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A study to test the safety of INCB160058 in participants with blood cancers

Submission date
31/10/2025

Recruitment status
Stopped

Registration date
13/02/2026

Overall study status
Stopped

Last Edited
13/08/2026

Condition category
Cancer

[X] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[ ] Record updated in last year

Plain English summary of protocol

Background and study aims
Myeloproliferative neoplasms (MPNs) are blood cancers in which the bone marrow produces too many blood cells (oxygen-carrying cells [red blood cells], infection-fighting cells [white blood cells], or blood-clotting cells [platelets]). MPNs can be caused by a change (mutation) in the JAK2 gene called JAK2V617F, which causes the bone marrow to make abnormal blood cells. These conditions can lead to problems like anaemia, bleeding, or increased risk of blood clots. INCB160058 is an oral drug (medicine you take by mouth) that is designed to block the mutation and help control the overproduction of blood cells that aren't working well. This study is being done to find out how INCB160058 works in the body, to find the adequate dose, to find out if there are any side effects (unwanted medical events that the study doctor thinks might be related to INCB160058), and to find out if it works to treat MPNs. This study is also being done to see how INCB160058 works in combination with a standard disease-directed therapy to treat myelofibrosis with the JAK2V617F mutation.

Who can participate?
Patients aged 18 years and over with myelofibrosis (MF), polycythemia vera (PV), or essential thrombocythemia (ET) - collectively known as myeloproliferative neoplasms (MPN) - and a positive JAK2V617F mutation

What does the study involve?
This study is conducted in two parts. Dose escalation tests different doses of the study drug, whereas the second part, dose expansion, will further test how safe, tolerable and effective the study drug is. Each participant will be in this study for approximately 12 months.

What are the possible benefits and risks of participating?
Benefits not provided at time of registration.

Participants may experience adverse events (AEs) or serious adverse events (SAEs) related to the study drug or procedures. These can include new or worsening symptoms, abnormal physical findings, or laboratory abnormalities that are clinically meaningful, induce clinical signs or symptoms, require additional therapy, or necessitate changes in study drug. All SAEs must be reported immediately (within 24 hours) and followed until resolution, stabilization, explanation,

or loss to follow-up. This may require additional visits or contacts.
Common AEs across the JAK inhibitors include, but are not limited to, thrombocytopenia, anemia, bruising, nausea, and diarrhoea.
The primary clinical risks with ruxolitinib treatment are the potential sequelae of decreased hematopoietic proliferation attributable to the inhibition of growth factor pathways associated with JAK inhibition. Increased rates of infection and anemia are potential risks of myelosuppression, and there are multiple sequelae of anemia, including the burden and risks of transfusion. The combination of INCB160058 with ruxolitinib is expected to result in minimal added toxicity. Complete blood counts will be closely monitored during the study, and supportive care will be given when clinically indicated (e.g., pRBC and platelet transfusions).
This study will evaluate escalating doses of INCB160058 administered as a single agent first before initiating combination treatment with ruxolitinib. The study design will maximize participant safety while important PK and safety information is collected. Dose escalation with combination treatment will proceed in participants with MF SubOpt R after initial characterization of the safety, PK, and PD effects of INCB160058 as monotherapy in MF. In addition, the starting dose of INCB160058 in combination with ruxolitinib will be at least one dose lower than the highest dose declared tolerable during monotherapy dose escalation.
All AEs will be monitored in all participants to identify occurrences of any safety concerns or potentiation of any ruxolitinib-related AEs. In addition, PK sampling will be performed to evaluate the steady-state concentration of ruxolitinib with and without INCB160058 to evaluate the potential for a DDI between INCB160058 and ruxolitinib.
Participants will undergo comprehensive physical examinations at screening and end-of-treatment (EOT) visits, including assessments of multiple organ systems and a brief neurological exam. During the study, targeted physical exams will be performed as indicated by symptoms or findings. Regular monitoring of vital signs (blood pressure, pulse, respiratory rate, temperature) and laboratory tests may be required, which can be time-consuming and may cause discomfort.
Male and female participants of reproductive potential must take appropriate precautions to avoid pregnancy or fathering children during the study and for a specified period after the last dose. This includes using permitted methods of contraception and refraining from donating sperm or oocytes. Female participants of childbearing potential must undergo pregnancy testing at screening and on Day 1 of each cycle.
Participants' personal information will be handled according to data protection laws (e.g., HIPAA, GDPR). There is a potential risk of data breaches, which could lead to unauthorized disclosure or access to personal data. The sponsor has incident response procedures in place to address such events.
Participation may require multiple visits, assessments, and follow-up contacts, which can be burdensome in terms of time and travel.
Bone marrow exams are generally safe procedures. Complications are rare but can include: excessive bleeding, infection, generally of the skin at the site of the exam, long-lasting discomfort at the bone marrow exam site and rarely, penetration of the breastbone (sternum) during sternal aspirations, which can cause heart or lung problems.
A contrast agent may be injected through a vein before the CT scan. This may cause an allergic reaction like mild itching and rash to more serious reactions like trouble breathing, shock, or rarely death. It may cause kidney problems if participant is dehydrated or their kidneys don't work well. Participants will be asked questions and may undergo tests to ensure that the CT contrast agent is safe. The radiation dose from a CT scan of the participant's spleen and liver is equivalent to around 4 to 8 years of natural background radiation. If participants are unable to have MRI scans, they will have up to ten CT scans over two years. Undergoing ten CT scans during this study may increase the chances of getting cancer to about 51% i.e. an increase of around 1%. When conducting an MRI participants may experience claustrophobia, nervousness, and sweating. The patient will be asked questions to ensure the MRI scan is safe for them. Participants with metal near important organs may not receive an MRI.

Where is the study run from?
Incyte

When is the study starting and how long is it expected to run for?
October 2025 to February 2029

Who is funding the study?
Incyte

Who is the main contact?
Dr Claire Harrison, Claire.Harrison18@nhs.net

Contact information

Type(s)
Public, Scientific, Principal investigator

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Additional identifiers

ClinicalTrials.gov (NCT)
NCT06313593

Integrated Research Application System (IRAS)
1012793

Protocol serial number
INCB 160058-101

Study information

Scientific Title
A Phase I, open-label, multicenter study of INCB160058 in participants with myeloproliferative neoplasms

Study objectives
Primary objective:
To evaluate the safety, tolerability, and DLTs and determine the MTD and/or RDE(s) of INCB160058 administered as monotherapy or in combination with ruxolitinib.

Secondary objectives:
1. To further characterize the safety profile of INCB160058 administered as monotherapy or in combination with ruxolitinib.
2. To evaluate the PK of INCB160058 administered as monotherapy or in combination with ruxolitinib.
3. To determine the preliminary efficacy of INCB160058.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 20/01/2026, London - Surrey Borders Research Ethics Committee (Equinox House City Link, Nottingham, NG2 4LA, United Kingdom; -; surreyborders.rec@hra.nhs.uk), ref: 25/LO/0862

Primary study design
Interventional

Allocation
Non-randomized controlled trial

Masking
Open (masking not used)

Control
Uncontrolled

Assignment
Parallel

Purpose
Treatment

Study type(s)
Efficacy, Safety

Health condition(s) or problem(s) studied
Myeloproliferative neoplasms

Interventions
This is a phase I open-label multicenter study. This study has two arms: INCB160058 as monotherapy and INCB160058 in combination with Ruxolitinib. Both INCB160058 and Ruxolitinib will be administered as tablets taken orally. Part 1 Dose Escalation - with MF, PV or ET: INCB160058 will be administered at a protocol-defined starting regimen to identify the maximum tolerated dose (MTD) and/or recommended dose for expansion (RDE[s]). Participants with myelofibrosis (MF), polycythemia vera (PV) or essential thrombocythemia (ET) will enrol in this group. Part 2 Dose Expansion - with MF, PV or ET: INCB160058 will be administered at the RDE(s) identified during Part 1. Participants with MF, PV or ET will enrol in this group.

Intervention Type
Drug

Phase
Phase I

Drug/device/biological/vaccine name(s)
INCB160058, ruxolitinib

Primary outcome(s)
1. DLTs: Dose-limiting toxicity will be defined as the occurrence of any of the toxicities as per protocol. DLTs have a 28-day observation period.
2. TEAEs: Defined as adverse events reported for the first time or worsening of a pre-existing event after first dose of study drug. Timeframe is up to two years and 30 days.
3. TEAEs leading to study drug modifications (e.g., interruptions) and discontinuation: Timeframe is up to two years and 30 days.

Key secondary outcome(s)
1. INCB160058 pharmacokinetic (PK) in Plasma: INCB160058 concentration in plasma. Timeframe up to day 57.
2. For participants with MF: Response using the revised IWG-MRT and ELN response criteria for MF: Defined as the percentage of participants with Response using the revised International Working Group for Myelofibrosis Research and Treatment (IWG-MRT) and European LeukemiaNet (ELN) response criteria. At Week 12 and 24 and then every 24 weeks up to 2 years.
3. For participants with MF: Percentage of participants achieving spleen volume reduction as defined in the protocol: Defined as percentage of participants with a protocol defined Spleen Volume Reduction. At Week 12 and Week 24.
4. For participants with PV: Response using revised IWG-MRT and ELN response criteria for PV: Defined as the percentage of participants with Response using the revised International Working Group for Myelofibrosis Research and Treatment (IWG-MRT) and European LeukemiaNet (ELN) response criteria. At Week 12 and 24 and then every 24 weeks up to 2 years.
5. For participants with ET: Response using revised IWG-MRT and ELN response criteria for ET: Defined as the percentage of participants with Response using the revised International Working Group for Myelofibrosis Research and Treatment (IWG-MRT) and European LeukemiaNet (ELN) response criteria. At Week 12 and 24 and then every 24 weeks up to 2 years.
6. For all participants: Percentage of participants achieving ≥ 50% reduction from baseline of total symptom score (TSS): Defined as the percentage of participants achieving ≥ 50% reduction from baseline of TSS. At Week 24.
7. For all participants: Symptom improvement in TSS at Weeks 12 and 24 relative to baseline as measured by the Myeloproliferative Neoplasms Symptom Assessment Form (MPN-SAF) TSS: Defined as the proportion of participants who achieve a protocol defined reduction in Total Symptomatic Score (TSS) relative to baseline as measured by the MPN-SAF TSS. At Week 12 and Week 24.

Completion date
31/12/2026

Reason abandoned (if study stopped)
Objectives no longer viable

Eligibility

Key inclusion criteria

1. Ability to comprehend and willingness to sign a written ICF for the study.
2. Age ≥18 years at the time of signing the ICF.
3. Participants with MF: Participants with DIPSS/DIPSS Plus intermediate-1 or greater MF or MYSEC-PM intermediate-1 or greater secondary MF. For the monotherapy MF cohort only, participants must have been previously treated with at least 1 JAK inhibitor for ≥ 12 weeks and are resistant, refractory, intolerant to, or have lost response to JAK inhibitor treatment.
4. Participants with MF: Histopathologically confirmed diagnosis of PMF, post–PV-MF, or post–ET-MF according to the 2022 ICC criteria (Arber et al 2022).
5. Participants with MF: Evidence of evaluable burden of disease:
5.1. Radiologic confirmation of splenomegaly (spleen volume ≥ 450 mL per MRI or CT).
or
5.2. Palpable spleen ≥ 5 cm below the left subcostal margin on physical examination at the screening visit.
6. ECOG performance status score of the following:
6.1. 0 or 1 for the dose-escalation part.
6.2. 0, 1, or 2 for the dose-expansion part.
7. Life expectancy of greater than 6 months, according to the assessment of the investigator.
8. Willingness to undergo a pretreatment and regular on-study BM biopsies and aspirates (as appropriate to disease). Archival tissue collected after the last line of therapy and within 4 months prior to C1D1 may be used in place of a fresh (within the screening period) pretreatment BM biopsy.
9. Existing documentation of JAK2V617F mutation (from a test ordered locally) prior to C1D1 (obtained by molecular assays such as next-generation targeted sequencing or PCR).
10. Willingness to avoid pregnancy or fathering children based on the criteria below:
10.1. Male participants with reproductive potential must agree to take appropriate precautions to avoid fathering children from screening through 90 days (a spermatogenesis cycle) after the last dose of study treatment and must refrain from donating sperm during this period. Permitted methods in preventing pregnancy (see Appendix A) should be communicated to the participants and their understanding confirmed.
10.2. Female participants who are WOCBP must have a negative serum pregnancy test at screening and a negative urine/serum pregnancy test before the first dose on Day 1 and must agree to take appropriate precautions to avoid pregnancy from screening through the safety follow-up visit and must refrain from donating oocytes during this period. Permitted methods in preventing pregnancy (see Appendix A) should be communicated to the participants and their understanding confirmed.
10.3. Female participants who are women not of childbearing potential (defined in Appendix A) are eligible
11. Participants with MF: Myeloblast count <10% in the BM (or in the peripheral blood if BM is not evaluable)
12. Participants with PV: Confirmed diagnosis of PV according to the 2022 ICC criteria (Arber et al 2022)
13. Participants with PV: Participants who have been previously treated with at least 1 prior standard cytoreductive therapy and are resistant, refractory, intolerant to, or have lost response to treatment
14. Participants with ET: Confirmed diagnosis of ET according to the 2022 ICC criteria (Arber et al 2022)
15. Participants with ET: Participants who have been previously treated with at least 1 prior standard cytoreductive therapy and are resistant, refractory, intolerant to, or have lost response to treatment
16. Participants with ET: High risk defined as follows:
16.1. Age ≥ 60 years at the time of signing the ICF
or

16.2. History of thrombosis (arterial or venous)
or
16.3. History of major bleeding (related to the underlying disease)
or
16.4. Bleeding risk, defined as current platelet count > 1 × 1012/L (or documented history of platelet count > 1 × 1012/L and on ongoing cytoreductive therapy)
17. Participants with ET: Platelet count > 450 × 109/L
18. Participants with MF SubOpt R:
18.1. Intermediate- or high-risk DIPSS/DIPSS Plus or MYSEC-PM MF (according to IWG-MRT criteria)
18.2. Must have been on a therapeutic regimen of ruxolitinib (i.e., dose and dose regimen of ruxolitinib between 5 and 25 mg BID to treat MF) for at least 12 weeks and at least 8 consecutive weeks on a stable dose immediately preceding the first dose of study treatment (see Section 6.1)
18.3. Unlikely to benefit from further ruxolitinib monotherapy in the opinion of the investigator and meet the criteria for evidence of evaluable burden of disease as defined in Inclusion Criterion 5

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
18 Years

Upper age limit
110 Years

Sex
All

Total final enrolment
37

Key exclusion criteria
1. Presence of any hematologic malignancy requiring active treatment other than PMF, post–PV-MF, post–ET-MF, PV, or ET
2. Active invasive malignancy
3. Prior therapy for disease under study as described in protocol
4. Medical history as described in protocol
5. Medications as described in protocol
6. Organ function as described in protocol

Date of first enrolment
13/02/2026

Date of final enrolment
23/07/2026

Locations

Countries of recruitment
United Kingdom

England

Canada

France

Germany

Italy

Norway

Switzerland

Study participating centre
Guys and St Thomas Hospital
Great Maze Pond
London
England
SE1 9RT

Study participating centre
GenesisCare
-
-
England
-

Sponsor information

Organisation
Incyte (United States)

ROR
https://ror.org/00cvzzg84

Funder(s)

Funder type

Funder Name
Incyte

Alternative Name(s)
Incyte Corporation, Incyte Corp

Funding Body Type
Government organisation

Funding Body Subtype
For-profit companies (industry)

Location
United States of America

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not expected to be made available