# Front-line therapy in CLL: assessment of ibrutinib-containing regimes

Submission date	Recruitment status  No longer recruiting	[X] Prospectively registered		
08/08/2014		[X] Protocol		
Registration date	Overall study status	Statistical analysis plan		
08/08/2014	Ongoing	[X] Results		
Last Edited	Condition category	[] Individual participant data		
28/10/2025	Cancer			

#### Plain English summary of protocol

http://www.cancerresearchuk.org/about-cancer/trials/a-trial-ibrutinib-rituximab-chronic-lymphocytic-leukaemia-flair

# Contact information

#### Type(s)

Public, Scientific, Principal investigator

#### Contact name

Dr Sue Bell

#### Contact details

Clinical Trials Research Unit Leeds Institute of Clinical Trials Research University of Leeds Leeds United Kingdom LS2 9JT +44 (0)113 343 4033 ctru\_flair@leeds.ac.uk

# Additional identifiers

EudraCT/CTIS number

2013-001944-76

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

# Study information

#### Scientific Title

FLAIR: Front-Line therapy in CLL: Assessment of Ibrutinib-containing Regimes: a randomised controlled trial

#### Acronym

**FLAIR** 

#### **Study objectives**

Current hypothesis as of 13/11/2023

The trial originally aimed to compare the effect on progression-free survival (PFS) of ibrutinib plus rituximab (IR) with that of fludarabine, cyclophosphamide and rituximab (FCR) in patients with previously untreated chronic lymphocytic leukaemia (CLL).

The amendment to include the additional trial arms will allow a comparison of PFS between ibrutinib plus venetoclax (I+V) and ibrutinib alone (I) with FCR, and a comparison of minimal residual disease (MRD) negativity rates in I+V with those in I.

A further amendment to allow genetically high-risk patients, defined by a detectable TP53 disruption (any 17p deletion and/or TP53 mutation), randomised to either I or I+V, will allow a comparison of MRD negativity rates between I and I+V in patients with TP53 abnormalities.

Previous hypothesis as of 07/09/2018:

The trial originally aimed to compare the effect on progression-free survival (PFS) of ibrutinib plus rituximab (IR) with that of fludarabine, cyclophosphamide and rituximab (FCR) in patients with previously untreated chronic lymphocytic leukaemia (CLL).

The amendment to include the additional trial arms will allow a comparison of PFS between ibrutinib plus venetoclax (I+V) and ibrutinib alone (I) with FCR, and a comparison of minimal residual disease (MRD) negativity rates in I+V with those in I.

Previous hypothesis:

The trial aims to provide evidence for the future first-line treatment of CLL patients by assessing whether IR is superior to FCR in terms of progression-free survival.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

NRES Committee Yorkshire & The Humber - Leeds West, 17/06/2014, ref: 14/YH/0085

### Study design

Randomized; Interventional; Design type: Treatment

### 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 to request a patient information sheet

#### Health condition(s) or problem(s) studied

Chronic lymphocytic leukaemia

#### **Interventions**

Current intervention as of 13/11/2023:

All arms are now closed to recruitment.

Participants were randomised on a 1:1:1:1 basis to receive standard therapy with fludarabine, cyclophosphamide and rituximab (FCR), ibrutinib plus rituximab (IR), ibrutinib monotherapy (I) or ibrutinib + venetoclax (I+V).

FCR: fludarabine (oral), cyclophosphamide (oral) and rituximab (intravenous infusion). F (24 mg/m2/day) and C (150 mg/m2/day) are administered days 1-5 and R is administered at 375 mg/m2 for day 1 cycle 1 and then at 500 mg/m2 for day 1 for cycles 2-6. Each cycle is repeated every 28 days and there are 6 cycles.

IR: ibrutinib (oral) and rituximab. 6 cycles of R as per FCR. Ibrutinib (420 mg) is administered daily for 6 years.

I: ibrutinib monotherapy is administered as per IR

I+V: ibrutinib + venetoclax (oral): ibrutinib is administered as per IR. Venetoclax is given daily from week 9 onwards in weekly dose increments (20 mg, 50 mg, 100 mg, 200 mg and 400 mg) after which 400 mg is administered for 6 years.

Follow up: baseline, 9 months post randomisation then every 6 months until 7 years or disease progression. All participants will be followed up at least annually until death.

Participants with any 17p deletion and/or TP53 mutation will be randomised on a 1:1 basis to receive ibrutinib monotherapy (I) or ibrutinib + venetoclax (I+V).

Previous intervention as of 07/09/2018:

Participants will be randomised on a 1:1:1 basis to receive standard therapy with fludarabine, cyclophosphamide and rituximab (FCR), ibrutinib monotherapy (I) or ibrutinib + venetoclax (I+V).

The IR arm has been closed to recruitment.

Previous intervention as of 29/06/2017:

Participants will be randomised on a 1:1:1:1 basis to receive standard therapy with fludarabine, cyclophosphamide and rituximab (FCR), ibrutinib plus rituximab (IR), ibrutinib monotherapy (I) or ibrutinib + venetoclax (I+V).

#### Added 24/07/2017:

FCR: fludarabine (oral), cyclophosphamide (oral) and rituximab (intravenous infusion). F (24mg/m2/day) and C (150mg/m2/day) are administered days 1-5 and R is administered at 375mg/m2 for day 1 cycle 1 and then at 500mg/m2 for day 1 for cycles 2-6. Each cycle is repeated every 28 days and there are 6 cycles.

IR: ibrutinib (oral) and rituximab. 6 cycles of R as per FCR. Ibrutinib (420mg) is administered daily for six years.

I: ibrutinib monotherapy is administered as per IR

I+V: ibrutinib + venetoclax (oral): ibrutinib is administered as per IR. Venetoclax is given daily from week 9 onwards in weekly dose increments (20mg, 50mg, 100mg, 200mg and 400mg) after which 400mg is administered for six years.

Follow up: baseline, 9 months post randomisation then every six months until 7 years or disease progression. All participants will be followed up at least annually until death.

#### Previous intervention:

Participants will be randomised on a 1:1 basis to receive standard therapy with fludarabine, cyclophosphamide and rituximab (FCR) or ibrutinib plus rituximab (IR).

#### Intervention Type

Drug

#### Phase

Not Applicable

#### Drug/device/biological/vaccine name(s)

Fludarabine, cyclophosphamide, rituximab, ibrutinib, venetoclax

#### Primary outcome measure

Current primary outcome measure as of 07/09/2018:

- 1. Whether I+V is superior to FCR in terms of progression-free survival.
- 2. Whether I+V is superior to I in terms of Minimal Residual Disease negativity. The proportion of concurrently randomised participants who are MRD negative in the bone marrow at any time during the trial will be summarised by treatment arm and compared using a binary logistic regression model adjusted for the minimisation factors and trial stage, excluding centre, and Kaplan-Meier curves will be presented. The analysis of MRD negativity will be initially carried out at 2 years after the close of recruitment.

#### Previous primary outcome measure:

The trial aims to provide evidence for the future first-line treatment of CLL patients by assessing whether IR is superior to FCR in terms of progression-free survival, and whether IR toxicity rates are favourable.

#### Secondary outcome measures

Current secondary outcome measures as of 10/09/2018:

- 1. PFS of I+V in comparison with I. This is assessed using time from randomisation to first documented evidence of disease progression (as defined by IWCLL criteria) or death from any cause. Participants who do not progress will be censored at the last date they were known to be alive and progression-free.
- 2. PFS of I in comparison with FCR. This is assessed using time from randomisation to first documented evidence of disease progression (as defined by IWCLL criteria) or death from any cause. Participants who do not progress will be censored at the last date they were known to be alive and progression free.
- 3. Overall survival. This is assessed using time from randomisation to date of death from any cause. Participants not known to have died will be censored at the date they were last known to be alive.
- 4. Proportion of participants obtaining undetectable MRD, as defined by IWCLL criteria. A negative MRD is defined as the presence of <0.01% CLL cells in the bone marrow. Achievement of MRD negativity is defined as a MRD negative results at any time over the length of the trial.
- 5. Stopping I-containing therapy in MRD negative patients. Participants receiving I, IR or I+V who achieve MRD negativity in the bone marrow will be able to stop treatment. MRD levels will be monitored over time following stopping treatment.
- 6. Restarting I-containing therapy on MRD relapse. Those who relapse at the MRD level will restart treatment and will be assessed further for MRD response.
- 7. Response to therapy, as defined by IWCLL criteria. For participants randomised to FCR or IR, response is assessed at 3 months post-treatment with FCR or R and again at the end of treatment with ibrutinib for participants randomised to IR. For participants randomised to I or I+V, response is assessed at 9 months post-randomisation and again at the end of treatment.

  8. Safety and toxicity assessed using adverse events reported throughout the trial, as graded by CTCAE V4.03, and determined by routine clinical assessments at each centre.
- 9. Health-related quality of life. The EORTC QLQC30 and EORTC QLQCLL16 will be used to measure participant assessed QoL prior to randomisation, at the end of treatment with FCR and R (for participants randomised to FCR or IR) or at 6 months post-randomisation (for participants randomised to I or I+V), and then at 6-monthly visits.
- 10. Cost-effectiveness. The SF12 and EQ5D will be used to produce quality adjusted life years (QALYs). NHS resource use and participants' out of pocket expenses will be collected via the Case Record Forms, as well as health economics patient questionnaires. These will be collected prior to randomisation, at the end of treatment with FCR and R (for participants randomised to FCR or IR) or at 6 months post-randomisation (for participants randomised to I or I+V), and then at 6-monthly visits.

Previous secondary outcome measures as of 07/09/2018:

- 1. PFS of I+V in comparison with I
- 2. PFS of I in comparison with FCR
- 3. Overall survival
- 4. Proportion of participants obtaining undetectable MRD, as defined by IWCLL criteria
- 5. Stopping of I-containing therapy in MRD-negative patients. Participants who have an MRD negative result in the peripheral blood at any timepoint between 12 and 30 months post-randomisation will be eligible to stop treatment prior to the 6 years post-randomisation timepoint if they confirm MRD negativity in the bone marrow.
- 6. Time to MRD relapse for participants who stop I-containing treatment based on MRD negativity and then go on to relapse at the MRD
- 7. Response to therapy, as defined by IWCLL criteria. For each comparison, the best response for each participant at either 3 months post-treatment with FCR, 9 months post randomisation (for participants randomised to I or I+V) or the end of treatment (for I or I+V) will be summarised by treatment group and overall. The proportion of participants achieving a Complete Response

(CR+CRi) and an Overall Response (at least a PR) at any stage during the trial will be summarised by treatment arm

- 8. Safety and toxicity. Safety analyses will summarise the AR, SAE, SAR and SUSAR rates per participant, by treatment received and overall for all participants randomised to stages II and III. ARs will be presented by CTCAE toxicity grade (V4.0.3).
- 9. Health-related quality of life assessed using all domains of the EORTC QLQ-C30 and the CLL-specific module, EORTC QLQ-CLL16.
- 10. Cost-effectiveness

Previous secondary outcome measures:

- 1. Overall survival
- 2. Undetectable minimal residual disease
- 3. Response to therapy
- 4. Health-related quality of life
- 5. Cost-effectiveness

#### Overall study start date

01/08/2014

#### Completion date

01/01/2030

# **Eligibility**

#### Key inclusion criteria

Current inclusion criteria as of 13/11/2023:

For standard-risk pathway:

- 1. At least 18 years old. Maximum age of 75 years old.
- 2. B-CLL with a characteristic immunophenotype, including small lymphocytic lymphoma
- 3. Binet's Stages C, B or Progressive Stage A
- 4. Requiring therapy by the IWCLL criteria in that they must have at least one of the following:
- 4.1. Evidence of progressive marrow failure as manifested by the development of, or worsening of, anaemia and/or thrombocytopenia.
- 4.2. Massive (i.e. 6 cm below the left costal margin) or progressive or symptomatic splenomegaly
- 4.3. Massive nodes (i.e. 10 cm in longest diameter) or progressive or symptomatic lymphadenopathy
- 4.4. 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  $30 \times 10^9 / L$
- 4.5. A minimum of any one of the following disease-related symptoms must be present:
- 4.5.1. Unintentional weight loss more than or equal to 10% within the previous 6 months.
- 4.5.2. Significant fatigue (i.e. Eastern Cooperative Oncology Group PS 2 or worse; cannot work or unable to perform usual activities)
- 4.5.3. Fevers of greater than 38.0°C for 2 or more weeks without other evidence of infection
- 4.5.4. Night sweats for more than 1 month without evidence of infection
- 5. Considered fit for treatment with FCR as determined by the treating clinician
- 6. World Health Organisation (WHO) performance status (PS) of 0, 1 or 2
- 7. Able to provide written informed consent
- 8. Biochemical values must be within the following limits within 14 days prior to randomization and at baseline:
- 8.1. Alanine aminotransferase (ALT) 3 x upper limit of normal (ULN). Aspartate aminotransferase

(AST) 3 x ULN.

8.2. Total bilirubin =  $1.5 \times \text{ULN}$ , unless bilirubin rise is due to Gilbert's syndrome or of non-hepatic origin

For the genetically high-risk pathway

- 1. TP53 abnormality confirmed by central laboratory
- 2. At least 18 years old (no upper limit)
- 3. Meeting all the inclusion criteria for the standard risk pathway stated, with the exception of 'considered fit for treatment with FCR as determined by the treating clinician'

#### Previous inclusion criteria:

- 1. At least 18 years old. Maximum age of 75 years old.
- 2. B-CLL with a characteristic immunophenotype, including small lymphocytic lymphoma
- 3. Binets Stages C, B or Progressive Stage A
- 4. Requiring therapy by the IWCLL criteria in that they must have at least one of the following:
- 4.1. Evidence of progressive marrow failure as manifested by the development of, or worsening of, anaemia and/or thrombocytopenia.
- 4.2. Massive (i.e. 6 cm below the left costal margin) or progressive or symptomatic splenomegaly
- 4.3. Massive nodes (i.e. 10 cm in longest diameter) or progressive or symptomatic lymphadenopathy
- 4.4. 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
- 4.5. A minimum of any one of the following disease-related symptoms must be present:
- 4.5.1. Unintentional weight loss more than or equal to 10% within the previous 6 months.
- 4.5.2. Significant fatigue (i.e. Eastern Cooperative Oncology Group PS 2 or worse; cannot work or unable to perform usual activities)
- 4.5.3. Fevers of greater than 38.0°C for 2 or more weeks without other evidence of infection
- 4.5.4. Night sweats for more than 1 month without evidence of infection
- 5. Considered fit for treatment with FCR as determined by the treating clinician
- 6. World Health Organisation (WHO) performance status (PS) of 0, 1 or 2
- 7. Able to provide written informed consent
- 8. Biochemical values must be within the following limits within 14 days prior to randomization and at baseline:
- 8.1. Alanine aminotransferase (ALT) 3 x upper limit of normal (ULN). Aspartate aminotransferase (AST)  $3 \times 10^{-5}$  x ULN.
- 8.2. Total bilirubin =  $1.5 \times ULN$ , unless bilirubin rise is due to Gilberts syndrome or of non-hepatic origin

#### Participant type(s)

**Patient** 

#### Age group

Adult

#### Lower age limit

18 Years

Sex

#### Target number of participants

Planned Sample Size: 1576; UK Sample Size: 1576; Planned sample size for genetically high-risk pathway: 64

#### Key exclusion criteria

Current exclusion criteria as of 07/09/2018:

- 1. Prior therapy for CLL
- 2. History or current evidence of Richter's transformation
- 3. Major surgery within 4 weeks prior to randomisation
- 4. Active infection
- 5. Above 20% P53 deletion, determined by FISH
- 6. Past history of anaphylaxis following exposure to rat or mouse derived CDR-grafted humanised monoclonal antibodies
- 7. Concomitant warfarin or equivalent vitamin K inhibitor added 29/06/2017: or other oral anticoagulant treatment; anyone requiring anticoagulation treatment for greater than 6 months is not eligible for trial entry
- 8. Pregnancy, lactation or women of child-bearing potential unwilling to use medically approved contraception whilst receiving treatment and for 12 months after treatment with rituximab has finished, or 30 days after treatment with ibrutinib has finished, whichever is latest. Women must agree to not donate eggs (ova, oocytes) for the purposes of assisted reproduction
- 9. Men whose partners are capable of having children but who are not willing to use appropriate medically approved contraception whilst receiving treatment and for 12 months after treatment with rituximab has finished, or 3 months after treatment with ibrutinib has finished, whichever is latest, unless they are surgically sterile
- 10. CNS involvement with CLL
- 11. Symptomatic cardiac failure not controlled by therapy, or unstable angina not adequately controlled by current therapy (in patients with a significant cardiac history the left ventricular function should be assessed and patients with severe impairment should be excluded)
- 12. Respiratory impairment (bronchiectasis or moderate COPD)
- 13. Other severe, concurrent diseases or mental disorders that could interfere with their ability to participate in the study
- 14. Inability to swallow oral medication
- 15. Disease significantly affecting gastrointestinal function and/or inhibiting small intestine absorption (malabsorption syndrome, resection of the small bowel, poorly controlled inflammatory bowel disease etc)
- 16. Known HIV positive
- 17. Positive serology for Hepatitis B (HB) defined as a positive test for HBsAg. In addition, if negative for HBsAg but HBcAb positive (regardless of HBsAb status), a HB DNA test will be performed and if positive the subject will be excluded
- 18. Positive serology for Hepatitis C (HC) defined as a positive test for HCAb, in which case reflexively perform a HC RIBA immunoblot assay on the same sample to confirm the result 19. History of prior malignancy, with the exception of the following:
- 19.1. Malignancy treated with curative intent and with no evidence of active disease present for more than 3 years prior to screening and felt to be at low risk for recurrence by treating physician
- 19.2. Adequately treated non-melanomatous skin cancer or lentigo maligna melanoma without current evidence of disease
- 19.3. Adequately treated cervical carcinoma in situ without current evidence of disease
- 20. Persisting severe pancytopenia (neutrophils  $< 0.5 \times 10^9 / l$  or platelets  $< 50 \times 10^9 / l$ ) unless

due to direct marrow infiltration by CLL

- 21. Current treatment with prednisolone of >10 mg/day
- 22. Active haemolysis (patients with haemolysis controlled with prednisolone at a dose 10 mg or less per day can be entered into the trial)
- 23. Patients with a creatinine clearance of less than 30 ml/min (either measured or derived by the Cockcroft Gault formula or alternative locally approved formula)
- 24. History of stroke or intracranial hemorrhage within 6 months prior to enrollment
- 25. Requirement for treatment with a strong CYP3A4/5 inhibitor or inducer
- 26. Cardiac event (eg. recent myocardial infarction, coronary artery stent) requiring dual antiplatelet treatment.
- 27. Allergy or inability to tolerate uric acid reducing agents (eg allopurinol/rasburicase).
- 28. Unwilling or unable to take PCP prophylaxis (eg cotrimoxazole).

#### Previous exclusion criteria:

- 1. Prior therapy for CLL
- 2. History or current evidence of Richters transformation
- 3. Major surgery within 4 weeks prior to randomisation
- 4. Active infection
- 5. Above 20% P53 deletion, determined by FISH
- 6. Past history of anaphylaxis following exposure to rat or mouse derived CDR-grafted humanised monoclonal antibodies
- 7. Concomitant warfarin or equivalent vitamin K inhibitor added 29/06/2017: or other oral anticoagulant treatment; anyone requiring anticoagulation treatment for greater than 6 months is not eligible for trial entry
- 8. Pregnancy, lactation or women of child-bearing potential unwilling to use medically approved contraception whilst receiving treatment and for 12 months after treatment with rituximab has finished, or 30 days after treatment with ibrutinib has finished, whichever is latest. Women must agree to not donate eggs (ova, oocytes) for the purposes of assisted reproduction
- 9. Men whose partners are capable of having children but who are not willing to use appropriate medically approved contraception whilst receiving treatment and for 12 months after treatment with rituximab has finished, or 3 months after treatment with ibrutinib has finished, whichever is latest, unless they are surgically sterile
- 10. CNS involvement with CLL
- 11. Symptomatic cardiac failure not controlled by therapy, or unstable angina not adequately controlled by current therapy (in patients with a significant cardiac history the left ventricular function should be assessed and patients with severe impairment should be excluded)
- 12. Respiratory impairment (bronchiectasis or moderate COPD)
- 13. Other severe, concurrent diseases or mental disorders that could interfere with their ability to participate in the study
- 14. Inability to swallow oral medication
- 15. Disease significantly affecting gastrointestinal function and/or inhibiting small intestine absorption (malabsorption syndrome, resection of the small bowel, poorly controlled inflammatory bowel disease etc)
- 16. Known HIV positive
- 17. Positive serology for Hepatitis B (HB) defined as a positive test for HBsAg. In addition, if negative for HBsAg but HBcAb positive (regardless of HBsAb status), a HB DNA test will be performed and if positive the subject will be excluded
- 18. Positive serology for Hepatitis C (HC) defined as a positive test for HCAb, in which case reflexively perform a HC RIBA immunoblot assay on the same sample to confirm the result
- 19. History of prior malignancy, with the exception of the following:
- 19.1. Malignancy treated with curative intent and with no evidence of active disease present for more than 3 years prior to screening and felt to be at low risk for recurrence by treating

#### physician

- 19.2. Adequately treated non-melanomatous skin cancer or lentigo maligna melanoma without current evidence of disease
- 19.3. Adequately treated cervical carcinoma in situ without current evidence of disease
- 20. Persisting severe pancytopenia (neutrophils  $< 0.5 \times 10^9 / l$  or platelets  $< 50 \times 10^9 / l$ ) unless due to direct marrow infiltration by CLL
- 21. Current treatment with prednisolone of >10 mg/day
- 22. Active haemolysis (patients with haemolysis controlled with prednisolone at a dose 10 mg or less per day can be entered into the trial)
- 23. Patients with a creatinine clearance of less than 30 ml/min (either measured or derived by the Cockcroft Gault formula or alternative locally approved formula)
- 24. History of stroke or intracranial hemorrhage within 6 months prior to enrollment
- 25. Requirement for treatment with a strong CYP3A4/5 inhibitor or inducer

# Date of first enrolment

01/09/2014

#### Date of final enrolment

31/10/2023

## Locations

#### Countries of recruitment

England

Northern Ireland

Scotland

United Kingdom

Wales

#### Study participating centre Clinical Trials Research Unit (CTRU)

Leeds United Kingdom LS2 9JT

Study participating centre Aberdeen Royal Infirmary

Foresterhill Road Aberdeen United Kingdom AB25 2ZN

#### Study participating centre Addenbrookes Hospital

Hills Road Cambridge United Kingdom CB2 0QQ

# Study participating centre Altnagelvin Hospital

WHSCT Glenshane Road Glenshane Londonderry United Kingdom BT47 6SB

#### Study participating centre Barnet General Hospital

Wellhouse Lane Hertfordshire Barnet United Kingdom EN5 3DJ

# Study participating centre Colchester General Hospital

Department of Haematology Colchester General Hospital Turner Road Colchester Essex Colchester United Kingdom CO4 5JL

### Study participating centre Basingstoke and North Hampshire Hospital

Aldermaston Road Basingstoke United Kingdom RG24 9NA

### Study participating centre Royal Hampshire County Hospital

Romsey Road Winchester United Kingdom SO22 5DG

### Study participating centre Beatson Oncology Centre

1053 Great Western Road Glasgow United Kingdom G12 0YN

# Study participating centre Victoria Hospital, Glasgow

52 Grange Road Glasgow United Kingdom G42 9LF

#### Study participating centre Royal Alexandra Hospital

Corsebar Road Paisley United Kingdom PA2 9PN

#### Study participating centre Belfast City Hospital

Belfast Health and Social Care Trust 51 Lisburn Road Belfast United Kingdom BT9 7AB

#### Birmingham Heartlands Hospital

Birmingham United Kingdom B9 5SS

#### Study participating centre Good Hope Hospital

Rectory Road Sutton Coldfield United Kingdom B75 7RR

#### Study participating centre Blackpool Victoria Hospital

Whinney Heys Road Lancashire Blackpool United Kingdom FY3 8NR

#### Study participating centre Borders General Hospital

Melrose United Kingdom TD6 9BS

# Study participating centre Bradford Royal Infirmary

Bradford Teaching Hospitals NHS Foundation Trust Duckworth Lane West Yorkshire BD9 6RJ Bradford United Kingdom BD9 6RJ

# Study participating centre Bristol Haematology and Oncology Centre

Horfield Road

Bristol United Kingdom BS2 8ED

# Study participating centre Calderdale Royal Hospital

Salterhebble Halifax United Kingdom HX3 0PW

## Study participating centre Huddersfield Royal Infirmary

Acre Street Lindley Huddersfield United Kingdom HD3 3EA

### Study participating centre Castle Hill Hospital

Castle Road Cottingham United Kingdom HU16 5JQ

# Study participating centre Gloucestershire Royal Hospital

Great Western Road Gloucester United Kingdom GL1 3NN

#### Study participating centre Cheltenham General Hospital

Sandford Road Cheltenham United Kingdom GL53 7AN

#### Study participating centre Christie Hospital

Christie NHS Foundation Trust Wilmslow Road Manchester United Kingdom M20 4BX

#### Study participating centre Churchill Hospital

Oxford Cancer Centre & Cancer Research UK Oxford University Hospitals NHS Trust Oxford United Kingdom OX3 7LE

# Study participating centre Basildon Hospital

Basildon United Kingdom SS16 5NL

#### Study participating centre Countess of Chester Hospital

Chester United Kingdom CH2 1UL

#### Study participating centre Craigavon Area Hospital

68 Lurgan Road Portadown United Kingdom BT63 5QQ

# Study participating centre Croydon University Hospital

530 London Road

Croydon United Kingdom CR7 7YE

# Study participating centre Derriford Hospital

Plymouth United Kingdom PL6 8DH

### Study participating centre Doncaster Royal Infirmary

Armthorpe Road Doncaster United Kingdom DN2 5LT

#### Study participating centre East Surrey Hospital

Canada Avenue Redhill Surrey Redhill United Kingdom RH1 5RH

# Study participating centre Epsom General Hospital

Dorking Road Epsom United Kingdom KT18 7EG

# Study participating centre St Helier Hospital

Wrythe Lane Carshalton United Kingdom SM5 1AA

#### Study participating centre George Eliot Hospital

College Street Nuneaton United Kingdom CV10 7DJ

# Study participating centre Glan Clwyd Hospital

Bodelwyddan Rhyl United Kingdom LL18 5UJ

# Study participating centre Lincoln County Hospital

Haematology Department Lincoln County Hospital Greetwell Road Lincoln Lincolnshire (E Mid) Lincoln United Kingdom LN2 5QY

# Study participating centre Grantham & District Hospital

Manthorpe Road Grantham United Kingdom NG31 8DG

# Study participating centre Pilgrim Hospital

Sibsey Road Boston United Kingdom PE21 9QS

#### Harrogate District Hospital

Lancaster Park Road Harrogate United Kingdom HG2 7SX

# Study participating centre Hammersmith Hospital

Imperial College Healthcare NHS Trust Du Cane Road London United Kingdom W12 0HS

#### Study participating centre Ipswich Hospital

Ipswich Hospital NHS Trust Heath Road Suffolk Ipswich United Kingdom IP4 5PD

# Study participating centre James Cook University Hospital

Marton Road Middlesbrough United Kingdom TS4 3BW

# Study participating centre James Paget Hospital

Great Yarmouth United Kingdom NR31 6LA

# Study participating centre Kings College Hospital

Denmark Hill

London United Kingdom SE5 9RS

#### Study participating centre Princess Royal University Hospital

Farnborough Common Orpington United Kingdom BR6 8ND

#### Study participating centre Kings Mill Hospital

Mansfield Road Nottinghamshire Sutton-In-Ashfield United Kingdom NG17 4JL

#### Study participating centre Leicester Royal Infirmary

Leicester General Infirmary Gwendolen Road Leicester LE5 4PW Leicester United Kingdom LE5 4PW

# Study participating centre Manchester Royal Infirmary

Oxford Road Manchester United Kingdom M13 9WL

# Study participating centre Milton Keynes General Hospital

Standing Way Eaglestone Milton Keynes United Kingdom MK6 5LD

# Study participating centre Monklands Hospital

Monkscourt Avenue Airdrie United Kingdom ML6 0JS

# Study participating centre Musgrove Park Hospital

Taunton United Kingdom TA1 5DA

#### Study participating centre Nevill Hall Hospital

Brecon Road Abergavenny United Kingdom NP7 7EG

#### Study participating centre Northampton General Hospital

Northampton United Kingdom NN1 5BD

# Study participating centre Nottingham University Hospitals

City Hospital Campus Hucknall Road Nottingham United Kingdom NG5 1PB

#### Peterborough City Hospital

Peterborough & Stamford NHS FT Bretton Gate Peterborough United Kingdom PE3 9GZ

### Study participating centre

#### **Poole Hospital**

Poole Hospital NHS Foundation Trust Longfleet Road Dorset Poole United Kingdom BH15 2JB

#### Study participating centre Royal Bournemouth Hospital

Castle Lane East Bournemouth United Kingdom BH7 7DW

### Study participating centre

# Queen Elizabeth Hospital Birmingham

University Hospital Birmingham NHS Foundation Trust Queen Elizabeth Hospital Queen Elizabeth Medical Centre Edgbaston Birmingham United Kingdom B15 2TH

# Study participating centre

# Queen Elizabeth Hospital Gateshead

Sheriff Hill Gateshead United Kingdom NE9 6SX

#### Queen's Hospital Romford

Haematology & Oncology Department Queens Hospital Rom Valley Way Essex Romford United Kingdom RM7 0AG

### Study participating centre Raigmore Hospital

Department of Haematology Old Perth Road Inverness United Kingdom IV2 3UJ

#### Study participating centre Rotherham District General Hospital

Moorgate Road Oakwood Rotherham S60 2UD Rotherham United Kingdom S60 2UD

### Study participating centre Queen Alexandra Hospital

Portsmouth United Kingdom PO6 3LY

## Study participating centre Royal Cornwall Hospital

Truro United Kingdom TR1 3LJ

#### **Royal Derby Hospital**

Uttoxeter Road Derby United Kingdom DE22 3NE

### Study participating centre Royal Devon and Exeter Hospital

Barrack Road Devon Exeter United Kingdom EX2 5DW

#### Study participating centre Royal Gwent Hospital

Block 3, Pathology Royal Gwent Hospital Newport Gwent NP20 2UB Newport United Kingdom NP20 2UB

### Study participating centre Royal Hallamshire Hospital

Glossop Road Sheffield United Kingdom S10 2JF

# Study participating centre Royal Lancaster Infirmary

Ashton Road Lancaster United Kingdom LA1 4RP

#### Royal Liverpool University Hospital

Prescot Street Liverpool United Kingdom L7 8XP

## Study participating centre Royal Marsden Hospital

London London United Kingdom SW3 6JJ

### Study participating centre Royal Oldham Hospital

Central Admin, Pennine Square Rochdale Road Oldham United Kingdom OL1 2JH

### Study participating centre Royal Stoke University Hospital

Stoke-on-Trent United Kingdom ST4 6QG

### Study participating centre Royal Surrey County Hospital

Egerton Road Guildford United Kingdom GU2 7XX

# Study participating centre Royal United Hospital

Bath United Kingdom BA1 3NG

#### Study participating centre Russells Hall Hospital

Georgina Unit High Street Pensnett Dudley United Kingdom DY1 2HQ

#### Study participating centre Salford Royal Hospital

Salford Royal Hospital NHS Foundation Trust Stott Lane Salford Manchester M6 8HD Salford United Kingdom M6 8HD

### Study participating centre Salisbury District Hospital

Salisbury United Kingdom SB2 8BJ

#### Study participating centre Sandwell General Hospital

Lyndon West Midlands West Bromwich United Kingdom B71 4HJ

## Study participating centre Scunthorpe General Hospital

Cliff Gardens Scunthorpe United Kingdom DN15 7BH

### Study participating centre Diana, Princess of Wales Hospital

Scartho Road Grimsby United Kingdom DN33 2BA

# Study participating centre Singleton Hospital

Sketty Lane Swansea United Kingdom SA2 8QA

#### Study participating centre Southampton General Hospital

Tremona Road Southampton United Kingdom SO16 6YD

#### Study participating centre St Bartholomew's Hospital

West Smithfield London United Kingdom EC1A 7BE

# Study participating centre

# St. James's University Hospital

Department of Haematology, Level 3 Bexley Wing St. James's University Hospital Beckett Street Leeds United Kingdom LS9 7TF

# Study participating centre St George's Hospital

London

United Kingdom SW17 0QT

# Study participating centre Stoke Mandeville Hospital

CCHU Mandeville Road Buckinghamshire Aylesbury United Kingdom HP21 8AL

#### Study participating centre Torbay District General Hospital

Lawes Bridge South Devon Torquay United Kingdom TQ2 7AA

# Study participating centre University College London Hospital

235 Euston Road London United Kingdom NW1 2BU

# Study participating centre University Hospital Aintree

Lower Lane Liverpool United Kingdom L9 7AL

# Study participating centre University Hospital of Wales

Heath Park Cardiff United Kingdom CF14 4XW

# Study participating centre University Hospital Coventry

Clifford Bridge Road Coventry United Kingdom CV2 2DX

# Study participating centre Victoria Hospital Kirkcaldy

Fife Area Labs
Victoria Hospital (Kirkcaldy)
Hayfield Road
Kirkcaldy
Fife
KY2 5AH
Kirkcaldy
United Kingdom
KY2 5AH

#### Study participating centre Queen Margaret Hospital

Whitefield Road Dunfermline United Kingdom KY12 0SU

# Study participating centre Watford General Hospital

Watford United Kingdom WD18 0HB

# Study participating centre West Middlesex University Hospital Islamorth

Isleworth United Kingdom TW7 6AF

#### West Wales General Hospital

Glangwili General Hospital, Chemotherapy Day Unit, Dolgwili Road, Carmarthen, SA31 2AF Glangwili General Hospital Dolgwilli Road Carmarthen Carmarthenshire SA31 2AF Carmarthen United Kingdom SA31 2AF

#### Study participating centre Western General Hospital

Crewe Road Edinburgh United Kingdom EH4 2XU

#### Study participating centre Worcestershire Royal Hospital

Charles Hastings Way Worcester United Kingdom WR5 1DD

# Study participating centre Worthing Hospital

Lyndhurst Road Worthing United Kingdom BN11 2DH

# Study participating centre St Richards Hospital

Spitalfield Lane Chichester United Kingdom PO19 6SE

#### Wythenshawe Hospital

Department of Haematology University Hospital of South Manchester NHS Foundation Trust Southmoor Road Wythenshawe Manchester United Kingdom M23 9LT

### Study participating centre York Hospital

Wiggington Road York United Kingdom YO31 8HE

#### Study participating centre Ysbyty Gwynedd

Penrhosgarnedd Bangor United Kingdom LL57 1PW

# Study participating centre Ysbyty Maelor

Wrexham Maelor Hospital Croesnewydd Road Wrexham United Kingdom LL13 7TD

# Sponsor information

#### Organisation

University of Leeds (UK)

# Sponsor details

Clinical Trials Research Unit Leeds Institute of Clinical Trials Research Leeds England United Kingdom LS2 9JT

#### Sponsor type

University/education

#### **ROR**

https://ror.org/024mrxd33

# Funder(s)

#### Funder type

Charity

#### **Funder Name**

Cancer Research UK; Grant Codes: C18027/A15790

#### 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**

Janssen Pharmaceuticals

#### Alternative Name(s)

Janssen Pharmaceutica NV, JANSSEN-CILAG NV, Janssen Belgium, Janssen, Janssen Pharmaceuticals

#### **Funding Body Type**

Private sector organisation

#### Funding Body Subtype

For-profit companies (industry)

#### Location

Belgium

#### **Funder Name**

AbbVie Ltd

### **Results and Publications**

#### Publication and dissemination plan

Planned publication in a high-impact peer reviewed journal in 2024.

#### Intention to publish date

31/12/2024

#### Individual participant data (IPD) sharing plan

Individual participant data for all trial participants (excluding any trial-specific participant optouts) will be made available for secondary research purposes at the end of the trial, i.e. usually when all primary and secondary endpoints have been met and all key analyses are complete. Data will only be shared for participants who have given consent to use of their data for secondary research.

Requests to access trial data should be made to CTRU-DataAccess@leeds.ac.uk in the first instance. Requests will be reviewed (based on the above principles) by relevant stakeholders. No data will be released before an appropriate agreement is in place setting out the conditions of release. The agreement will govern data retention requirements, which will usually stipulate that data recipients must delete their copy of the data at the end of the planned project.

#### IPD sharing plan summary

Available on request

#### **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	22/08/2017		Yes	No
Protocol article	protocol update	08/01/2021	11/01/2021	Yes	No
Interim results article	interim results	04/05/2023	09/05/2023	Yes	No
HRA research summary			28/06/2023	No	No
Results article		10/12/2023	19/12/2023	Yes	No
Results article		15/06/2025	17/06/2025	Yes	No
Plain English results			28/10/2025	No	Yes