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

Submission date 13/09/2005	**Recruitment status** No longer recruiting	[X] Prospectively registered [X] Protocol [_] Statistical analysis plan [X] Results [_] Individual participant data
Registration date 17/11/2005	**Overall study status** Completed	
Last Edited 12/11/2026	**Condition category** 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

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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

Primary study design
Interventional

Study design
Randomised controlled trial

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 ≤ 2
3. Age >18 years
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 ≥ 3.0 x 109/L
5.3. Absolute neutrophil count (ANC) ≥ 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) ≤ 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 ≤3 x ULN, 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

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 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
Mixed

Lower age limit
18 Years

Upper age limit
100 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
England
SO16 6YD

Study participating centre
Addenbrooke's Hospital
Hills Road
Cambridge

England
CB2 0QQ

Study participating centre
Basildon & Thurrock University Hospital
Nethermayne
Essex
Basildon
England
SS16 5NL

Study participating centre
Basingstoke and North Hampshire Hospital
Aldermaston Road
Basingstoke
England
RG24 9NA

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

Study participating centre
Bristol Haematology And Oncology Centre
Horfield Road
Bristol
England
BS2 8ED

Study participating centre
Christie Hospital
Wilmslow Road
Withington
Manchester
England
M20 4BX

Study participating centre
Clatterbridge Cancer Centre
Clatterbridge Road
Wirral
Bebington
England
CH63 4JY

Study participating centre
Derriford Hospital
Derriford Road
Crownhill
Plymouth
England
PL6 8DH

Study participating centre
Freeman Hospital
Freeman Road
High Heaton
Newcastle upon Tyne
England
NE7 7DN

Study participating centre
Hammersmith Hospital
Du Cane Road
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England
W12 0HS

Study participating centre
Huddersfield Royal Infirmary
Lindley
Huddersfield
England
HD3 3EA

Study participating centre

James Paget Hospital
Lowestoft Road
Gorleston
Great Yarmouth
Norfolk
England
NR31 6LA

Study participating centre
Leicester General Hospital
Gwendolen Road
Leicester
England
LE5 4PW

Study participating centre
Leicester Royal Infirmary
Infirmary Square
Leicester
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LE1 5WW

Study participating centre
Maidstone Hospital
Hermitage Lane
Kent
Maidstone
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ME16 9QQ

Study participating centre
Ninewells Hospital
Ninewells Avenue
Dundee
Scotland
DD1 9SY

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

Study participating centre
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N18 1QX

Study participating centre
Nottingham City Hospital
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NG5 1PB

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BH15 2JB

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Harlow
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CM20 1QX

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Queen Alexandra Hospital
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PO6 3LY

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Queen Elizabeth Hospital
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Birmingham
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B15 2TH

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Royal Bournemouth Hospital
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Uttoxeter Road
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Royal Liverpool University Hospital
Prescot Street
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L7 8XP

Study participating centre
Royal Marsden Hospital London
Fulham Road
London
England
SW3 6JJ

Study participating centre
Royal Marsden Hospital Sutton
Downs Road
Sutton
England
SM2 5PT

Study participating centre
Royal Surrey County Hospital
Egerton Road
Guildford
England
GU2 7XX

Study participating centre
Salisbury District Hospital
Odstock Road
Salisbury
England
SP2 8BJ

Study participating centre
Southend University Hospital
Pritilewell Chase
Westcliff on Sea
England
SS0 0RY

Study participating centre
St Bartholomew's Hospital
West Smithfield
London
England
EC1A 7BE

Study participating centre
St James's University Hospital
Beckett Street

Leeds
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LS9 7TF

Study participating centre
St Mary's Hospital
Parkhurst Road
Newport
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PO30 5TG

Study participating centre
St Thomas's Hospital
St Thomas Street
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England
SE1 9RT

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University College London Hospital
250 Euston Road
London
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NW1 2PQ

Study participating centre
University Hospital Aintree
Lower Lane
Liverpool
England
L9 7AL

Study participating centre
University Hospital Coventry & Warwickshire NHS Trust
Clifford Bridge Road
Coventry
England
CV2 2DZ

Study participating centre
Velindre Hospital
Velindre Road
Whitchurch
Cardiff
Wales
CF14 2TL

Study participating centre
Western General Hospital
Crewe Road South
Edinburgh
Lothian
Scotland
EH4 2XU

Study participating centre
Weston Park Hospital
Whitham Road
Sheffield
England
S10 2SJ

Study participating centre
Yeovil District Hospital
Higher Kingston
Yeovil
England
BA21 4AT

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
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		25/03/2019	13/04/2022	Yes	No
Plain English results			08/08/2019	No	Yes
Protocol (other)		11/07/2016	12/11/2026	No	No
Study website		11/11/2025	11/11/2025	No	Yes