# A study to determine the maximum tolerated dose and activity of the combination of romidepsin and carfilzomib in relapsed or refractory peripheral T-cell lymphoma

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
11/12/2013		Protocol		
Registration date 11/12/2013	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	[] Individual participant data		
04/12/2024	Cancer			

#### Plain English summary of protocol

http://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/a-trial-looking-at-romidepsin-and-carfilzomib-for-people-with-peripheral-t-cell-lymphoma-that-has

## Contact information

## Type(s)

Scientific

#### Contact name

Ms Eszter Nagy

#### Contact details

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## Additional identifiers

EudraCT/CTIS number

2013-001879-20

**IRAS** number

#### ClinicalTrials.gov number

NCT03141203

#### Secondary identifying numbers

15553

# Study information

#### Scientific Title

Phase I/II study to determine the maximum tolerated dose and activity of the combination of romidepsin and carfilzomib in relapsed or refractory peripheral T-cell lymphoma

#### **Acronym**

RomiCar

#### **Study objectives**

RomiCar is a prospective, single arm, multicentre phase I/II clinical trial for patients with relapsed or refractory peripheral T-cell lymphoma.

The following designs will be used in each phase:

Phase I: Continual Reassessment Method (CRM) to determine the Maximum Tolerated Dose (MTD) of the combination of romidepsin and carfilzomib.

Phase II: A'Hern's single stage design to assess the activity (best overall response rate (PR + CR)) of the combination of romidepsin and carfilzomib over 8 cycles of treatment.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

NRES Committee East Midlands - Northampton, 30/12/2013, ref:13/EM/0462

## Study design

Non-randomized interventional treatment trial

## 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 contact details to request a participant information sheet

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

Peripheral T-cell lymphoma

#### **Interventions**

Carfilzomib, Proteasome inhibitor Romidepsin, Histone deacetylase (HDAC) inhibitor

Romidepsin dose (days 1, 8, 15)

Dose level 1: 8 mg/m2

Dose level 2 (starting dose):10 mg/m2

Dose level 3: 10 mg/m2 Dose level 4: 12 mg/m2 Dose level 5: 12 mg/m2 Dose level 6: 14 mg/m2

Carfilzomib dose\* (days 1, 2, 8, 9, 15, 16)

Dose level 1: 20/36 mg/m2

Dose level 2 (starting dose): 20/36 mg/m2

Dose level 3: 20/45 mg/m2 Dose level 4: 20/45 mg/m2 Dose level 5: 20/56 mg/m2 Dose level 6: 20/56 mg/m2

Patients in the phase II will receive the Maximum Tolerated Dose determined by phase I results. Treatment is intravenous and given in cycles (each lasting 28 days). Treatment is given on the days stated in the table above. Patients will receive treatment for 8 cycles and further cycles may be given at the investigator's discretion if the patient has not progressed. Follow-up is a minimum of 1 year.

Follow Up Length: 12 month(s) Study Entry: Registration only

#### Intervention Type

Drug

#### Phase

Phase I/II

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

Romidepsin, carfilzomib

#### Primary outcome measure

Current primary outcome measures as of 11/06/2018:

- 1. Maximum Tolerated Dose (MTD) of the combination of romidepsin and carfilzomib (Phase I); Timepoint(s): Within 4 weeks of treatment with the combination
- 2. Best Overall Response Rate (Phase II); Timepoint(s): During 8 cycles of treatment with the combination

<sup>\*</sup> For all dose levels, the carfilzomib dose will be 20 mg/m2 for the first 2 doses (i.e. day 1 and 2 of cycle 1), rising to the target dose for subsequent doses and cycles.

Previous primary outcome measures:

Maximum Tolerated Dose (MTD) of the combination of romidepsin and carfilzomib (Phase I); Timepoint(s): Within 4 weeks of treatment with the combination

#### Secondary outcome measures

Current secondary outcome measures as of 11/06/2018:

- 1. Best Overall Response Rate (Phase II); Timepoint(s): During treatment and until the end of the trial
- 2. Duration of response from time of first documented response until relapse or progression; Timepoint(s): From first response through to end of follow-up
- 3. Maximum % change in the radiological sum of the products of the diameters from baseline; Timepoint(s): During 8 cycles of combination treatment
- 4. Overall Survival; Timepoint(s): From baseline until the end of the trial
- 5. Progression Free Survival (Phase II); Timepoint(s): From baseline until the end of the trial
- 6. Toxicity of the combination of romidepsin and carfilzomib; Timepoint(s): During combination treatment

Previous secondary outcome measures:

- 1. Best Overall Response Rate (Phase II); Timepoint(s): During 8 cycles of treatment with the combination
- 2. Duration of response from time of first documented response until relapse or progression; Timepoint(s): From first response through to end of follow-up
- 3. Maximum % change in the radiological sum of the products of the diameters from baseline; Timepoint(s): During 8 cycles of combination treatment
- 4. Overall Survival; Timepoint(s): From baseline to 6, 12, 24 and 36 months
- 5. Progression Free Survival (Phase II); Timepoint(s): From baseline to 6, 12, 24 and 36 months
- 6. Toxicity of the combination of romidepsin and carfilzomib; Timepoint(s): During combination treatment

#### Overall study start date

13/07/2015

#### Completion date

23/09/2021

## Eligibility

#### Key inclusion criteria

Current inclusion criteria as of 11/06/2018:

- 1. Aged ≥16 years
- 2. Life expectancy > 12 weeks
- 3. ECOG performance status ≤2
- 4. Relapsed or refractory\* peripheral Tcell lymphoma including the following histologies: peripheral Tcelllymphoma not otherwise specified, angioimmunoblastic Tcell lymphoma, anaplastic large cell lymphoma, enteropathy associated Tcell lymphoma, extranodal NK/Tcell lymphoma, transformed mycosis fungoides, hepatosplenic Tcell lymphoma
- 5. Failed at least 1 prior therapy (but no upper limit of prior regimens)
- 6. Adequate haematopoietic reserve (Hb  $\geq$  9 g/dl, neutrophils  $\geq$ 1.0x10(9)/l and platelets  $\geq$ 100x10 (9)/l or  $\geq$ 75x10(9)/l if marrow involvement documented)
- 7. Adequate liver function (bilirubin  $\leq$ 1.5 x upper limit of normal (ULN) (unless due to Gilbert's syndrome), AST / ALT  $\leq$ 2x ULN)

- 8. Adequate renal function (creatinine clearance  $\geq$  20ml/min as assessed by Cockcroft and Gault calculation)
- 9. Serum potassium  $\geq$  3.8 mmol/l, calcium  $\geq$  2.2 mmol/l and magnesium  $\geq$  LLN prior to trial entry (supplements permitted)
- 10. CT measurable disease with at least 1 lesion having short axis >1.5 cm or splenomegaly >14 cm in craniocaudal

length attributable to relapsed lymphoma

11. Ability to give informed consent

\*For all relapsed patients, relapse must be confirmed by tissue biopsy (or bone marrow trephine if no other tissue available). For refractory patients, a biopsy must have been obtained within the last 6 months and preferably to confirm refractory disease. In rare cases (such as when rebiopsy is not possible), the initial diagnostic biopsy may be accepted, provided that the patient has been reviewed at the local MDT who agreed that the presentation is consistent with relapsed /refractory T cell lymphoma, and this has been documented.

#### Previous inclusion criteria:

- 1. Age  $\geq$  16 years of age
- 2. Life expectancy > 12 weeks
- 3. ECOG performance status  $\leq 2$
- 4. Relapsed or refractory\* peripheral Tcell lymphoma including the following histologies: peripheral Tcelllymphoma not otherwise specified, angioimmunoblastic Tcell lymphoma, anaplastic large cell lymphoma, enteropathy associated Tcell lymphoma, extranodal NK/Tcell lymphoma, transformed mycosis fungoides, hepatosplenic Tcell lymphoma
- 5. Failed at least 1 prior therapy (but no upper limit of prior regimens)
- 6. Adequate haematopoietic reserve (Hb  $\geq$  9g/dl, neutrophils  $\geq$  1.0x109/l and platelets  $\geq$  100x109/l or  $\geq$  75x109/l if marrow involvement documented)
- 7. Adequate liver function (bilirubin  $\leq$  1.5 x ULN, AST / ALT  $\leq$  2x ULN)
- 8. Adequate renal function (creatinine clearance  $\geq$  20ml/min as assessed by Cockcroft and Gault calculation)
- 9. Serum potassium  $\geq$  4.0 mmol/l, calcium  $\geq$  2.2 mmol/l and magnesium  $\geq$  0.85 mmol/l prior to trial entry
- 10. CT measurable disease with at least 1 lesion having short axis > 1.5cm or splenomegaly > 14cm in craniocaudal

length attributable to relapsed lymphoma

- 11. Ability to give informed consent
- \* For all relapsed patients, relapse must be confirmed by tissue biopsy (or bone marrow trephine if no other tissue available). For refractory patients, a biopsy must have been obtained within the last 6 months and preferably to confirm refractory disease.

#### Participant type(s)

**Patient** 

#### Age group

Adult

## Lower age limit

16 Years

#### Sex

Both

#### Target number of participants

Planned Sample Size: 58; UK Sample Size: 58

#### Total final enrolment

50

#### Key exclusion criteria

Current exclusion criteria as of 11/06/2018:

- 1. Persistent treatment related toxicities of CTCAE v4.0 grade  $\geq 2$
- 2. Previous treatment with histone deactylase inhibitor or proteasome inhibitor
- 3. Need for any other concurrent anticancer drug (apart from corticosteroids at a dose equivalent to prednisolone  $\leq$ 7.5mg daily). A steroid prephase may be used but should be stopped by the first day of cycle 1.
- 4. Concurrent medical illness deemed by the investigator as uncontrolled and/or clinically significant
- 5. Coexisting active infection requiring parenteral antibiotics
- 6. Patients unable to swallow oral medication
- 7. Active infection with HIV, hepatitis B or hepatitis C
- 8. Radiotherapy\* (except for palliative reasons), endocrine therapy, immunotherapy or use of other investigational agents within 28 days prior to trial entry (or a longer period depending on the defined characteristics of the agents used, please contact the trials office for confirmation). \*Limited field radiotherapy to an isolated lesion in bone or soft tissue must be completed 2 weeks prior to trial entry
- 9. Major surgery within 4 weeks of trial entry
- 10. Patients with proven CNS involvement
- 11. QTc interval of >450ms or patients taking medications that significantly prolong the QT interval
- 12. Clinically significant cardiac disease ≥ NYHA Class III, symptomatic ischaemia, conduction abnormalities uncontrolled by conventional intervention or myocardial infarction within 6 months of trial entry
- 13. Pregnant and lactating patients (patients of childbearing potential must have a negative pregnancy test prior to study entry and within 7 days prior to the start of treatment. Postmenopausal females (> 45 years old and without menstruation for > 1 year) and surgically sterilised females are exempt from a pregnancy test)
- 14. Patients and partners of childbearing potential not willing to use effective contraception during and for 3 months after therapy
- 15. Concurrent Pulmonary Hypertension
- 16. Left Ventricular Ejection Fraction (LVEF) of<40%
- 17. Patients taking any inhibitors or strong inducers of CYP3A4, with the exception of dexamethasone.
- 18. Previous systemic malignancy within the last 3 years unless treated with curative intent with no sign of recurrence. Other exceptions include non-melanotic skin cancer or carcinoma in-situ of the uterine cervix

#### Previous exclusion criteria:

- 1. Persistent treatment related toxicities of CTCAE v4.0 grade  $\geq 2$
- 2. Previous treatment with histone deactylase inhibitor or proteasome inhibitor
- 3. Need for any other concurrent anticancer drug (apart from corticosteroids at a dose equivalent to prednisolone  $\leq$ 7.5mg daily). A steroid prephase may be used but should be stopped by the first day of cycle 1.
- 4. Concurrent medical illness deemed by the investigator as uncontrolled and/or clinically

#### significant

- 5. Coexisting active infection requiring parenteral antibiotics
- 6. Patients unable to swallow oral medication
- 7. Active infection with HIV, hepatitis B or hepatitis C
- 8. Radiotherapy\* (except for palliative reasons), endocrine therapy, immunotherapy or use of other investigational agents within 28 days prior to trial entry (or a longer period depending on the defined characteristics of the agents used, please contact the trials office for confirmation). \*Limited field radiotherapy to an isolated lesion in bone or soft tissue must be completed 2 weeks prior to trial entry
- 9. Major surgery within 4 weeks of trial entry
- 10. Patients with proven CNS involvement
- 11. QTc interval of  $\geq$  480ms or patients taking medications that significantly prolong the QT interval (Appendix 7)
- 12. Clinically significant cardiac disease ≥ NYHA Class III, symptomatic ischaemia, conduction abnormalities uncontrolled by conventional intervention or myocardial infarction within 6 months of trial entry
- 13. Pregnant and lactating patients (patients of childbearing potential must have a negative pregnancy test prior to study entry and within 7 days prior to the start of treatment. Postmenopausal females (> 45 years old and without menstruation for > 1 year) and surgically sterilised females are exempt from a pregnancy test)
- 14. Patients and partners of childbearing potential not willing to use effective contraception during and for 3 months after therapy

## Date of first enrolment

13/07/2015

Date of final enrolment 31/08/2019

## Locations

#### Countries of recruitment

England

United Kingdom

## Study participating centre Christie Hospital

Manchester United Kingdom M20 4BX

Study participating centre Churchill Hospital Oxford United Kingdom OX3 7LE

## Study participating centre Derriford Hospital

Plymouth United Kingdom PL6 8DH

## Study participating centre Clatterbridge Cancer Centre

Liverpool United Kingdom L7 8XP

## Study participating centre Leicester Royal Infirmary

Leicester United Kingdom LE1 5WW

## Study participating centre Nottingham City Hospital

Nottingham United Kingdom NG5 1PB

## Study participating centre The Royal Marsden Hospital

Sutton United Kingdom SM2 5PT

### Study participating centre Southampton General Hospital

Southampton United Kingdom SO16 6YD

## Study participating centre St Bartholomew's Hospital

London United Kingdom EC1A 7BE

## Study participating centre St James's University Hospital

Leeds United Kingdom LS9 7TF

# Study participating centre The Queen Elizabeth Hospital

Birmingham United Kingdom B15 2TH

## Study participating centre University College London Hospital

London United Kingdom NW1 2BU

## Sponsor information

#### Organisation

University of Birmingham (UK)

## Sponsor details

Cancer Research UK Clinical Trials Unit Institute for Cancer Studies Edgbaston Birmingham England United Kingdom B15 2TT

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RomiCar@trials.bham.ac.uk

#### Sponsor type

#### University/education

#### ROR

https://ror.org/03angcq70

# Funder(s)

#### Funder type

Industry

#### Funder Name

Celgene Europe Ltd

#### **Funder Name**

Bloodwise

#### Alternative Name(s)

#### **Funding Body Type**

Private sector organisation

#### Funding Body Subtype

Other non-profit organizations

#### Location

**United Kingdom** 

#### **Funder Name**

Amgen

#### Alternative Name(s)

Amgen Inc., Applied Molecular Genetics Inc.

#### **Funding Body Type**

Government organisation

#### **Funding Body Subtype**

For-profit companies (industry)

#### Location

United States of America

## **Results and Publications**

#### Publication and dissemination plan

To be confirmed at a later date

#### Intention to publish date

31/07/2023

#### Individual participant data (IPD) sharing plan

The datasets generated during the current study will be available upon request from the CRCTU's Director's Committee (CRCTU-General@adf.bham.ac.uk) within 6 months after the publication of the outcome measures, unless the trial results are to be used as part of a regulatory submission where release of the data may be delayed or be subject to the approval of a third party. In addition, for trials with long-term follow-up primary outcome data (e.g. response) may be available before secondary outcome data (e.g. survival). Only scientifically sound proposals from appropriately qualified research groups will be considered for data and/or sample sharing. A data sharing agreement will cover the terms and conditions of the release of trial data and will include publication requirements, authorship and acknowledgements and obligations for the responsible use of data. An anonymised encrypted dataset will be transferred directly using a secure method and in accordance with the University of Birmingham's IT guidance on encryption of datasets.

#### IPD sharing plan summary

Available on request

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Basic results		15/02/2023	16/02/2023	No	No
HRA research summary			28/06/2023	No	No
Plain English results			04/12/2024	No	Yes