

# A phase 3 study of obexelimab in patients with warm autoimmune hemolytic anemia

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		<input type="checkbox"/> Protocol
<b>Registration date</b> 14/09/2023	<b>Overall study status</b> Ongoing	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 27/11/2024	<b>Condition category</b> Haematological Disorders	<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Warm autoimmune haemolytic anemia (wAIHA) is an autoimmune disorder where the body's immune cells attack and destroy red blood cells leading to anemia. Symptoms include fatigue, jaundice, dark urine, and an enlarged spleen.

Standard first-line treatment for wAIHA is daily doses of corticosteroids. However, long term treatment can lead to significant toxicity and complications. B cell directed therapies have obtained promising results in clinical trials, for example, rituximab which is becoming the preferred second-line therapy.

Obexelimab (a B cell targeted therapy) is an investigational drug being developed by Zenas BioPharma, which means it has not yet been approved for the treatment of a disease by any regulatory agencies and can only be tested in a study like this one. This study will test obexelimab administered as a subcutaneous injection (under the skin) given once a week.

The purpose of this study is to learn more about how safe and how well obexelimab works to treat wAIHA.

### Who can participate?

Adults over 18 years, diagnosed with wAIHA for at least 3 months and currently receiving treatment for wAIHA or have previously received treatment for wAIHA.

### What does the study involve?

This study is divided into three parts:

- Part A: Safety and Dose Confirmation Run-in Period. All patients will receive obexelimab and this part will provide preliminary safety, tolerability, and efficacy data.
- Part B: Randomised, double-blind, placebo-controlled. Half (50%) of the patients who enroll will receive placebo. This part will evaluate the efficacy and safety of obexelimab.
- Part C: Open-label extension portion. This part will look at how obexelimab works over an extended period of time. If participants complete Part A or B, they will be eligible to enroll in Part C.

Approximately 134 patients will participate in this global study. Participants in Parts A and B will be on the study for 40 weeks, and participants in Part C will be on the study for an additional 52-week treatment period and a 12-week follow-up. During this time, they will have several visits to have tests and procedures to check their health and the effects of the study drug.

What are the possible benefits and risks of participating?

Taking part in this study may or may not help to treat your wAIHA. Your health could improve, stay the same, or get worse. However, the data we get from you during this study may help doctors learn more about the study drug and whether or not it provides any benefit to patients with wAIHA, and this may help future patients with wAIHA.

The safety of obexelimab has been studied in 198 people of whom 40 received the subcutaneous injection form used in this study. When obexelimab was given as the intravenous form, there was a serious but uncommon risk for allergic reactions and gastrointestinal symptoms like nausea, vomiting and diarrhea during infusion. Obexelimab treats wAIHA by changing your immune system which may cause you risk for infections. When obexelimab was given as the subcutaneous form, there were mild to moderate side effects at the site of injection including redness, pain, and swelling. Other common side effects include dizziness, headache, and abdominal pain.

Where is the study run from?

Zenas BioPharma (USA) LLC

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

May 2022 to September 2026

Who is funding the study?

Zenas BioPharma (USA) LLC

Who is the main contact?

Allen Poma (Vice President, Clinical Development) [allen.poma@zenasbio.com](mailto:allen.poma@zenasbio.com)

## Contact information

### Type(s)

Scientific

### Contact name

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### Type(s)

Principal investigator

**Contact name**

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**Additional identifiers****ClinicalTrials.gov (NCT)**

NCT05786573

**Clinical Trials Information System (CTIS)**

2022-501005-12-00

**Integrated Research Application System (IRAS)**

1007139

**Central Portfolio Management System (CPMS)**

54861

**Protocol serial number**

ZB012-03-002

**Study information****Scientific Title**

A phase 3, multicenter, randomised, double-blind, placebo-controlled study, with a safety and dose confirmation run-in period, to evaluate the efficacy and safety of obexelimab in patients with warm autoimmune hemolytic anemia (SApHiAre)

**Acronym**

SApHiAre

**Study objectives**

Administration of obexelimab will lead to a higher proportion of wAIHA patients with hemoglobin  $\geq 10$  g/dl and  $\geq 2$  g/dl increase from baseline without the requirement for blood transfusion or glucocorticoid rescue therapy

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approved 08/09/2023, London -City & East Research Ethics Committee (2nd Floor, 2 Redman Place, Stratford, London, E20 1JQ, United Kingdom; n/a; cityandeast.rec@hra.nhs.uk), ref: 23/LO/0335

## **Study design**

Interventional double-blind randomized placebo-controlled trial

## **Primary study design**

Interventional

## **Study type(s)**

Treatment

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

Warm autoimmune hemolytic anemia

## **Interventions**

In Part A (safety and dose confirmation run-in period), obexelimab will be administered as a subcutaneous injection for 24 weeks. In Part B (randomised control period), participants will be randomised with interactive response technology (IRT), and obexelimab or placebo will be administered as a subcutaneous injection for 24 weeks. Participants from Part A and Part B may continue to receive obexelimab in Part C (open label extension (OLE) period). Participants who do not enroll in the OLE period will return to the clinic for a safety follow-up visit 12 weeks after Week 24. In Part C, obexelimab will be administered for up to 52 weeks. Subjects in Part C will return to the clinic for a safety follow-up visit 12 weeks after Week 52.

## **Intervention Type**

Drug

## **Phase**

Phase III

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

Obexelimab

## **Primary outcome(s)**

Part A: Safety and Dose Confirmation Run-in Period (SRP)

1. Proportion of patients with Hgb  $\geq 10$  g/dL and  $\geq 2$  g/dL increase from Baseline on or after Week 8 with no use of blood transfusion or GC rescue therapy prior to attaining response

Part B: Randomised Control Period (RCP)

2. Proportion of patients who achieve a durable Hgb response (defined as Hgb  $\geq 10$  g/dL and  $\geq 2$  g/dL increase from Baseline on at least 3 of 4 consecutive available visits), at the earliest on or after Week 12, with no use of blood transfusion or GC rescue therapy prior to attaining durable response through Week 24

## **Key secondary outcome(s)**

There are no secondary outcome measures

## **Completion date**

30/09/2026

## Eligibility

### Key inclusion criteria

#### PARTS A AND B: INCLUSION CRITERIA

1. Males and females,  $\geq 18$  years of age
2. Clinically diagnosed with wAIHA for at least 3 months and currently receiving treatment for wAIHA or have previously received treatment for wAIHA.
3. Diagnosis of primary or secondary wAIHA documented by a positive direct antiglobulin test specific for anti-IgG or anti-IgA.
4. Failed at least 1 prior wAIHA treatment regimen.
5. At least one sign or symptom of anemia as assessed by the investigator at screening.
6. Other inclusion criteria apply.

### Participant type(s)

Patient

### Healthy volunteers allowed

No

### Age group

Adult

### Lower age limit

18 years

### Sex

All

### Key exclusion criteria

#### PARTS A AND B: EXCLUSION CRITERIA

1. Have cold antibody AIHA, cold agglutinin syndrome, mixed type (i.e., warm, and cold) AIHA, or paroxysmal cold hemoglobinuria.
2. Have any other associated cause of hereditary or acquired hemolytic anemia.
3. For the RCP only, patients with secondary wAIHA not due to autoimmune disorders, including LPDs.
4. Received a transfusion within 2 weeks prior to randomisation.
5. Use of B cell-depleting, B cell-targeted, or other biologic immunomodulatory agents within the 6 months prior to randomisation.
6. Received IV Ig or epoetin alfa within 6 weeks prior to randomisation.
7. Receiving more than 2 concomitant medications for the treatment of wAIHA.
8. Other exclusion criteria apply.

### Date of first enrolment

15/09/2023

### Date of final enrolment

31/03/2025

# Locations

## Countries of recruitment

United Kingdom

Italy

Japan

Poland

Spain

Taiwan

Türkiye

United States of America

## Study participating centre

### **Barts Health NHS Trust**

The Royal London Hospital

80 Newark Street

London

United Kingdom

E1 2ES

## Study participating centre

### **Plymouth Hospitals NHS Trust**

Derriford Hospital

Derriford Road

Crownhill

Plymouth

United Kingdom

PL6 8DH

## Study participating centre

### **Leicester General Hospital**

Gwendolen Road

Leicester

United Kingdom

LE5 4PW

**Study participating centre**  
**University College Hospital**  
235 Euston Road  
London  
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NW1 2BU

**Study participating centre**  
**Kent and Canterbury Hospital**  
Ethelbert Road  
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CT1 3NG

## **Sponsor information**

### **Organisation**

Zenas BioPharma (USA) LLC

## **Funder(s)**

### **Funder type**

Industry

### **Funder Name**

Zenas BioPharma (USA) LLC

## **Results and Publications**

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

The Sponsor is committed to the responsible sharing of clinical data with the goal of advancing medical science and improving patient care. Independent researchers will be permitted to use anonymised data collected from participants during this study to conduct additional scientific research, which may be unrelated to the study medication. This data will be obtained from study publications once the research has been completed.

### **IPD sharing plan summary**

Available on request

### **Study outputs**

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