A phase II trial of Cyclosporin A in early adverse risk Chronic Lymphocytic Leukaemia (CLL)

| Submission date | Recruitment status No longer recruiting | Prospectively registered | | |
|-------------------------------------|-----------------------------------------|----------------------------------------------|--|--|
| 05/03/2014 | | ☐ Protocol | | |
| Registration date 05/03/2014 | Overall study status Completed | Statistical analysis plan | | |
| | | [X] Results | | |
| Last Edited | Condition category | [] Individual participant data | | |
| 21/06/2019 | Cancer | | | |

Plain English summary of protocol

http://www.cancerresearchuk.org/cancer-help/trials/a-trial-of-cyclosporin-a-for-chroniclymphocytic-leukaemia-cyclle

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

EudraCT/CTIS number

2012-002795-13

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

13956

Study information

Scientific Title

A phase II trial of Cyclosporin A in early adverse risk Chronic Lymphocytic Leukaemia (CLL)

Acronym

CyCLLe

Study objectives

The CyCLLe trial aims to measure the spontaneous proliferation (growth) rate of leukaemia cells in patients with Chronic Lymphocytic Leukaemia (CLL) and evaluate the effect of an immunosuppressive drug called Cyclosporin A (CsA), on the rate of proliferation.

For the majority of patients, CLL is incurable and once the disease has progressed it can lead to chronic illness, reduced survival and poor quality of life. CLL progression occurs when there is an imbalance between the growth of new leukaemic cells and the rate of cell death. This trial will investigate a strategy for delaying the progression of CLL using CsA.

Activated Tcells appear to perform an important role in tumour cell proliferation. As CsA is known to decrease T cell activation in tumour cells, it is possible it could reduce the rate of growth of new tumour cells and therefore delay disease progression.

The trial will recruit 10 patients with early stage CLL, who do not currently require therapy, from 2 Trials Acceleration Programme (TAP) centres. The research is funded by Leukaemia and Lymphoma research.

The rate of cell growth and loss of cells from the circulation will be assessed over up to 3 cycles (8 weeks apart) using deuterated (heavy) glucose. Patients will attend clinic on day 0 of each cycle to drink a sugar solution containing deuterated glucose and provide a blood sample. Patients will return on day 4 of each cycle for a further blood test to measure proliferation rates. Treatment will begin at week 5 of the first cycle for 8 weeks, continuing for an additional 4 months if a benefit is seen. Patients will be seen once/twice weekly whilst on treatment.

Rates of release may also be measured in patients who consent to additional visits for extra blood samples. The maximum time the patient would be on study is 11 months.

Ethics approval required

Old ethics approval format

Ethics approval(s)

12/EE/0485; First MREC approval date 12/12/2012

Study design

Non-randomised; Interventional; Design type: Screening

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 the contact details to request a patient information sheet

Health condition(s) or problem(s) studied

Topic: National Cancer Research Network; Subtopic: Haematological Oncology; Disease: Leukaemia (chronic)

Interventions

Cyclosporin A, Immunosuppressant

Follow Up Length: 2 month(s) Study Entry: Registration only

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Cyclosporin A

Primary outcome measure

Change in proliferation rate of CLL cells; Timepoint(s): Change in proliferation rate of CLL cells after 4 weeks of CsA therapy, measured by deuterated glucose

Secondary outcome measures

- 1. Complete response rate
- 2. Complete Remission after 8 weeks and 6 months
- 3. CsA Loss of labelled CLL cells; Timepoint(s): Rate of loss of labelled CLL cells from the circulation with CsA therapy
- 4. Overall response rate; Timepoint(s): Overall response rate (Complete Remission + Partial Remission) after 8 weeks and 6 months of CsA
- 5. Release of labelled CLL cells; Timepoint(s): Time to maximum release of labelled CLL cells into the circulation with CsA therapy
- 6. Spontaneous intra-patient variation; Timepoint(s): Spontaneous intra-patient variation in the proliferation, release and loss of CLL cells from the cirulation
- 7. Toxicity of CsA in patients with CLL; Timepoint(s): Toxicity of CsA in patients with CLL (toxicities will be measured and graded according to CTCAE criteria

Overall study start date

29/04/2013

Completion date

29/04/2015

Eligibility

Key inclusion criteria

- 1. Stage A or B CLL (Binet system) not requiring therapy by conventional criteria
- $2. \le 2$ lines of previous therapy for CLL
- 3. Male and female, age ≥18
- 4. ECOG performance status ≤2
- 5. Life expectancy >12 months
- 6. No therapy for CLL in previous 3 months (including glucocorticoids)
- 7. CD38+ve ≥ 7%
- 8. Normal renal function (eGFR >60mls/min)
- 9. Normal liver function (AST and / or ALT < 1.5 ULN)
- 10. Negative serology for Hepatitis B, C and HIV
- 11. Valid informed consent

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

Planned Sample Size: 10; UK Sample Size: 10

Total final enrolment

5

Key exclusion criteria

- 1. Active infection
- 2. Active autoimmune disease (requiring therapy)
- 3. Diabetes Mellitus
- 4. Previous myocardial infarction or clinically significant cardiac dysrhythmia.
- 5. Uncontrolled hypertension
- 6. Taking medication known to cause serious interaction with CsA where the interaction cannot be prevented by monitoring and adjusting CsA level
- 7. Fludarabine refractory disease (Non response to or relapse within 6 months of fludarabine containing regimen)
- 8. Previous bone marrow transplant
- 9. History of prior malignancy, with the exception of certain skin cancers and malignancies treated with curative intent and with no evidence of active disease for more than 3 years.
- 10. Pregnant and lactating patients (patients of childbearing potential must have a negative

pregnancy test prior to study entry)

11. Patients and partners of childbearing potential not willing to use effective contraception during and for 3 months after therapy

Date of first enrolment

29/04/2013

Date of final enrolment

29/04/2015

Locations

Countries of recruitment

England

United Kingdom

Study participating centre Institute for Cancer Studies

Birmingham United Kingdom B15 2TT

Sponsor information

Organisation

University of Birmingham (UK)

Sponsor details

Edgbaston Birmingham England United Kingdom B15 2TT

Sponsor type

University/education

ROR

https://ror.org/03angcq70

Funder(s)

Funder type

Charity

Funder Name

Leukaemia and Lymphoma Research

Alternative Name(s)

Funding Body Type

Private sector organisation

Funding Body Subtype

Other non-profit organizations

Location

United Kingdom

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? |
|----------------------|---------|--------------|------------|----------------|-----------------|
| Basic results | | | 21/06/2019 | No | No |
| HRA research summary | | | 28/06/2023 | No | No |