# A phase I/IIa study combining curcumin (Curcumin C3 Complex, Sabinsa) with standard care FOLFOX chemotherapy in patients with inoperable colorectal cancer

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
28/10/2011		[X] Protocol		
Registration date 28/10/2011	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	[] Individual participant data		
04/09/2019	Cancer			

#### Plain English summary of protocol

http://cancerhelp.cancerresearchuk.org/trials/trial-looking-at-curcumin-and-folfox-for-advanced-bowel-cancer

## Contact information

## Type(s)

Scientific

#### Contact name

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#### Contact details

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## Additional identifiers

Clinical Trials Information System (CTIS)

2011-002289-19

## ClinicalTrials.gov (NCT)

NCT01490996

#### Protocol serial number

10672

# Study information

#### Scientific Title

A phase I/IIa study combining curcumin (Curcumin C3 Complex, Sabinsa) with standard care FOLFOX chemotherapy in patients with inoperable colorectal cancer

#### **Acronym**

FOLFOX plus curcumin in patients with inoperable colorectal cancer

#### Study objectives

Phase I/IIa study administering daily oral C3-complex curcumin to patients receiving standard care folinic acid (FOL) fluorouracil (F) and Oxalipatin (OX) (FOLFOX) chemotherapy.

Phase I is a dose-escalation response study to establish a maximum tolerated dose. Phase IIa is a two-armed control study comparing FOLFOX+curcumin with FOLFOX alone. The second phase is randomised. Between 42 and 51 patients will be recruited depending on dose-limiting toxicities observed in phase I. Treatment will last for up to 12 cycles (approx 6 months of chemotherapy). Recruitment is anticipated to take 3 years. Follow-up will include routine CT scans to monitor progression, and ultimately survival times. Median survival approx 18 months and <5% 5 year survival, therefore potential running time 7 years in the event of extremely favourable treatment response.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

East Midlands (Derby 1) regional ethics committee, 04/08/2011, ref: 11/EM/0263

## Study design

Randomised; Interventional and Observational; Design type: Treatment, Case-controlled study

## Primary study design

Interventional

## Study type(s)

Treatment

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

Topic: National Cancer Research Network; Subtopic: Colorectal Cancer; Disease: Colon

#### **Interventions**

This study is the first to combine daily oral curcumin with standard care FOLFOX-based (5-fluorouracil, folinic acid and oxaliplatin) chemotherapy in colorectal cancer patients with inoperable liver metastases: the CUFOX trial. CUFOX comprises a Phase 1 dose-escalation study (3+3+3 design) to determine an acceptable target dose of curcumin with which to safely proceed to a Phase IIa open-labelled randomised controlled trial. Thirty three participants with histological or cytological confirmation of inoperable colorectal cancer will then be randomised

to oxaliplatin-based chemotherapy with the addition of daily oral curcumin at the target dose determined in Phase I, or to standard care oxaliplatin-based chemotherapy alone (recruiting at a ratio of 2:1).

#### **Intervention Type**

Drug

#### **Phase**

Phase I/II

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

Folinic acid, fluorouracil, oxaliplatin, curcumin

#### Primary outcome(s)

Safety; Timepoint(s): Real-time adverse event reporting using Common Terminology Criteria for Adverse Events (CTC-AE), diaries and direct consultation.

## Key secondary outcome(s))

- 1. Biomarker Discovery; Timepoint(s): Samples taken during treatment phase 1-2years. Analysis 3-4 years.
- 2. Efficacy; Timepoint(s): Measured by response (RECIST) and survival
- 3. Measurement of systemic curcumin; Timepoint(s): During treatment phase
- 4. Neurotoxic side-effects; Timepoint(s): 2 weekly neurotoxicity questionnaires
- 5. Tolerability/Establishing Target Dose; Timepoint(s): Completion dose escalation phase of 3 consecutive patients without dose-limiting toxicity 2 cycles

## Completion date

09/01/2015

## **Eligibility**

## Key inclusion criteria

- 1. Histological or cytological diagnosis of metastatic colorectal cancer
- 2. Measurable disease by Response Evaluation Criteria in Solid Tumours version 1.1 (RECIST 1.1)
- 3. Adequate haematological, hepatic and renal function
- 4. Age more than or equal to 18 years
- 5. Eastern Cooperative Oncology Group (ECOG) Performance status 0 or 1
- 6. Patients must have recovered from effects of any recent major surgery
- 7. Willing to use contraception if applicable
- 8. Informed consent
- 9. Life expectancy estimated to be more than 12 weeks; Target Gender: Male & Female ; Lower Age Limit 18 no age limit or unit specified

#### Participant type(s)

**Patient** 

## Healthy volunteers allowed

No

## Age group

#### Adult

#### Lower age limit

18 years

#### Sex

All

#### Total final enrolment

28

#### Key exclusion criteria

- 1.Contraindications to FOLFOX chemotherapy: Peripheral neuropathy National Cancer Institute Common Toxicity Criteria (NCI CTC) >1, Liver failure, uncontrolled coronary heart disease, myocardial infarction within the previous 6 months.
- 2. Unwilling or unable to comply with the study protocol
- 3. Patients who are pregnant or lactating or contemplating pregnancy. Patients or their partners who become pregnant during the study will be referred to the appropriate experts.
- 4. Undergone chemotherapy (other than adjuvant for CRC) or participating in another drug study.
- 5. Previous cancer <5 years (other than colorectal, basal cell carcinoma, in-situ cervical cancer)
- 6. Major surgery within 4 weeks of starting the study
- 7. Co-existing active infection or serious concurrent medical condition
- 8. Significant cardiovascular disease
- 9. Bone metastases
- 10. Known brain or leptomeningeal metastases
- 11. Surgery or hospital admissions for symptomatic intra-abdominal adhesions
- 12. Active endoscopically proven peptic ulcer disease or colitis

### Date of first enrolment

09/01/2012

#### Date of final enrolment

09/01/2015

## Locations

#### Countries of recruitment

United Kingdom

England

## Study participating centre Leicester Royal Infirmary

Leicester United Kingdom LE1 5WW

# Sponsor information

#### Organisation

University of Leicester (UK)

#### **ROR**

https://ror.org/04h699437

# Funder(s)

## Funder type

Charity

#### **Funder Name**

Bowel Disease Research Foundation of ACPGBI (UK)

#### Funder Name

Cancer Research UK (CRUK) (UK)

#### 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** 

#### **Funder Name**

Hope Against Cancer (UK)

#### **Funder Name**

Royal College of Surgeons of England (UK)

#### Alternative Name(s)

RCS England, RCS ENG, The Royal College of Surgeons of England, RCS

## **Funding Body Type**

Private sector organisation

## **Funding Body Subtype**

Universities (academic only)

#### Location

United Kingdom

# **Results and Publications**

Individual participant data (IPD) sharing plan

## IPD sharing plan summary

## **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/07/2019	04/09/2019	Yes	No
Protocol article	protocol	24/03/2015		Yes	No
HRA research summary			28/06/2023		No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes