

# A clinical study in order to compare the effectiveness and safety of two different treatments in patients with newly diagnosed primary immune thrombocytopenia

<b>Submission date</b> 06/07/2023	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 04/09/2023	<b>Overall study status</b> Ongoing	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 18/11/2025	<b>Condition category</b> Haematological Disorders	<input type="checkbox"/> Individual participant data
		<input checked="" type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

RODEX is investigating immune thrombocytopenia (ITP), and an autoimmune disease where the immune system attacks important blood cells called platelets, which are essential for normal clotting. Patients with ITP have reduced numbers of platelets and are at risk of bleeding. A course of corticosteroids (steroids – a man-made version of a hormone the body makes naturally) is recommended as the first line of treatment for adults with newly diagnosed ITP. Most patients with ITP respond to corticosteroids with a rise in platelet count, but improvements are usually temporary and the majority of patients will relapse. The objective of RODEX is to find out if a two-drug combination of corticosteroids (dexamethasone) plus a medicine called romiplostim is better than dexamethasone alone for the first-line of treatment of ITP. Romiplostim is a thrombopoietin-receptor agonist (TPO-RA). Thrombopoietin (TPO) is the natural chemical that the body produces to tell the bone marrow to make more platelets. TPO-RA's are treatments that act like the body's own TPO to increase the number of platelets that are produced.

### Who can participate?

Adult ( $\geq 18$  years old) patients recently diagnosed with ITP with a low platelet count and no prior ITP treatment

### What does the study involve?

RODEX will recruit up to 126 patients at up to 30 hospital sites in the European Economic Area (EEA), including Spain and Italy, and up to 15 sites and 26+ participants in England, Wales and Scotland, UK. Adult patients will be eligible to take part if they meet the eligibility criteria. Participants will be randomly allocated by a computer to receive a course of dexamethasone alone (control arm) or dexamethasone plus romiplostim (investigational arm) and followed up for up to 2 years (screening, day 1, week 8, week 12, month 6, month 12, and end of Study Visit) to find out if dexamethasone plus romiplostim can improve long-term treatment response and avoid bleeding. Study treatments and visits will vary slightly dependent on the study arm.

What are the possible benefits and risks of participating?

You will not be paid or receive any incentive for participating in this study. The additional study assessments you receive may help to identify health conditions and care options that would not otherwise be identified through your routine care. However, the study may not benefit you personally. We hope that the research could in the future improve the care and prognosis of other patients with ITP.

The study PIS lists the main risks and burdens of the study, including common side effects of the study drugs and other medications that should not be taken with the study treatment, and other types of risks and burdens associated with the study. The PIS refers the participant to the IMP (romiplostim and dexamethasone) package inserts and treating doctor for further information about drug-related risks and toxicities. The PIS risks and side effects section text is based on information provided in the submitted SPCs, IBs, and Amgen Risks and Discomforts mandated text.

The most frequently observed side effects of romiplostim are:

- Hypersensitivity reactions (including rare cases of rash, urticaria and angioedema)
- Headache and dizziness
- Difficulty in sleeping
- Abdominal pain, upset stomach and vomiting
- Pain in extremities (arms and legs), muscles and bones
- Progression of existing Myelodysplastic Syndrome (MDS; A group of disorders resulting from poorly formed or dysfunctional blood cells that cause tiredness, difficulty in breathing, pale skin, frequent infections, easy bruising and bleeding)

Among the more serious side effects of romiplostim are:

- Low platelets (a type of white blood cells that helps fight infections)
- High platelets leading to bleeding
- Increased likelihood of a blood clot
- Increased fibres in the bone marrow

The frequency of side-effects to dexamethasone are less well documented but include:

- Difficulty sleeping
- Changes in mood (euphoria most frequent, but also including negative feelings)
- Increased blood sugars
- Stomach irritation and intestinal perforation
- Increased susceptibility to infection and masking of infection symptoms
- Changes in white blood cells (defences) and coagulation
- Hypersensitivity reactions
- Endocrine disorders, such as weight gain
- Cardiovascular disorders (arterial hypertension, bradycardia, deterioration of severe heart failure, and difficulty regulating blood pressure)

These side effects will be minimised via a strict drug dosing and dose reduction schedule and regular toxicity assessment reporting throughout the study treatment period. Participants who have significant side effects will stop treatment but be followed up for safety reasons. Safety events will be monitored regularly in real-time and by oversight groups.

Dexamethasone is known to affect the development of male sperm and the female ovarian cycle. The effects of Romiplostim on sperm and the ovarian cycle are unclear. The ability of either drug to cross the placental barrier between mother and child, and the effects of either

drug on the unborn child are unclear. So the drugs are only recommended to be given to pregnant mothers if the benefit outweighs the risks for the mother and child. Participants of childbearing age will have the inconvenience of taking contraception to avoid pregnancy of female participants and female partners of male participants. Participants will be given strict contraception guidance and advised that they should avoid pregnancy. Participants unwilling to use suitable contraception will not be permitted to participate. Individuals who become pregnant during and up to 30 days after the participant stopped study treatment will be asked to provide optional consent for the collection of pregnancy data to support follow-up for safety reasons.

Risks related to other study procedures include:

- Taking part will take some time that may not otherwise have been taken, for example, to complete the consent form, attend extra visits for study assessments and blood sample collections, and complete the study questionnaires.
- Blood collection can occasionally be associated with dizziness, hematoma formation, infection at the injection site, needle phobia, and multiple attempts punctures to locate the veins.
- Quality of life questionnaires may include topics and questions that are upsetting to some patients. Patients may choose not to complete individual questions and/or questionnaires. If they are upset by this part of the study they may seek support from their study doctor/nurse who will signpost them to appropriate local resources.

The number of study-specific assessment visits, blood sample collections, and questionnaires has been restricted to the minimum number required to answer the study questions and, thus, reduce the impact of these additional burdens.

Where is the study run from?

Bristol Medical School, University of Bristol (UK)

When is the study starting and how long is it expected to run for?

July 2023 to October 2026

Who is funding the study?

Andalusian Public Foundation for Health Research Management of Seville (FISEVI) (Fundación Pública Andaluza para la Gestión de la Investigación en Salud de Sevilla)

Who is the main contact?

RODEX UK National Coordinator, [RODEX@cardiff.ac.uk](mailto:RODEX@cardiff.ac.uk)

## Contact information

### Type(s)

Public, Scientific

### Contact name

Dr RODEX UK National Coordinator

### Contact details

Centre for Trials Research  
Neuadd Merionnydd  
Heath Park  
Cardiff

United Kingdom  
CF14 4YS  
-  
RODEX@cardiff.ac.uk

### **Type(s)**

Principal investigator

### **Contact name**

Dr Charlotte Bradbury

### **Contact details**

Consultant Senior Lecturer  
Bristol  
United Kingdom  
BS2 8HW  
+44 (0)160 63307300  
c.bradbury@bristol.ac.uk

## **Additional identifiers**

### **ClinicalTrials.gov (NCT)**

NCT05325593

### **Clinical Trials Information System (CTIS)**

2021-006970-22

### **Integrated Research Application System (IRAS)**

1007244

### **Central Portfolio Management System (CPMS)**

57733

## **Study information**

### **Scientific Title**

A multicentre, randomized, open-label study of romiplostim plus dexamethasone vs dexamethasone in patients with newly diagnosed primary immune thrombocytopenia

### **Acronym**

RODEX

### **Study objectives**

Primary objectives:

To evaluate the superiority of romiplostim plus dexamethasone vs dexamethasone alone after 6 months ( $\geq 180$  days) from treatment cessation in patients with newly primary immune thrombocytopenia (ITP) in terms of sustained response off any ITP treatment (6mSROT-50) and without WHO grade 2 or more bleeding.

## Secondary objectives:

To evaluate the superiority of experimental arm after 6 and 12 months from treatment cessation in terms of sustained response off any ITP

treatment(6mSROT-30,12mSROT-30 and 12mSROT-50)and without WHO grade 2 or more bleeding

To evaluate the superiority of experimental arm in terms of complete response,response,global response and response within the target range

To compare the time to first response,the proportion of patients with early response and initial response

To compare the duration of platelet response,the time to loss of response in patients who achieved response,the proportion of patients

requiring any rescue treatment along the study period

To evaluate and compare proportion of treatment failure and time to treatment failure

To evaluate the safety and tolerability

To compare the difference between study arms in the mean change in patients bleeding and the change in patients quality of life

To describe and compare healthcare resources use and loss of productivity

## Ethics approval required

Ethics approval required

## Ethics approval(s)

approved 01/09/2023, Wales Research Ethics Committee 1 (Health and Care Research Wales Support and Delivery Centre, Castlebridge 4, 15-19 Cowbridge Road East, Cardiff, CF11 9AB, United Kingdom; +44 292 2940931; Wales.REC1@wales.nhs.uk), ref: 23/WA/0199

## Study design

Randomized controlled open-label parallel-group study

## Primary study design

Interventional

## Study type(s)

Efficacy, Quality of life, Safety, Treatment

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

Primary immune thrombocytopenia

## Interventions

Participants are assigned to groups via a randomisation process that will be stratified by site with a 1:1 allocation to either the investigational or comparator trial arm. Investigational arm (dexamethasone plus romiplostim): dexamethasone tablet taken orally a dose of 40mg daily on days 1-4 of the first cycle, plus a single subcutaneous romiplostim injection self-administered at home by the participant and/or administered in clinic by a healthcare professional weekly at a starting dose of 3mcg/kg calculated on current body weight and adjusted on a weekly basis following strict protocol dosing rules according to platelet counts. Participants will remain on treatment for up to 12 months. Comparator arm (dexamethasone only): dexamethasone tablet is taken orally at a dose of 40mg daily on days 1-4 for up to 3 cycles every 14 to 28 days. Participants will remain on treatment for up to 3 months. Participants in both arms will be followed up for up to two years. Participants will be randomised on a trial 1:1 basis by site.

## Intervention Type

Drug

## Phase

Phase III

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

Romiplostim, dexamethasone

## Primary outcome(s)

The proportion of patients achieving 6mSROT-50 at 6 months (180 days) from treatment cessation.

Definition of 6mSROT-50: platelets higher than or equal to  $50 \times 10^9/L$  in the absence of any ITP treatment including any rescue treatment for at least 6 consecutive months ( $\geq 180$  days) from treatment cessation and without WHO grade 2 or more bleeding.

## Key secondary outcome(s)

1. The proportion of patients achieving 6mSROT-30 at 6 months (180 days) from treatment cessation
2. The proportion of patients achieving 12mSROT-50 at 12 months (365 days) from treatment cessation
3. The proportion of patients achieving 12mSROT-30 at 12 months (365 days) from treatment cessation
4. The proportion of patients with complete response (CR) at 6 months (Day 180), at 12 months (Day 365) from randomisation and at End of study Visit (visit 12 months after the last dose of study treatment). This will be evaluated in the total sample and in the absence of any rescue treatment
5. The proportion of patients with response (R) at 6 months (Day 180), at 12 months (Day 365) from randomisation and at end of study Visit (visit 12 months after the last dose of study treatment). This will be evaluated in the total sample and in the absence of any rescue treatment.
6. The proportion of patients with global response (GR) at 6 months (Day 180), at 12 months (Day 365) from randomisation and End of study Visit (visit 12 months after the last dose of study treatment). This will be evaluated in the total sample and in the absence of any rescue treatment.
7. The proportion of patients with response within the target range (TR) at 6 months (Day 180), and at 12 months (Day 365) from randomisation and end of study Visit (visit 12 months after the last dose of study treatment). This will be evaluated in the total sample and in the absence of any rescue treatment.
8. The median time to first response defined as the time from randomization to first response (R) in the absence of any rescue treatment. This will be evaluated in the total sample and in the absence of any rescue treatment.
9. The proportion of patients with early response (ER) and initial response (IR)
10. Mean maximum number of consecutive days with platelet response (CR, R, GR and TR) along the study period. This will be evaluated in the total sample and in the absence of any rescue treatment.
11. Mean number of days with platelet response (CR, R, GR and TR) along the study period. This will be evaluated in the total sample and in the absence of any rescue treatment.
12. The proportion of patients who need rescue treatments and proportion and time to treatment failures

13. The time to loss of response (LoR) in patients who achieved response
14. The proportion of patients requiring any rescue treatment along the study period
15. The proportion of patients with adverse events (AEs), including serious adverse events (SAEs) and laboratory safety parameters. AEs will be graded according to National Cancer Institute Common Terminology Criteria for Adverse Events (CTCAE) version 5.0. Bleeding events will be carefully monitored.
16. Mean change in patients' bleeding from screening to Day 1, Week 8, Week 12, Month 6, Month 12 and End of study Visit (visit 12 months after the last dose of study treatment) assessed with the ITP-bleeding tool.
17. The mean change in patients' quality of life from baseline Day 1 (the day of administration of the first dose of study medication) to Week 8, Month 6 (Day 180), Month 12 (Day 365) from randomisation and End of study Visit (visit 12 months after the last dose of study treatment) assessed with SF-36v2, FACIT-F and ITP-PAQ in both arms.
18. Healthcare resources use (HRU) from treatment initiation to end of study (outpatient visits and home health care, hospitalizations and emergency visits, diagnostic procedures, pharmacological and non-pharmacological treatments and HRU related to management of adverse drug reactions) and loss of productivity (number of days of absenteeism from school or work and associated cost).

- Definition of 6mSROT-30: platelets higher or equal than  $30 \times 10^9/L$  in the absence of any ITP treatment including any rescue treatment for at least 6 consecutive months ( $\geq 180$  days) from treatment cessation and without WHO grade 2 or more bleeding.
- Definition of 12mSROT-50: platelets higher or equal than  $50 \times 10^9/L$  in the absence of any ITP treatment including any rescue treatment for at least 12 consecutive months ( $\geq 365$  days) from treatment cessation and without WHO grade 2 or more bleeding.
- Definition of 12mSROT-30: platelets higher or equal than  $30 \times 10^9/L$  in the absence of any ITP treatment including any rescue treatment for at least 12 consecutive months ( $\geq 365$  days) from treatment cessation and without WHO grade 2 or more bleeding.
- Definition of CR: platelet count  $\geq 100 \times 10^9/L$  and absence of bleeding symptoms.
- Definition of R: platelet count between  $100 \times 10^9/L$  and  $30 \times 10^9/L$  and at least doubled from baseline and absence of bleeding symptoms.
- Definition of GR: CR or R.
- Definition of TR: platelet count between  $\geq 30 \times 10^9/L$  and  $\leq 400 \times 10^9/L$ .
- Definition of ER: proportion of patients with platelet count higher or equal than  $30 \times 10^9/L$  and at least double than baseline at first week (Day 7) from randomisation.
- Definition of IR: proportion of patients with platelet count higher or equal than  $30 \times 10^9/L$  in the first month (Day 30) from randomisation.
- Definition of LoR: number of days from the first time the patient achieved a platelet count  $\geq 30 \times 10^9/L$  until platelet count dropped below  $30 \times 10^9/L$  measured on 2 occasions with more than 1 day apart or presence of bleeding.

### **Completion date**

24/10/2026

## **Eligibility**

### **Key inclusion criteria**

1. Age  $\geq 18$  years of age at the time of signing informed consent.
2. Newly diagnosis of primary ITP according to the International Working Group assessment and previously untreated for ITP.
3. Platelet counts  $< 30 \times 10^9/L$  or ITP with platelet counts  $< 50 \times 10^9/L$  and concomitant bleeding

symptoms.

4. Serum creatinine concentration  $\leq 1.5$  mg/dL.

### **Participant type(s)**

Patient

### **Healthy volunteers allowed**

No

### **Age group**

Mixed

### **Lower age limit**

18 years

### **Upper age limit**

100 years

### **Sex**

All

### **Total final enrolment**

129

### **Key exclusion criteria**

1. WHO performance status  $>$
2. Previous therapy with rituximab (within 3 months previous to study enrollment), corticosteroids or therapy with other immunomodulating agents within 1 month before enrolment; prior use of hematopoietic analogs or fostamatinib for any other reason than ITP three months before enrolment.
3. Previous use of romiplostim, PEG-recombinant human (rHu) megakaryocyte growth and development factor, eltrombopag, recombinant human anti-thrombopoietin (rHuTPO), or any platelet-producing agent for three months prior to enrolment.
4. Alkylating agents within 8 weeks before the screening visit or anticipated use during the time of the proposed study.
5. Splenectomy within 3 months of the screening visit or planned splenectomy during the study period.
6. Abnormal renal function (serum creatinine  $> 1.5$  mg/dL).
7. Active hepatic disease evidenced by alanine aminotransferase [ALT] or aspartate aminotransferase [AST] levels  $> 5$  times the upper limit of normal (it will only be necessary to determine one of the two transaminases).
8. Severe chronic liver disease as evidenced by, but not limited to, any of the following: International Normalized Ratio (INR)  $> 1.4$ , hypoalbuminemia, portal vein hypertension including the presence of otherwise unexplained splenomegaly and history of esophageal varices.
9. Patients with known IgM seropositive tests for cytomegalovirus and/or Epstein-Barr virus in the previous month.
10. Patients with an active viral infection at screening for Hepatitis B Virus (HBV), Hepatitis C Virus (HCV) or detectable virus charge of HIV.
11. Intolerance to dexamethasone.
12. History of a bone marrow stem cell disorder.
13. Active or prior malignancy except adequately treated (i.e., complete surgical excision with

negative margins) basal cell carcinoma.

14. History of Helicobacter pylori by urea breath test or stool antigen test within 6 months of enrollment, if available.

15. History of myelodysplastic syndrome, systemic lupus erythematosus, or autoimmune cytopenia.

16. History of antiphospholipid antibody syndrome.

17. History of disseminated intravascular coagulation, hemolytic uremic syndrome, or thrombotic thrombocytopenic purpura.

18. History of deep or superficial venous thromboembolism in the last 12 months or stroke, acute ischaemic heart disease or acute peripheral vascular disease in the last 6 months.

19. Hypersensitivity to any recombinant Escherichia coli-derived product (e.g., Infergen, Neupogen, Somatropin, and Actimmune) or known sensitivity to any of the products to be administered during dosing

20. Currently enrolled in another investigational device or drug study or < 30 days since ending another investigational device or drug studies, or receiving other investigational agents.

21. Will have any other investigational procedures performed while enrolled in this clinical study.

22. Pregnant or breastfeeding, or planning to become pregnant or breastfeed during treatment or within 1 month after the end of treatment.

23. Female subject of childbearing potential is not willing to use, in combination with her partner, an acceptable method of effective contraception during treatment and for 1 month after the end of treatment (see annex 5 for additional contraception information). Females of childbearing potential should only be included after a negative pregnancy test.

24. Will not be available for protocol-required study visits, to the best of the subject's and investigator's knowledge.

25. Any kind of disorder that, in the opinion of the investigator, may compromise the ability of the subject to give written informed consent and/or to comply with all required study procedures.

26. Other serious comorbidities at investigator criteria.

**Date of first enrolment**

02/12/2022

**Date of final enrolment**

24/04/2025

## **Locations**

**Countries of recruitment**

United Kingdom

England

Scotland

Italy

Spain

**Study participating centre**

**University Hospitals Bristol and Weston NHS Foundation Trust**

Trust Headquarters  
Marlborough Street  
Bristol  
England  
BS1 3NU

**Study participating centre**

**University Hospitals Plymouth NHS Trust**

Derriford Hospital  
Derriford Road  
Derriford  
Plymouth  
England  
PL6 8DH

**Study participating centre**

**Torbay and South Devon NHS Foundation Trust**

Torbay Hospital  
Newton Road  
Torquay  
England  
TQ2 7AA

**Study participating centre**

**Glasgow Royal Infirmary**

84 Castle Street  
Glasgow  
Scotland  
G4 0SF

**Study participating centre**

**Norfolk and Norwich University Hospitals NHS Foundation Trust**

Colney Lane  
Colney  
Norwich  
England  
NR4 7UY

**Study participating centre**

**East Kent Hospitals University NHS Foundation Trust**

Kent & Canterbury Hospital  
Ethelbert Road  
Canterbury  
England  
CT1 3NG

**Study participating centre****The Newcastle upon Tyne Hospitals NHS Foundation Trust**

Freeman Hospital  
Freeman Road  
High Heaton  
Newcastle upon Tyne  
England  
NE7 7DN

**Study participating centre****University Hospitals Birmingham NHS Foundation Trust**

Queen Elizabeth Hospital  
Mindelsohn Way  
Edgbaston  
Birmingham  
England  
B15 2GW

**Study participating centre****John Radcliffe Hospital**

Headley Way  
Headington  
Oxford  
England  
OX3 9DU

**Sponsor information****Organisation**

Fundación Pública Andaluza para la Gestión de la Investigación en Salud de Sevilla (FISEVI)

**Funder(s)**

## Funder type

Industry

## Funder Name

Amgen

# Results and Publications

## Individual participant data (IPD) sharing plan

An aggregated anonymised primary research data set will be made available to third-party researchers worldwide for future research upon request to the sponsor and subject to an appropriate data sharing agreement where relevant. Data-sharing enquiries should be emailed to Clara Rosso Fernández (claram.rosso.sspa@juntadeandalucia.es).

## IPD sharing plan summary

Available on request

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Study website</a>		11/11/2025	11/11/2025	No	Yes