

# Best available therapy versus JAK Inhibition in patients with high risk polycythaemia vera or essential thrombocythaemia who are resistant or intolerant to hydroxycarbamide

<b>Submission date</b> 12/04/2012	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 12/04/2012	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 30/06/2023	<b>Condition category</b> Cancer	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

<https://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/a-trial-looking-ruxolitinib-treat-polycythaemia-vera-essential-thrombocythaemia-majic>

## Contact information

### Type(s)

Scientific

### Contact name

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### Contact details

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## Additional identifiers

### EudraCT/CTIS number

2011-005279-18

### IRAS number

### ClinicalTrials.gov number

## Secondary identifying numbers

11941

# Study information

## Scientific Title

A randomised study of best Available therapy versus JAK Inhibition in patients with high risk polycythaemia vera or essential thrombocythaemia who are resistant or intolerant to hydroxycarbamide

## Acronym

MAJIC

## Study objectives

MAJIC is a phase II, randomised, open-label, two arm, multicentre clinical trial. The trial aims to investigate and evaluate the activity and safety (in terms of complete haematological response within one year) of Ruxolitinib in the treatment of patients with Polycythaemia Vera (PV) or Essential Thrombocythaemia (ET) who have met criteria for resistance or intolerance of hydroxycarbamide (HC) therapy.

More information can be found at <http://public.ukcrn.org.uk/search/StudyDetail.aspx?StudyID=11941>

On 10/03/2015 the overall trial end date was changed from 02/12/2013 to 31/07/2020.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

NRES Committee North West - Liverpool Central, 25/01/2012, ref: 12/NW/0045

## Study design

Randomised; 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

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

Topic: National Cancer Research Network; Subtopic: Haematological Oncology; Disease: Miscellaneous

## **Interventions**

1. Ruxolitinib, JAK I/II inhibitor
2. Best Available Therapy: This would be the clinicians choice of second line treatment that the patient would receive outside of the trial. This can be any active (non investigational) agent used alone or in combination but not solely venesection or supportive care.

Follow Up Length: 60 month(s)

Study Entry : Single Randomisation only

## **Intervention Type**

Drug

## **Phase**

Phase II

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

Ruxolitinib

## **Primary outcome measure**

Complete response rates within 1 year

## **Secondary outcome measures**

1. Partial response rates as defined by European LeukemiaNet criteria within 1 year of treatment
2. Duration of response
3. Toxicity profile of Ruxolitinib based on CTC criteria
4. Dose Intensity
5. Histological response: bone marrow biopsy analysis criteria as defined by European LeukemiaNet
6. Molecular response: JAK2V617F status quantitation; criteria defined by European LeukemiaNet
7. Haemorrhagic and thromboembolic event rate
8. Quality of life and disease symptom burden
9. Overall survival
10. Progression free survival

## **Overall study start date**

04/06/2012

## **Completion date**

28/03/2022

## **Eligibility**

### **Key inclusion criteria**

Inclusion criteria for PV:

1. Male or female patient  $\geq 18$  years of age

2. A confirmed diagnosis of high risk PV. High Risk is defined as ANY ONE of the following
  - 2.1. Age >60 years
  - 2.2. Previous documented thrombosis
  - 2.3. Erythromelalgia or migraine (severe, recurrent, requiring medications, and felt to be secondary to the MPN) either after diagnosis or within 10 years before diagnosis and considered to be disease-related
  - 2.4. Significant splenomegaly (i.e. > 5cm below costal margin on palpation) or symptomatic (splenic infarcts or requiring analgesia)
  - 2.5. Platelets > 1000 x 10<sup>9</sup>/L
  - 2.6. Diabetes or hypertension requiring pharmacological therapy for > 6 months

**Inclusion criteria for ET:**

1. Male or female patient ≥18 years of age
  2. A confirmed diagnosis of high risk ET. High risk is defined as ANY ONE of the following:
    - 2.1. Age > 60 years
    - 2.2. Platelet count > 1500 x 10<sup>9</sup>/L
    - 2.3. Previous documented thrombosis
    - 2.4. Erythromelalgia or migraine (severe, recurrent, requiring medications, and felt to be secondary to the MPN) either after diagnosis or within 10 years before diagnosis and considered to be disease-related
    - 2.5. Previous haemorrhage related to ET Diabetes or hypertension requiring pharmacological therapy for > 6 months
  3. ALL patients must also be either intolerant OR resistant to Hydroxycarbamide (HC) based on the following established criteria: Any ONE of the following:
    - 3.1. Platelet count >600 x 10<sup>9</sup>/L after 8 weeks of at least 2 g/day or maximum tolerated dose (MTD) of HC (2.5 g/day in patients with a body weight >80 kg)
    - 3.2. Platelet count >400 x 10<sup>9</sup>/L and WBC < 2.5 x 10<sup>9</sup>/L at any dose of HC (for a period of at least 8 weeks)
    - 3.3. Platelet count >400 x 10<sup>9</sup>/L and Hb < 11 g/dl at any dose of HC (for a period of at least 8 weeks)
    - 3.4. Platelet count persistently <100 x 10<sup>9</sup>/L at any dose of HC (for a period of at least 8 weeks)
    - 3.4. Progressive splenomegaly or hepatomegaly i.e. enlargement by more than 5cm or appearance of new splenomegaly or hepatomegaly on HC treatment
    - 3.5. Not achieving the desired reduction of haematocrit or packed cell volume with the addition of HC in patients who do not tolerate frequent venesections after 8 weeks of at least 2 g/day of HC (2.5 g/day in patients with a body weight >80 kg)
    - 3.6. Not achieving the desired stable reduction of WBC when leukocytes are a target of therapy after 8 weeks of at least 2 g/day or MTD of HC (2.5 g/day in patients with a body weight >80 kg)
    - 3.7. Thrombosis or haemorrhage while on therapy
    - 3.8. Presence of leg ulcers or other unacceptable HC-related non-haematological toxicities, such as unacceptable mucocutaneous manifestations, gastrointestinal symptoms, pneumonitis or fever at any dose of HC OR Cycling platelet counts on therapy
- Target Gender: Male & Female ; Lower Age Limit 18 years

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

Planned Sample Size: 290; UK Sample Size: 290

**Total final enrolment**

306

**Key exclusion criteria**

1. Pregnant and lactating patients (patients of childbearing potential must have a negative pregnancy test prior to study entry)
2. Patients and partners of childbearing potential not willing to use effective contraception
3. Eastern Cooperative Oncology Group Performance Status Scale (ECOG) Performance Status Score  $\geq 3$
4. Current rapid or paroxysmal atrial fibrillation
5. Uncontrolled or unstable angina
6. Recent (6 months) myocardial infarction or acute coronary syndrome or any clinically significant cardiac disease > New York Heart Association (NYHA) Class II
7. Previous treatment with a Janus kinase 2 (JAK2) inhibitor
8. Previous (within the last 12 months) or current platelet count  $< 100 \times 10^9/L$  or neutrophil count  $< 1 \times 10^9/L$  not due to therapy
9. Inadequate liver function as defined by aspartate aminotransferase/alanine aminotransferase (ALT/AST)  $> 1.5 \times$  upper limit normal (ULN)
10. Inadequate renal function as defined by Glomerular filtration rate (GFR)  $< 15$  mls/min
11. Unable to give informed consent

**Date of first enrolment**

04/06/2012

**Date of final enrolment**

31/07/2015

**Locations**

**Countries of recruitment**

England

United Kingdom

**Study participating centre**

University of Birmingham

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 & Lymphoma Research (UK)

# Results and Publications

## Publication and dissemination plan

Paper on the primary endpoint data for PV patients is in progress. We will also be planning for a final paper on ET patients, this cohort of patients completed follow up in Feb-2020. Further publications will be forthcoming after follow up is complete for all patients and the end of trial report is produced in 2022. (added 20/07/2020)

## Intention to publish date

28/03/2023

## Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from the Trial Management Group (contact [majic@trials.bham.ac.uk](mailto:majic@trials.bham.ac.uk)) who will review any requests for data sharing following the end of trial report in 2022.

## IPD sharing plan summary

Available on request

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Plain English results</a>			25/10/2022	No	Yes
<a href="#">Basic results</a>		29/03/2023	29/03/2023	No	No
<a href="#">HRA research summary</a>			28/06/2023	No	No
<a href="#">Results article</a>		01/07/2023	30/06/2023	Yes	No