and transarterial chemoembolisation (TACE) will be performed between 2 - 5 weeks post-randomisation using DC Bead loaded with Doxorubicin-HCL (150 mg).

The control group will receive TACE plus matching placebo, as per protocol above.

The patient will continue to take sorafenib/placebo until progression according to RECIST has been externally verified. Patients will be followed up for 1 year from the last administration of sorafenib/placebo. They will be unblinded upon progression.

Follow-up length: 12 months

Study entry: single randomisation only

## Intervention Type

Drug

## Phase

Phase III

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

Sorafenib, doxorubicin

## Primary outcome(s)

Progression free survival (PFS)

## Key secondary outcome(s)

Overall survival - the time between the date of randomisation and death from any cause

## Completion date

31/08/2016

# Eligibility

## Key inclusion criteria

1. Histological or cytological diagnosis or meet the American Association for the Study of Liver Diseases (AASLD) criteria for diagnosis of HCC and at least one uni-dimensional lesion measurable according to the Response Evaluation Criteria in Solid Tumours (RECIST) criteria by computed tomography (CT) scan or magnetic resonance imaging (MRI)
2. Not a candidate for surgical resection
3. Aged greater than or equal to 18 years and estimated life expectancy greater than 3 months
4. Eastern Cooperative Oncology Group (ECOG) performance status greater than or equal to 1
5. Adequate haematological function Hb greater than or equal to 9 g/L, absolute neutrophil count greater than or equal to  $1.5 \times 10^9/L$ , platelet count greater than or equal to  $60 \times 10^9/L$
6. Bilirubin greater than or equal to 50  $\mu\text{mol}/L$ , aspartate aminotransferase (AST) and alanine aminotransferase (ALT) less than or equal to 5 x upper limit of normal (ULN), alkaline phosphatase (ALP) less than 4 x ULN
7. Adequate renal function; creatinine less than or equal to  $1.5 \times \text{ULN}$
8. International normalised ratio (INR) greater than or equal to 1.5
9. Amylase and lipase less than 2 x ULN
10. Child-Pugh A (score less than or equal to 6)
11. Left ventricular ejection fraction greater than or equal to 45%
12. Women of child-bearing potential should have a negative pregnancy test prior to study entry. Both men and women must be using an adequate contraception method, which must be continued for 3 months after completion of treatment.
13. Written informed consent
14. Male and female, lower age limit of 18 years

## Participant type(s)

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Sex**

All

**Total final enrolment**

313

**Key exclusion criteria**

1. Extrahepatic metastasis
2. Prior embolisation, systemic or radiation therapy for HCC
3. Any contraindications for hepatic embolisation procedures including portosystemic shunt, hepatofugal blood flow, known severe atheromatosis
4. Investigational therapy or major surgery within 4 weeks of trial entry
5. Any ablative therapy (radiofrequency ablation [RFA] or percutaneous ethanol injection [PEI]) for HCC (this should not exclude patients if target lesion(s) have not been treated and occurred greater than 6 weeks prior study entry)
6. History of bleeding within the past 4 weeks
7. Child-Pugh cirrhosis C or B (score greater than or equal to 7)
8. Hepatic encephalopathy
9. Ascites refractory to diuretic therapy
10. Documented occlusion of the hepatic artery or main portal vein
11. Hypersensitivity to intravenous contrast agents
12. Active clinically serious infection greater than grade 2 National Cancer Institute Common Toxicity Criteria (NCI-CTC) version 4.0
13. Pregnant or lactating women
14. Known history of human immunodeficiency virus (HIV) infection
15. History of second malignancy except those treated with curative intent more than three years previously without relapse and non-melanotic skin cancer or cervical carcinoma in situ
16. Evidence of severe or uncontrolled systemic diseases, cardiac arrhythmias (requiring anti-arrhythmic therapy or pace maker), uncontrolled hypertension, congestive cardiac failure greater than New York Heart Association (NYHA) class 2, myocardial infarction (MI) within 6 months or laboratory finding that in the view of the Investigator makes it undesirable for the patient to participate in the trial
17. Psychiatric or other disorder likely to impact on informed consent
18. Patient is unable and/or unwilling to comply with treatment and study instructions
19. Patient unable to swallow oral medications

**Date of first enrolment**

04/11/2010

**Date of final enrolment**

07/12/2015

# Locations

## Countries of recruitment

United Kingdom

France

Ireland

Italy

## Study participating centre

**Beatson West of Scotland Cancer Centre**  
Glasgow  
United Kingdom  
G12 0YN

## Study participating centre

**Bristol Royal Infirmary**  
United Kingdom  
BS2 8HW

## Study participating centre

**Castle Hill Hospital**  
Hull  
United Kingdom  
HU16 5JQ

## Study participating centre

**Christie Hospital**  
Manchester  
United Kingdom  
M20 4BX

## Study participating centre

**Derriford Hospital**  
United Kingdom  
PL6 8DH

**Study participating centre**

**Freeman Hospital**

Newcastle

United Kingdom

NE7 7DN

**Study participating centre**

**Hammersmith Hospital**

London

United Kingdom

W12 0HS

**Study participating centre**

**King's College Hospital**

London

United Kingdom

SE5 9RS

**Study participating centre**

**Manchester Royal Infirmary**

United Kingdom

M13 9WL

**Study participating centre**

**Ninewells Hospital**

Dundee

United Kingdom

DD2 1UB

**Study participating centre**

**Norfolk and Norwich University Hospital**

United Kingdom

NR4 7UY

**Study participating centre**

**Queen's Medical Centre**

Nottingham

United Kingdom

NG7 2UH

**Study participating centre**  
**Royal Devon and Exeter Hospital**  
United Kingdom  
EX2 5DW

**Study participating centre**  
**Royal Gwent Hospital**  
United Kingdom  
NP20 2UB

**Study participating centre**  
**Royal Infirmary of Edinburgh**  
United Kingdom  
EH16 4SA

**Study participating centre**  
**Royal Liverpool University Hospital**  
United Kingdom  
L7 8XP

**Study participating centre**  
**Royal Marsden Hospital**  
London  
United Kingdom  
SW3 6JJ

**Study participating centre**  
**Royal Marsden Hospital**  
Sutton  
United Kingdom  
SM2 5PT

**Study participating centre**  
**Southampton General Hospital**  
United Kingdom  
SO16 6YD

**Study participating centre**  
**St Bartholomew's Hospital**  
United Kingdom  
EC1A 7BE

**Study participating centre**  
**St James's University Hospital**  
Leeds  
United Kingdom  
LS9 7TF

**Study participating centre**  
**St Vincent's University Hospital**  
Dublin  
Ireland  
D04 Y8V0

**Study participating centre**  
**The Queen Elizabeth Hospital**  
Birmingham  
United Kingdom  
B15 2TH

**Study participating centre**  
**University Hospital Aintree**  
United Kingdom  
L9 7AL

## **Sponsor information**

**Organisation**  
University College London (UCL) (UK)

**ROR**  
<https://ror.org/02jx3x895>

# Funder(s)

## Funder type

Industry

## Funder Name

Bayer PLC (UK)

## Funder Name

Biocompatibles Ltd (UK)

## Funder Name

Cancer Research UK (CRUK) (UK) (ref: C12125/A10051)

## Alternative Name(s)

CR\_UK, Cancer Research UK - London, Cancer Research UK (CRUK), CRUK

## Funding Body Type

Private sector organisation

## Funding Body Subtype

Other non-profit organizations

## Location

United Kingdom

# Results and Publications

## Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request, and subsequent approval by the Trial Management Group, from TACE2@trials.bham.ac.uk

## IPD sharing plan summary

Available on request

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	01/08/2017		Yes	No
<a href="#">HRA research summary</a>			28/06/2023	No	No
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes

<a href="#"><u>Plain English results</u></a>		26/10/2022	No	Yes
<a href="#"><u>Study website</u></a>	Study website	11/11/2025	11/11/2025	No