

# BILCAP: A research trial evaluating chemotherapy in patients following surgery for biliary tract cancer

<b>Submission date</b> 13/09/2005	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 17/11/2005	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 13/04/2022	<b>Condition category</b> Cancer	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

<https://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/a-trial-looking-at-capecitabine-after-surgery-for-cancer-of-the-bile-duct-or-gallbladder>

## Contact information

### Type(s)

Scientific

### Contact name

Prof John Primrose

### Contact details

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Southampton  
United Kingdom  
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## Additional identifiers

### ClinicalTrials.gov (NCT)

NCT00363584

### Clinical Trials Information System (CTIS)

2005-003318-13

### Protocol serial number

HE3002

# Study information

## Scientific Title

A randomised clinical trial evaluating adjuvant chemotherapy with capecitabine compared to expectant treatment alone (observation), following surgical resection of a biliary tract tumour

## Acronym

BILCAP

## Study objectives

To evaluate adjuvant chemotherapy with capecitabine in patients who have undergone complete macroscopic resection of a biliary tract cancer. The primary objective is to determine 2-year survival in patients treated with capecitabine compared to those undergoing observation. The secondary objectives are to compare 5-year survival, relapse-free interval, toxicity, quality of life and healthcare economics.

On 09/02/10 the inclusion and exclusion criteria for this trial were updated. Please see the relevant field for more details. Please also note that the anticipated end date of this trial was extended from 01/10/2008 to 01/03/2011.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

West Midlands Ethics Committee, 04/10/2005, ref: 05/MRE07/62

## Study design

Randomised controlled trial

## Primary study design

Interventional

## Study type(s)

Treatment

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

Biliary tract cancer

## Interventions

Current interventions as of 24/03/2017:

This is a multicentre, prospective, randomised phase III trial of patients who have undergone a macroscopically complete surgical resection of a biliary tract cancer. Those patients who fulfil the inclusion criteria are stratified by surgical centre, tumour site (hilar/extrahepatic cholangiocarcinoma, intrahepatic cholangiocarcinoma, lower common bile duct cholangiocarcinoma and gall bladder carcinoma), and by the type of resection (RO/R1) and performance status (ECOG PS 0,1,2), and randomised to either:

Treatment arm: Capecitabine 1250 mg/m<sup>2</sup> given post-operatively twice a day on day 1 to 14 of a 3 weekly cycle for 24 weeks (8 cycles).

Control arm: No scheduled post-operative chemotherapy.

A total of 447 patients who have undergone a macroscopically complete surgical resection of a biliary tract cancer will be randomised equally into each arm of the study, and will be followed-up for 5 years.

Previous interventions:

A randomised phase III study of adjuvant chemotherapy with capecitabine compared to expectant treatment alone (observation) in patients following surgical resection of a biliary tract tumour.

## **Intervention Type**

Drug

## **Phase**

Phase III

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

Capecitabine

## **Primary outcome(s)**

2-year survival

## **Key secondary outcome(s)**

Current secondary outcome measures as of 24/03/2017:

1. 5-year survival
2. Relapse is measured by 3 monthly follow up visits for 1st year, 6 monthly follow up visits for 2nd year and annual visits for up to 5 years from randomisation. 6 monthly CT scans (chest/abdo/pelvis) for first two years and then annually for up to 5 years from randomisation
3. Toxicity is measured on Day 1 of every treatment cycle and at the end of treatment (within 4 weeks of last treatment administered). Long-term toxicities are measured during follow up visits 3 monthly follow up visits for 1st year, 6 monthly follow up visits for 2nd year and annual visits for up to 5 years from randomisation
4. Quality of life is assessed using EORTC QoL questionnaire (QLQ-C30 ) version 3 with the EORTC QLQ-LMC21 site-specific add-on and EuroQoL (5 questions). QOL is measured at baseline, 3 monthly for the 1st year and 6 monthly for the 2nd year
5. Healthcare economics to assess the relative cost effectiveness of the treatment regimes (chemotherapy or observation) for the duration of treatment and for the first two years of follow-up, using the same sub-set of QoL patients. The collection of the data for the economic evaluation is collected by adding the health problems questionnaire (5 questions) -to the QOL booklet to ascertain the resource use.

Previous secondary outcome measures:

1. 5-year survival
2. Relapse
3. Toxicity
4. Quality of life
5. Healthcare economics

## **Completion date**

31/12/2020

# Eligibility

## Key inclusion criteria

Current information as of 09/02/2010 (update to trial made in December 2008)

1. Patients with histologically confirmed biliary tract cancer (including intrahepatic cholangiocarcinoma, extrahepatic/hilar cholangiocarcinoma, muscle invasive gallbladder cancer or cancer of the distal bile duct) who have undergone a macroscopically complete resection with curative intent.
2. Eastern Cooperative Oncology Group (ECOG) Performance Status  $\leq 2$
3. Age  $> 18$
4. Adequate renal function:
  - 4.1. Serum urea and serum creatinine  $< 1.5$  times upper limit of normal (ULN)
  - 4.2. Calculated glomerular filtration rate (GFR) using Cockcroft-Gault  $\leq 60$  ml/min. If the calculated GFR is below 60 ml/min, isotope EDTA confirmation of adequate renal function (as detailed in the Summary of Product Characteristics [SPC] for capecitabine) is required
5. Adequate haematological function:
  - 5.1. Haemoglobin  $\geq 10$ g/dl
  - 5.2. WBC  $\geq 3.0 \times 10^9/L$
  - 5.3. Absolute neutrophil count (ANC)  $\geq 1.5 \times 10^9/L$
  - 5.4. Platelet count  $\geq 100,000/mm^3$
6. Adequate liver function:
  - 6.1. Total bilirubin  $\leq 3 \times$  ULN
  - 6.2. Alanine transaminase (ALT) or aspartate transaminase (AST)  $\leq 5 \times$  ULN
  - 6.3. Adequate surgical biliary drainage with no evidence of infection
7. Not of childbearing potential OR must be using an approved method of contraception
8. Written informed consent
9. Able to start treatment within 12 weeks of surgery. If the treatment start date is  $>12$  weeks, it will be necessary to contact the BILCAP Trial Office.

Current information as of 28/02/2008:

1. Age 18 or over
2. Histologically confirmed biliary tract cancer (including intrahepatic or extrahepatic cholangiocarcinoma or muscle-invasive gallbladder cancer) and undergone macroscopically complete resection with curative intent
3. No history of other malignant diseases (other than adequately treated non-melanotic skin cancer or in situ carcinoma of the uterine cervix)
4. Eastern Cooperative Oncology Group (ECOG) Performance Status 0-2
5. Adequate renal function (serum urea and serum creatinine less than 1.5 times upper limit of normal [ULN], glomerular filtration rate greater than/equal to 60 ml/min). If the calculated GFR is below 60 ml/min, isotope EDTA confirmation of adequate renal function (as detailed in the Summary of Product Characteristics [SPC] for capecitabine)
6. Adequate haematological function (haemoglobin =10 g/dl, white blood cells [WBC] = $3.0 \times 10^9/l$ , absolute neutrophil count [ANC] = $1.5 \times 10^9/l$ , platelet count = $100,000/mm^3$ )
7. Adequate liver function (total bilirubin  $\leq 3 \times$  ULN, alanine aminotransferase [ALT] or aspartate aminotransferase [AST]  $\leq 5$  times ULN, adequate surgical biliary drainage with no evidence of infection)
8. Not of childbearing potential OR must be using an approved method of contraception
9. Written informed consent

Information at time of registration:

1. Age 18 or over

2. Histologically confirmed biliary tract cancer (including intrahepatic or extrahepatic cholangiocarcinoma or muscle-invasive gallbladder cancer) and undergone macroscopically complete resection with curative intent
3. No history of other malignant diseases (other than adequately treated non-melanotic skin cancer or in situ carcinoma of the uterine cervix)
4. Eastern Cooperative Oncology Group (ECOG) Performance Status 0-2
5. Adequate renal function (serum urea and serum creatinine less than 1.5 times upper limit of normal [ULN], glomerular filtration rate greater than/equal to 60 ml/min)
6. Adequate haematological function (haemoglobin =10 g/dl, white blood cells [WBC] = $3.0 \times 10^9$  /l, absolute neutrophil count [ANC] = $1.5 \times 10^9$ /l, platelet count =100,000/mm<sup>3</sup>)
7. Adequate liver function (total bilirubin less than 50 µmol/l, alanine aminotransferase [ALT] or aspartate aminotransferase [AST] = 5 times ULN, adequate surgical biliary drainage with no evidence of infection)
8. Not of childbearing potential OR must be using an approved method of contraception
9. Written informed consent

### **Participant type(s)**

Patient

### **Healthy volunteers allowed**

No

### **Age group**

Adult

### **Lower age limit**

18 years

### **Sex**

All

### **Total final enrolment**

447

### **Key exclusion criteria**

Current information as of 09/02/2010 (update to trial made in December 2008):

1. Pancreatic or ampullary cancer or mucosal gallbladder cancer
2. Incomplete recovery from previous surgery or unresolved biliary tree obstruction
3. Use of other investigational agents during the study treatment period, or within 4 weeks of planned entry to the study
4. History of other malignancy within 5 years of trial entry, except adequately treated cervical carcinoma-in-situ or non-melanotic skin cancer.
5. Any previous chemotherapy or radiotherapy, given for biliary tract cancer.
6. A serious co-existing medical condition likely to interfere with protocol treatment including a potential serious infection.
7. Evidence of significant clinical disorder or laboratory finding which, in the opinion of the investigator, makes it undesirable for the patient to participate in the trial

Information at time of registration:

1. Pancreatic or periampullary cancer or mucosal gallbladder cancer
2. Resection of tumour that involved the pancreas

3. Incomplete recovery from previous surgery or unresolved biliary tree obstruction
4. Use of other investigational agents during the study or within 4 weeks of planned entry to the study
5. Previous chemotherapy, radiotherapy, biological or hormone therapy given for biliary tract cancer
6. History of second malignancy within 5 years of trial entry, except non-melanotic skin cancer or in situ cervical carcinoma
7. A serious co-existing medical condition including a potential serious infection
8. Evidence of significant clinical disorder or laboratory finding which, in the opinion of the investigator, makes it undesirable for the patient to participate in the trial
9. Psychological, familial, sociological or geographical factors considered likely to prevent compliance with the protocol
10. Any other serious uncontrolled medical conditions
11. Pregnant or breastfeeding women

**Date of first enrolment**

10/07/2006

**Date of final enrolment**

04/12/2014

## **Locations**

**Countries of recruitment**

United Kingdom

England

Scotland

Wales

**Study participating centre**

**Southampton General Hospital (Lead Centre)**

University Surgical Unit

Tremona Road

Southampton

United Kingdom

SO16 6YD

**Study participating centre**

**Addenbrooke's Hospital**

Hills Road

Cambridge

United Kingdom

CB2 0QQ

**Study participating centre**  
**Basildon & Thurrock University Hospital**  
Nethermayne  
Essex  
Basildon  
United Kingdom  
SS16 5NL

**Study participating centre**  
**Basingstoke and North Hampshire Hospital**  
Aldermaston Road  
Basingstoke  
United Kingdom  
RG24 9NA

**Study participating centre**  
**Beatson West of Scotland Cancer Centre**  
1053 Gt. Western Road  
Glasgow  
United Kingdom  
G12 0YN

**Study participating centre**  
**Bristol Haematology And Oncology Centre**  
Horfield Road  
Bristol  
United Kingdom  
BS2 8ED

**Study participating centre**  
**Christie Hospital**  
Wilmslow Road  
Withington  
Manchester  
United Kingdom  
M20 4BX

**Study participating centre**

**Clatterbridge Cancer Centre**  
Clatterbridge Road  
Wirral  
Bebington  
United Kingdom  
CH63 4JY

**Study participating centre**  
**Derriford Hospital**  
Derriford Road  
Crownhill  
Plymouth  
United Kingdom  
PL6 8DH

**Study participating centre**  
**Freeman Hospital**  
Freeman Road  
High Heaton  
Newcastle upon Tyne  
United Kingdom  
NE7 7DN

**Study participating centre**  
**Hammersmith Hospital**  
Du Cane Road  
London  
United Kingdom  
W12 0HS

**Study participating centre**  
**Huddersfield Royal Infirmary**  
Lindley  
Huddersfield  
United Kingdom  
HD3 3EA

**Study participating centre**  
**James Paget Hospital**  
Lowestoft Road  
Gorleston

Great Yarmouth  
Norfolk  
United Kingdom  
NR31 6LA

**Study participating centre**  
**Leicester General Hospital**  
Gwendolen Road  
Leicester  
United Kingdom  
LE5 4PW

**Study participating centre**  
**Leicester Royal Infirmary**  
Leicester  
United Kingdom  
LE1 5WW

**Study participating centre**  
**Maidstone Hospital**  
Hermitage Lane  
Kent  
Maidstone  
United Kingdom  
ME16 9QQ

**Study participating centre**  
**Ninewells Hospital**  
Dundee  
United Kingdom  
DD1 9SY

**Study participating centre**  
**North Manchester General Hospital**  
Delaunays Road  
Manchester  
United Kingdom  
M8 5RB

**Study participating centre**  
**North Middlesex Hospital**  
Sterling Way  
London  
United Kingdom  
N18 1QX

**Study participating centre**  
**Nottingham City Hospital**  
Hucknall Road  
Nottingham  
United Kingdom  
NG5 1PB

**Study participating centre**  
**Poole Hospital**  
Longfleet Road  
Dorset  
Poole  
United Kingdom  
BH15 2JB

**Study participating centre**  
**Princess Alexandra Hospital**  
Hamstel Road  
Harlow  
United Kingdom  
CM20 1QX

**Study participating centre**  
**Queen Alexandra Hospital**  
Southwick Hill Road  
Portsmouth  
United Kingdom  
PO6 3LY

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

**Study participating centre**  
**Royal Bournemouth Hospital**  
Castle Lane East  
Bournemouth  
United Kingdom  
BH7 7DW

**Study participating centre**  
**Royal Derby Hospital**  
Uttoxeter Road  
Derby  
United Kingdom  
DE22 3NE

**Study participating centre**  
**Royal Free Hospital**  
Pond Street  
London  
United Kingdom  
NW3 2QG

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

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

**Study participating centre**  
**Royal Marsden Hospital Sutton**  
Downs Road

Sutton  
United Kingdom  
SM2 5PT

**Study participating centre**  
**Royal Surrey County Hospital**  
Egerton Road  
Guildford  
United Kingdom  
GU2 7XX

**Study participating centre**  
**Salisbury District Hospital**  
Salisbury  
United Kingdom  
SP2 8BJ

**Study participating centre**  
**Southend University Hospital**  
Pritilewell Chase  
Westcliff on Sea  
United Kingdom  
SS0 0RY

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

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

**Study participating centre**

**St Mary's Hospital**  
Parkhurst Road  
Newport  
United Kingdom  
PO30 5TG

**Study participating centre**

**St Thomas's Hospital**

St Thomas Street  
London  
United Kingdom  
SE1 9RT

**Study participating centre**

**University College London Hospital**

250 Euston Road  
London  
United Kingdom  
NW1 2PQ

**Study participating centre**

**University Hospital Aintree**

Lower Lane  
Liverpool  
United Kingdom  
L9 7AL

**Study participating centre**

**University Hospital Coventry & Warwickshire NHS Trust**

Clifford Bridge Road  
Coventry  
United Kingdom  
CV2 2DZ

**Study participating centre**

**Velindre Hospital**

Velindre Road  
Whitchurch  
Cardiff  
United Kingdom  
CF14 2TL

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

**Study participating centre**  
**Weston Park Hospital**  
Whitham Road  
Sheffield  
United Kingdom  
S10 2SJ

**Study participating centre**  
**Yeovil District Hospital**  
Somerset  
United Kingdom  
BA21 4A

## **Sponsor information**

**Organisation**  
The University of Southampton

**ROR**  
<https://ror.org/01ryk1543>

## **Funder(s)**

**Funder type**  
Charity

**Funder Name**  
Cancer Research UK (CRUK) (UK) (Ref: C317/A4273)

**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 from [BILCAP@trials.bham.ac.uk](mailto:BILCAP@trials.bham.ac.uk)

## IPD sharing plan summary

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>		25/03/2019	13/04/2022	Yes	No
<a href="#">Plain English results</a>			08/08/2019	No	Yes
<a href="#">Study website</a>	Study website	11/11/2025	11/11/2025	No	Yes