

# 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

<b>Submission date</b> 11/12/2013	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 11/12/2013	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 04/12/2024	<b>Condition category</b> Cancer	<input type="checkbox"/> Individual participant data

## 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

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## Additional identifiers

Clinical Trials Information System (CTIS)

2013-001879-20

ClinicalTrials.gov (NCT)

NCT03141203

**Protocol serial number**

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

**Study type(s)**

Treatment

**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/m<sup>2</sup>

Dose level 2 (starting dose):10 mg/m<sup>2</sup>

Dose level 3: 10 mg/m<sup>2</sup>

Dose level 4: 12 mg/m<sup>2</sup>  
Dose level 5: 12 mg/m<sup>2</sup>  
Dose level 6: 14 mg/m<sup>2</sup>

Carfilzomib dose\* (days 1, 2, 8, 9, 15, 16)  
Dose level 1: 20/36 mg/m<sup>2</sup>  
Dose level 2 (starting dose): 20/36 mg/m<sup>2</sup>  
Dose level 3: 20/45 mg/m<sup>2</sup>  
Dose level 4: 20/45 mg/m<sup>2</sup>  
Dose level 5: 20/56 mg/m<sup>2</sup>  
Dose level 6: 20/56 mg/m<sup>2</sup>

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

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(s)**

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

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

## **Key secondary outcome(s)**

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

## Completion date

23/09/2021

## Eligibility

### Key inclusion criteria

Current inclusion criteria as of 11/06/2018:

1. Aged  $\geq 16$  years
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  $\geq 9$  g/dl, neutrophils  $\geq 1.0 \times 10^9$ /l and platelets  $\geq 100 \times 10^9$ /l or  $\geq 75 \times 10^9$ /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  $\leq 2$  x ULN)
8. Adequate renal function (creatinine clearance  $\geq 20$  ml/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 re-biopsy 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 Tcell lymphoma 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  $\geq 1.0 \times 10^9$ /l and platelets  $\geq 100 \times 10^9$ /l or  $\geq 75 \times 10^9$ /l if marrow involvement documented)
  7. Adequate liver function (bilirubin  $\leq 1.5 \times$  ULN, AST / ALT  $\leq 2 \times$  ULN)
  8. Adequate renal function (creatinine clearance  $\geq 20$ ml/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  $> 1.5$ 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.

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

16 years

**Sex**

All

**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 deacetylase inhibitor or proteasome inhibitor
3. Need for any other concurrent anticancer drug (apart from corticosteroids at a dose equivalent to prednisolone  $\leq 7.5$ mg 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  $\geq$  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 deacetylase 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  $\geq$  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**

United Kingdom

England

**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)

**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

**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?
<a href="#">Basic results</a>		15/02/2023	16/02/2023	No	No
<a href="#">HRA research summary</a>			28/06/2023	No	No

<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes
<a href="#">Plain English results</a>			04/12/2024	No	Yes