Velcade™ (bortezomib) combination chemotherapy in AL amyloidosis

Submission date	Recruitment status	[X] Prospectively registered
30/07/2010	Stopped	Protocol
Registration date	Overall study status	Statistical analysis plan
30/07/2010	Stopped	☐ Results
Last Edited	Condition category	Individual participant data
27/03/2019	Cancer	 Record updated in last year

Plain English Summary

https://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/a-trial-looking-bortezomib-with-chemotherapy-for-amyloidosis-reveal

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

EudraCT/CTIS number 2009-014906-33

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

Study information

Scientific Title

A pilot study of relapsed or refractory patients using Velcade™ (bortezomib) combination chemotherapy in AL amyloidosis

Acronym

REVEAL

Study hypothesis

The trial aims to assess the efficacy, safety and tolerability of two bortezomib-based combination chemotherapy regimens in patients with AL amyloidosis who have relapsed (disease has been successfully treated but has returned) or have inadequate response to front line treatment (disease has responded partly but not enough to improve the amyloid related organ function) or are refractory (disease has not responded at all to prior treatment).

Background:

AL amyloidosis is a multisystem disorder resulting from the accumulation of abnormal protein deposits called amyloid deposits in various organs of the body, causing impairment of organ function. The deposited proteins are formed by light chains secreted by abnormal plasma cells (a type of blood cell). Treatment of AL amyloidosis involves chemotherapy to kill the abnormal plasma cell, thus reducing the abnormal light chains, in the hope of slowing down or halting amyloid deposition, and preserving organ function. Bortezomib, used as a single agent, has been shown to be an effective agent for treating myeloma and amyloidosis and combining it with other drugs appears to increase the rapidity and completeness of response i.e. a quick and long-lasting remission in myeloma. The current study would be the first study of such combinations in relapsed or refractory AL amyloidosis.

Specific aims of research:

The study will compare two bortezomib-dexamethasone-chemotherapy combinations, one with adriamycin (PAD) and one with cyclophosphamide (CVD), in a randomised multicentre parallel phase II design.

Outline of research plan:

The patients will be identified and consented at the UK National Amyloidosis Centre and will be treated at regional haematology centres (RHCs). They will be given 3 cycles of chemotherapy and will be assessed for response thereafter. Those who have only a partial response will continue to a maximum of six cycles.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Central London REC 4 pending as of 13/08/2010, ref: 10/H0715/30

Study design

Multicentre randomised interventional treatment trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

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

Condition

Topic: National Cancer Research Network; Subtopic: Haematological Oncology; Disease: Leukaemia (acute), Leukaemia (acute lymphoblastic)

Interventions

PAD or CVD (maximum of 6 x 21 day cycles):

1. PAD:

Bortezomib 1.0 mg/m2 intravenous (IV) Days 1, 4, 8, 11 (increase to 1.3 mg/m2 if well tolerated) Doxorubicin 18 mg/m2 IV Days 1, 8

Dexamethasone 20 mg orally (po) Days 1, 4, 8, 11 (increase to 40 mg if well tolerated)

2. CVD:

Bortezomib 1.0 mg/m2 IV Days 1, 4, 8, 11 (increase to 1.3 mg/m2 if well tolerated) Cyclophosphamide 350 mg/m2 po Days 1, 8, 15 Dexamethasone 20 mg po Days 1, 4, 8, 11 (increase to 40 mg if well tolerated)

Follow-up length: 7 months

Study entry: single randomisation only

Intervention Type

Drug

Phase

Phase II

Drug/device/biological/vaccine name(s)

Bortezomib, adriamycin, cyclophosphamide

Primary outcome measure

- 1. Clonal response of the underlying plasma cell dyscrasia
- 2. Safety and toxicity of PAD and CVD

All assessed at 3 or 7 months.

Secondary outcome measures

- 1. Improvement in amyloidotic organ function
- 2. Overall survival
- 3. Cost effectiveness

All assessed at 7 months.

Overall study start date

01/12/2010

Overall study end date

31/05/2013

Reason abandoned (if study stopped)

Objectives no longer viable

Eligibility

Participant inclusion criteria

- 1. Aged 18 years or greater, either sex
- 2. Systemic AL amyloidosis who fulfil all the following criteria:
- 2.1. Measurable clonal disease in the serum as defined by either a serum paraprotein of greater than 7 g/L or the abnormal component of the serum free light chain greater than 75 mg/L (abnormal ratio only in case of renal failure)
- 2.2. Amyloid related organ dysfunction or organ syndrome
- 3. Following prior chemotherapy or prior autologous stem cell transplant, evidence of either:
- 3.1. Clonal disease relapse
- 3.2. Refractory clonal disease
- 3.3. Inadequate clonal response (defined as less than a 90% reduction in serum clonal markers)
- 4. Capable of providing written informed consent

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

Planned sample size: 52; UK sample size: 52

Participant exclusion criteria

- 1. Overt symptomatic non-amyloid manifestations of multiple myeloma
- 2. Amyloidosis of unknown or non-AL type
- 3. Localised AL amyloidosis (in which amyloid deposits are limited to a typical single organ, for example the bladder or larynx, in association with a clonal proliferative disorder within that

organ)

- 4. Trivial or incidental AL amyloid deposits in the absence of a significant amyloid related organ syndrome (e.g., isolated carpal tunnel syndrome)
- 5. Allogeneic stem cell transplantation
- 6. Solid organ transplantation
- 7. Severe peripheral neuropathy or autonomic neuropathy causing significant functional impairment
- 8. Thrombocytopaenia (platelet count less than $50 \times 10^9/l$)
- 9. Neutropaenia (neutrophil count less than $1 \times 10^9/l$)
- 10. Liver involvement by amyloid causing bilirubin greater than 2 times or alkaline phosphatase greater than 4 times upper limit of normal
- 11. Estimated glomerular filtration rate (eGFR) less than 20 ml/min but not on dialysis (patients on dialysis are not excluded)
- 12. Ejection fraction less than 40%
- 13. New York Heart Association (NYHA) class IV heart failure
- 14. Eastern Cooperative Oncology Group (ECOG) performance status greater than 3
- 15. Estimated life expectancy of less than 3 months
- 16. Active hepatitis B or C or human immunodeficiency virus (HIV) infection
- 17. Previous cumulative anthracycline dose of greater than 200 mg/m2
- 18. Previous treatment with bortezomib combined with anthracycline and/or alkylator and/or immunomodulatory drugs (ImiD)
- 19. Concurrent active malignancies, except surgically removed basal cell carcinoma of the skin or other in situ carcinomas
- 20. Pregnant, lactating or unwilling to use adequate contraception
- 21. Intolerance/sensitivity to any of the study drugs

Recruitment start date

01/12/2010

Recruitment end date

31/05/2013

Locations

Countries of recruitment

England

United Kingdom

Study participating centre Cancer Research UK & UCL Cancer Trials Centre London United Kingdom

W1T 4TJ

Sponsor information

Organisation

University College London (UCL) (UK)

Sponsor details

Gower Street London England United Kingdom WC1E 6BT

Sponsor type

University/education

Website

http://www.ucl.ac.uk/

ROR

https://ror.org/02jx3x895

Funder(s)

Funder type

Charity

Funder Name

Cancer Research UK (CRUK) (UK) - Clinical Trials Advisory and Awards Committee (CTAAC) grant (ref: C23725/A11440)

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