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

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
13/09/2005		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
17/11/2005	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
13/04/2022	Cancer			

#### 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

University Surgical Unit F Level, Centre Block Southampton General Hospital Southampton United Kingdom SO16 6YD

# Additional identifiers

Clinical Trials Information System (CTIS)

2005-003318-13

ClinicalTrials.gov (NCT)

NCT00363584

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/m2 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 ≤ 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 ≥ 10g/dl
- 5.2. WBC  $\geq$  3.0 x 109/L
- 5.3. Absolute neutrophil count (ANC)  $\geq$  1.5 x 109/L
- 5.4. Platelet count ≥ 100,000/mm3
- 6. Adequate liver function:
- 6.1. Total bilirubin ≤ 3 x ULN
- 6.2. Alanine transaminase (ALT) or aspartate transaminase (AST)  $\leq$  5 x 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 cholagiocarcinoma 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 x 10^9 /l, absolute neutrophil count [ANC] =1.5 x 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 cholagiocarcinoma 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 x 10^9 /l, absolute neutrophil count [ANC] =1.5 x 10^9/l, platelet count =100,000/mm^3)
- 7. Adequate liver function (total bilirubin less than 50  $\mu$ mol/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 SSO ORY

#### 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

# IPD sharing plan summary

#### **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		25/03/2019	13/04/2022	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Plain English results			08/08/2019	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes