

Phase II study of the adjuvant use of lenalidomide in patients undergoing reduced intensity conditioning allogeneic transplantation for multiple myeloma

Submission date 24/05/2011	Recruitment status No longer recruiting	☒ Prospectively registered ☐ Protocol
Registration date 24/05/2011	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 28/05/2020	Condition category Cancer	☐ Individual participant data

Plain English summary of protocol

<http://cancerhelp.cancerresearchuk.org/trials/trials-search/a-trial-looking-lenalidomide-after-stem-cell-transplant-for-people-with-multiple-myeloma-lenaric>

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Clinical Trials Information System (CTIS)

2009-012033-30

Protocol serial number

7268

Study information

Scientific Title

Phase II study of the adjuvant use of lenalidomide in patients undergoing reduced intensity conditioning allogeneic transplantation for multiple myeloma

Acronym

LenaRIC

Study objectives

Allogeneic stem cell transplant (SCT) remains the only curative option for multiple myeloma (MM). However, conventional (myeloablative) transplants remain associated with a substantial transplant related mortality which compromises effectiveness in younger patients and precludes their use entirely in patients over the age of 55 years. The recent demonstration that the use of reduced intensity conditioning (RIC) regimens substantially reduces the toxicity of allografting, whilst permitting durable donor stem cell engraftment, has raised the hope of extending this procedure to many patients who would currently not be considered for transplantation. Donor lymphocytes can be safely administered in patients who relapse late after transplantation. Routine use of donor lymphocyte infusion (DLI) early after transplant is generally avoided, as the risk of GVHD increases the sooner DLI is administered after transplant. In the context of myeloma, the strategy of delayed DLI (at one year) reduces the risk of GVHD. Consequently, an independent anti-myeloma strategy early after transplantation is required to allow sufficient delay before DLI can be safely administered. The tolerability and remarkable activity of lenalidomide against myeloma makes it an excellent candidate to be used in an adjunctive role early after a reduced intensity regimen transplant prior to later institution of DLI, to suppress the growth and rapid recovery of a residual myeloma cell population

Ethics approval required

Old ethics approval format

Ethics approval(s)

First MREC approval date 12/11/2010, ref 10/H1208/49

Primary study design

Interventional

Study design

Non-randomised interventional trial

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Haematological Oncology, Myeloma

Interventions

Patients will receive up to 12 cycles of Lenalidomide (or until 12 months post-transplant). Each cycle will last 28 days and patients will receive Lenalidomide on days 1 - 21 of each 28 day cycle. Dose reductions are in place. Follow up length: 24 month(s). Study entry : registration only.

Intervention Type

Drug

Phase

Phase II

Drug/device/biological/vaccine name(s)

Fludarabine, lenalidomide, ciclosporin, ATG

Primary outcome(s)

1. Progression free survival at 2 years post transplant
2. Timepoint(s): 2 years post transplant

Key secondary outcome(s)

1. Day +100 and 1 year non-relapse mortality, timepoint(s): day 100 and year 1
2. Disease free survival at 1 and 2 years post transplant, timepoint(s): Markers of disease assessed at months 1, 3, 6, 9, 12, 15, 18, 21 and 24 post transplant
3. Donor engraftment, timepoint(s): lineage-specific chimerism assessed at months 1, 3, 6, 9, 12, 15, 18, 21 and 24 post-transplant
4. GVHD, timepoint(s): GVHD will be monitored continuously until 2 years post transplant
5. Overall survival at years 1 and 2 post transplant, timepoint(s): will be monitored continuously until 24 months post-transplant

Completion date

19/12/2017

Eligibility

Key inclusion criteria

1. Multiple myeloma subjects who have received a high dose melphalan conditioned autologous transplant in the preceding 120 days and who are in CR1/2 or VGPR1/2 as defined by International uniform response criteria for Myeloma, 2006 (Appendix 1)
2. Patients 18 to 70 years in whom allogeneic transplantation using a reduced intensity conditioning regimen is not contra-indicated but who are not suitable for conventional allograft
3. Eastern Cooperative Oncology Group (ECOG) status <2 or an ECOG status of 3 if the reason for a status of 3 is due exclusively to multiple myeloma (e.g. pathological fracture) (Appendix 2)
4. Patients with a HLA identical sibling or ten/ten antigen (A,B,C,DR,DQ) matched unrelated donor
5. Cardiac ejection fraction > 40%
6. Measured EDTA Creatinine clearance >50 ml/min
7. Carbon Monoxide Diffusing Capacity (DLCO) >50%
8. Liver function (AST or ALT) < 2.5 x upper limit of normal
9. Patients able to give written informed consent prior to allogeneic transplant, with the understanding that the patient has the right to withdraw from the study at any time, without prejudice
10. Patients willing and able to comply with the protocol for the duration of the study
11. Agree to abstain from donating blood (and semen in male subjects) while taking study drug therapy and for 28 days following discontinuation of study drug therapy
12. Agree not to share study drug with another person and to return all unused study drug to the investigator or pharmacist

- 13. Male or female
- 14. Upper age limit 70 years
- 15. Lower age limit 18 years

Updated 10/07/2017: upper age limit changed from 65 to 70 years.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 Years

Sex

All

Total final enrolment

40

Key exclusion criteria

1. Patients with allergies or contraindications to receiving Fludarabine, Lenalidomide, ciclosporin or ATG
2. Pregnant or lactating women
3. Adults of reproductive potential not willing to comply with the Lenalidomide Risk Minimisation Plan
4. Patients with organ allografts
5. Any co-morbidity that, in the investigators opinion, would affect the patients participation in this study
6. Patient who have taken any other investigational medical product within 4 weeks of starting conditioning therapy

Added 10/07/2017:

7. Patients with known positive serology for HIV/Hepatitis B/Hepatitis C
8. Patients who have undergone a previous allogeneic stem cell transplant
9. Patients who have previously progressed on Lenalidomide

Date of first enrolment

31/05/2011

Date of final enrolment

12/06/2015

Locations**Countries of recruitment**

United Kingdom

England

Study participating centre

Queen Elizabeth Hospital

Birmingham

United Kingdom

B15 2TH

Sponsor information

Organisation

University Hospitals Birmingham NHS Foundation Trust (UK)

ROR

<https://ror.org/014ja3n03>

Funder(s)

Funder type

Charity

Funder Name

Cancer Research UK Feasibility Study Committee

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

Celgene Ltd (unrestricted educational grant)

Alternative Name(s)

Celgene Corporation

Funding Body Type

Private sector organisation

Funding Body Subtype

For-profit companies (industry)

Location

United States of America

Results and Publications

Individual participant data (IPD) sharing plan

The current data sharing plans for the current study are unknown and will be made available at a later date.

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Basic results			28/05/2020	No	No
HRA research summary			28/06/2023	No	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes