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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 [_] Protocol
Registration date 17/11/2005	**Overall study status** Completed	[_] Statistical analysis plan [X] Results
Last Edited 13/04/2022	**Condition category** Cancer	[_] 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

Study website
http://www.bilcap.bham.ac.uk

Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number
2005-003318-13

IRAS number

ClinicalTrials.gov number
NCT00363584

Secondary identifying numbers
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

Secondary study design
Randomised controlled trial

Study setting(s)
Not specified

Study type(s)
Treatment

Participant information sheet
Not available in web format, please use the contact details below to request a patient information sheet

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 measure
2-year survival

Secondary outcome measures
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

Overall study start date
01/01/2005

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
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

Age group
Adult

Lower age limit
18 Years

Sex
Both

Target number of participants
360

Total final enrolment

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
England

Scotland

United Kingdom

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
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CH63 4JY

Study participating centre
Derriford Hospital
Derriford Road
Crownhill
Plymouth
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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
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United Kingdom
HD3 3EA

Study participating centre
James Paget Hospital
Lowestoft Road
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Norfolk
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Study participating centre
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Study participating centre
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Leicester
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LE1 5WW

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Maidstone Hospital
Hermitage Lane
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United Kingdom
ME16 9QQ

Study participating centre
Ninewells Hospital
Dundee
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DD1 9SY

Study participating centre
North Manchester General Hospital
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M8 5RB

Study participating centre
North Middlesex Hospital
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N18 1QX

Study participating centre
Nottingham City Hospital
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Nottingham
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NG5 1PB

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Longfleet Road
Dorset
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BH15 2JB

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CM20 1QX

Study participating centre
Queen Alexandra Hospital
Southwick Hill Road
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Study participating centre
Queen Elizabeth Hospital
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B15 2TH

Study participating centre
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Castle Lane East
Bournemouth
United Kingdom
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Study participating centre
Royal Derby Hospital
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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
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NW1 2PQ

Study participating centre
University Hospital Aintree
Lower Lane

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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

Sponsor details
Legal Services
Building 37, Room 4033
The University of Southampton
Southampton
England
United Kingdom
SO17 1BJ

Sponsor type
University/education

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, CRUK

Funding Body Type
Private sector organisation

Funding Body Subtype
Other non-profit organizations

Location
United Kingdom

Results and Publications

Publication and dissemination plan
An abstract of the trial results has been submitted to ASCO 06/02/2017. A publication in a high-impact peer reviewed journal is planned for 2017.

Intention to publish date
31/12/2017

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
Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Plain English results			08/08/2019	No	Yes
Results article		25/03/2019	13/04/2022	Yes	No