CLL6 (Roche): a randomised, phase II trial of fludarabine, cyclophosphamide and rituximab (FCR) with or without mitoxantrone in previously untreated chronic lymphocytic leukaemia

Recruitment status No longer recruiting	[X] Prospectively registered		
	☐ Protocol		
Overall study status	Statistical analysis plan		
Completed	[X] Results		
Condition category Cancer	[] Individual participant data		
	Overall study status Completed Condition category		

Plain English summary of protocol

http://www.cancerhelp.org.uk/trials/trials-search/a-trial-looking-at-treatment-for-people-with-newly-diagnosed-chronic-lymphocytic-leukaemia

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number

Study information

Scientific Title

CLL6 (Roche): a randomised, phase II trial of fludarabine, cyclophosphamide and rituximab (FCR) with or without mitoxantrone in previously untreated chronic lymphocytic leukaemia

Acronym

CLL6 (Roche)

Study objectives

The trial is intended to compare the complete remission rates of fludarabine, cyclophosphamide and rituximab (FCR) with or without mitoxantrone (M) in patients with previously untreated chronic lymphocytic leukaemia.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Leeds (West) Research Ethics Committee, 09/02/2009, ref: 08/H1307/135

Study design

Phase II multi-centre randomised controlled open parallel-group trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Chronic lymphocytic leukaemia (CLL)

Interventions

This trial aims to recruit 218 patients over 18 months. Patients will be randomised to receive six cycles of either FCR or FCM-R. Cycles of FCR and FCM-R are reported every 28 days for a total of six courses. Each cycle is repeated every 28 days. However treatment is administered during each cycle as per the following schedule:

Patients randomised to receive fludarabine, cyclophosphamide and rituximab (FCR) will receive:

Fludarabine (oral): 24 mg/m²/day on days 1 to 5

Cyclophosphamide (oral): 150 mg/m²/day on days 1 to 5

Rituximab (IV): 375 mg/m² on day 1 (cycle 1) Rituximab (IV): 500 mg/m² on day 1 (cycle 2 to 6)

Patients randomised to receive fludarabine, cyclophosphamide, rituximab and mitoxantrone (FCM-R) will receive:

Fludarabine (oral): 24 mg/m^2/day on days 1 to 5

Cyclophosphamide (oral): 150 mg/m^2/day on days 1 to 5

Rituximab (IV): 375 mg/m^2 on day 1 (cycle 1) Rituximab (IV): 500 mg/m^2 on day 1 (cycle 2 to 6)

Mitoxantrone (IV): 6 mg/m^2/day on day 1

Intervention Type

Drug

Phase

Phase II

Drug/device/biological/vaccine name(s)

Fludarabine, cyclophosphamide, rituximab, mitoxantrone

Primary outcome(s)

Proportion of patients achieving a complete response (CR) at three months post end-of-treatment as specified by the IWCLL criteria

Key secondary outcome(s))

- 1. Proportion of patients with undetectable minimal residual disease, measured at three months post-end-of-treatment
- 2. Overall response rate defined as complete or partial remission by the IWCLL criteria, measured at three months post-end-of-treatment
- 3. Progression free survival at two years
- 4. Overall survival at two years
- 5. Safety and toxicity, measured at two years after randomisation

Completion date

01/07/2012

Eligibility

Key inclusion criteria

- 1. Both males and females, at least 18 years old
- 2. B-cell chronic lymphocytic leukaemia (B-CLL) with a characteristic immunophenotype
- 3. Binet's Stages B, C or Progressive A
- 4. Requirement for therapy as defined by the International Workshop on Chronic Lymphocytic Leukemia (IWCLL) criteria (must meet one of the following criteria: evidence of progressive marrow failure as manifested by the development of, or worsening of, anaemia and/or thrombocytopenia)
- 5. Massive (i.e. 6 cm below the left costal margin) or progressive or symptomatic splenomegaly
- 6. Massive nodes (i.e. 10 cm in longest diameter) or progressive or sypmtomatic lymphodenopathy
- 7. Progressive lymphocytosis with an increase of more than 50% over a 2-month period or lymphocyte doubling time (LDT) of less than 6 months as long as the lymphocyte count is over $30 \times 10^9/L$
- 8. A minimum of any one of the following disease-related symptoms must be present:
- 8.1. Unitentional weight loss more than or equal to 10% within the previous 6 months
- 8.2. Significant fatigue (i.e. Eastern Cooperative Oncology Group performance status 2 or worse; cannot work or unable to perform usual activities)
- 8.4. Fevers of greater than 38°C for two or more weeks without other evidence of infection
- 8.5. Night sweats for more than one month without evidence of infection

9. No prior therapy for CLL

10. Able to provide written informed consent

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Total final enrolment

215

Key exclusion criteria

- 1. Prior therapy for CLL
- 2. Active infection
- 3. Past history of anaphylaxis following exposure to rat or mouse derived complementarity-determining regions (CDR)-grafted humanised monoclonal antibodies
- 4. Pregnancy, lactation or women of child bearing potential unwilling to use medically approved contraception whilst receiving treatment
- 5. Men whose partners are capable of having children but who are not willing to use appropriate medically approved contraception during the study, unless they are surgically sterile
- 6. Central nervous system (CNS) involvement with CLL
- 7. Mantle cell lymphoma
- 8. Other severe, concurrent disease or mental disorders
- 9. Known human immunodeficiency virus (HIV) positive
- 10. Patient has active or prior hepatitis B or C
- 11. Active secondary malignancy excluding basal cell lymphoma
- 12. Persisting severe pancytopenia (neutrophils less than 0.5 x 10^9/L or platelets less than 50 x 10^9/L), trasfusion dependent anaemia and active haemolysis
- 13. Patients with a creatinine clearance of less than 30 ml/min (either measured or derived by the Cockroft formula)

Date of first enrolment

01/06/2009

Date of final enrolment

30/03/2012

Locations

Countries of recruitment

United Kingdom

England

Ireland

Study participating centre
St. James's University Hospital
Leeds
United Kingdom
LS9 7TF

Sponsor information

Organisation

Leeds Teaching Hospitals NHS Trust (UK)

ROR

https://ror.org/00v4dac24

Funder(s)

Funder type

Industry

Funder Name

Roche

Alternative Name(s)

F. Hoffmann-La Roche Ltd, F. Hoffmann-La Roche & Co, F. Hoffmann-La Roche AG, Roche Holding AG, Roche Holding Ltd, Roche Holding, Roche Holding A.G., Roche Holding, Limited, F. Hoffmann-La Roche & Co., Roche Holdings, Inc.

Funding Body Type

Government organisation

Funding Body Subtype

For-profit companies (industry)

Location

Switzerland

Results and Publications

Individual participant data (IPD) sharing plan

Not provided at time of registration

IPD sharing plan summary

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/10/2017		Yes	No
HRA research summary	Participant information sheet	11/11/2025	28/06/2023		No
Participant information sheet			11/11/2025	No	Yes
Plain English results			27/07/2022	No	Yes