Pharmacokinetic study of capecitabine after total gastrectomy for stomach adenocarcinoma

Submission date	Recruitment status	[X] Prospectively registered
15/06/2009	Stopped	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
28/08/2009	Stopped	Results
Last Edited	Condition category	☐ Individual participant data
14/05/2019	Cancer	Record updated in last year

Plain English summary of protocol

http://cancerhelp.cancerresearchuk.org/trials/a-study-capecitabine-works-stomach-cancer-stomach-removed

Contact information

Type(s)

Scientific

Contact name

Prof Duncan Jodrell

Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

NCT00871273

Secondary identifying numbers

CAP002

Study information

Scientific Title

A pharmacokinetic study of capecitabine in patients undergoing peri-operative chemotherapy and a total gastrectomy for adenocarcinoma of the stomach

Acronym

CAP002

Study objectives

To establish the pharmacokinetics (PK) of capecitabine in patients who have undergone a total gastrectomy, i.e. the action of drug capecitabine in the body over a period of time, including the processes of absorption, distribution, localisation in tissues, biotransformation and excretion.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Sunderland Research Ethics Committee, 16/06/2009, ref: 09/H0904/38

Study design

Multicentre non-randomised single-arm open-label study

Primary study design

Interventional

Secondary study design

Non randomised study

Study setting(s)

Hospital

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

Gastric adenocarcinoma

Interventions

This is a clinical trial to evaluate the PK of adjuvant capecitabine in patients who have undergone a total gastrectomy. The study will compare the pharmacokinetic profile of capecitabine administered to patients with gastric cancer pre- and post-gastrectomy (using patients as their own controls) and also compare the data accrued with historical data for capecitabine PK. The aim is to ensure equivalent capecitabine exposure following total gastrectomy.

Screening tests will consist of demographic details, complete medical history, physical exam, vital signs, haematology and biochemistry tests. Electrocardiogram (ECG), tumour measurement (computed tomography [CT] abdomen, chest X-ray or CT chest) and a serum or urine pregnancy test (for women of childbearing potential) will also be performed. Haematology and biochemistry will be repeated prior to each study drug administration.

All patients will receive ECX chemotherapy which includes epirubicin 50 mg/m² (intravenous [iv] bolus) on day 1, cisplatin 60 mg/m² (iv infusion) on day 1 and oral capecitabine chemotherapy at a dose of 625 mg/m² administered twice daily at 12 hourly intervals for 21 consecutive days out of a 21-day cycle.

Capecitabine and its metabolites (DFCR, DFUR and 5-FU) plasma levels will be measured during cycles 1 and 4 in all patients, using a validated HPLC-MS method. An optional pharmacogenetic sample will be collected prior to the start of chemotherapy treatment. Treatment will continue for 3 cycles pre-operatively and 3 cycles post-operatively unless there is evidence of disease progression on chemotherapy, unacceptable toxicity or treatment is discontinued at the patient's request.

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Capecitabine

Primary outcome measure

To establish the PK of capecitabine in patients who have undergone a total gastrectomy, measured at week 18 +/- 2

Secondary outcome measures

- 1. To compare the PK profile of capecitabine administered to patients with gastric cancer preand post-gastrectomy and to compare this to historical data of capecitabine PK values in patients with other cancer types
- 2. To ensure equivalent capecitabine exposure when compared to previous studies using patients who have not undergone such surgery

Measured at PK analysis.

Overall study start date

01/08/2009

Completion date

30/11/2013

Reason abandoned (if study stopped)

Participant recruitment issue

Eligibility

Key inclusion criteria

- 1. Histological confirmation of gastric carcinoma suitable for potentially curative resection
- 2. Surgery must be planned to involve a total gastrectomy
- 3. No concurrent mechanical or malabsorptive disorders precluding affective oral administration of the drug (excluding early satiety related to the presence of the malignancy)
- 4. Aged greater than or equal to 18 years, either sex
- 5. World Health Organisation (WHO) performance status of less than or equal to 2
- 6. Haematological and biochemical indices (these measurements must be performed within one week prior to the patient going on study):
- 6.1. Haemoglobin (Hb) greater than or equal to 9.0 g/dl
- 6.2. Neutrophils greater than or equal to $1.5 \times 10^9/l$
- 6.3. Platelets (Plts) greater than or equal to $100 \times 10^9/l$
- 6.4. Serum bilirubin less than or equal to 1.5 x upper normal limit (ULN)
- 6.5. Alanine amino-transferase (ALT) and/or aspartate amino-transferase (AST) less than or equal to 2.0 x ULN (if both are measured, both must be less than or equal to 2.0 x ULN)
- 6.6. Calculated creatinine clearance greater than or equal to 50 ml/min (uncorrected value) or isotope clearance measurement greater than or equal to 50 ml/min
- 7. Female patients of child-bearing potential must have a negative serum or urine pregnancy test within two weeks prior to enrolment and agree to use appropriate medically approved contraception for four weeks prior to entering the trial, during the trial, and for six months afterwards
- 8. Male patients must agree to use appropriate medically approved contraception during the trial and for six months afterwards
- 9. Written, informed consent provided
- 10. Ability of the patient to co-operate with treatment and follow up must be ensured
- 11. Patients receiving oral anti-coagulation prior to entry into the study, must be converted to low molecular weight heparin in light of the interaction between capecitabine and warfarin

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

12

Key exclusion criteria

- 1. Patients with gastric lymphoma or other histological diagnosis
- 2. Any evidence of malignant ascites, peritoneal or liver metastasis, spread to other distant abdominal or extra-abdominal organs
- 3. History of confirmed ischaemic heart disease, concurrent congestive heart failure or prior history of class III/IV cardiac disease
- 4. Concurrent mechanical or malabsorptive disorders precluding effective oral administration of the drug

- 5. Use of other concomitant chemotherapy
- 6. Pregnancy or lactation
- 7. Patients known to be serologically positive for hepatitis B, hepatitis C or human immunodeficiency virus (HIV)
- 8. Patients who are high medical risks because of non-malignant systemic disease including active uncontrolled infection
- 9. Any other serious medical or psychological condition precluding adjuvant treatment 10. Patients with any other condition that in the Investigator's opinion would not make the patient a good candidate for the clinical trial

Date of first enrolment

01/11/2009

Date of final enrolment 30/11/2013

Locations

Countries of recruitment

England

United Kingdom

Study participating centre Oncology CentreCambridge

United Kingdom CB2 0QQ

Sponsor information

Organisation

Cambridge University Hospitals NHS Foundation Trust (UK)

Sponsor details

R&D Department, Box 146 Addenbrookes Hospital Hills Road Cambridge England United Kingdom CB2 0QQ

Sponsor type

Hospital/treatment centre

Website

http://www.cuh.org.uk/addenbrookes/addenbrookes_index.html

ROR

https://ror.org/04v54gj93

Funder(s)

Funder type

Industry

Funder Name

Roche (UK)

Alternative Name(s)

F. Hoffmann-La Roche Ltd, F. Hoffmann-La Roche & Co, F. Hoffmann-La Roche AG, Roche Holding AG, Roche Holding Ltd, Roche Holding, Roche Holding A.G., Roche Holding, Limited, F. Hoffmann-La Roche & Co.

Funding Body Type

Government organisation

Funding Body Subtype

For-profit companies (industry)

Location

Switzerland

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type Details Date created Date added Peer reviewed? Patient-facing? HRA research summary 28/06/2023 No No