This document provides a short summary of this study for a general audience. You can find more information in the scientific summaries of the study. Links to those summaries are provided at the end of this document.

Study names

Short Title: A study to learn about the effect of daprodustat on haemoglobin in participants with anaemia due to chronic kidney disease.

Full Scientific Title: A 28-week, randomised, double-blind, placebo-controlled, parallel group, multi-centre study in recombinant human erythropoietin naive non-dialysis participants with anaemia associated with chronic kidney disease to evaluate the efficacy and safety of daprodustat compared to placebo.

Study Number: 205270

Who sponsored this study?

GlaxoSmithKline (GSK)
GSK Clinical Support Help Desk
Website: clinicalsupporthd.gsk.com/contact.html
Email: GSKClinicalSupportHD@gsk.com

General information about the clinical study

When was this study done?

The study started in March 2018 and ended in October 2020.

What was the main objective of this study?

Chronic kidney disease (CKD) is a long-term disease of the kidneys. Some people with CKD cannot make enough red blood cells, which contain an oxygen-carrying protein called haemoglobin (Hgb). This condition is called anaemia due to CKD.

Patients with anaemia may be treated with medicines that trigger the body to make more red blood cells, which leads to an increase in Hgb levels. Daprodustat is a medicine that is being tested to treat anaemia due to CKD.

Researchers wanted to see how well daprodustat works in improving Hgb levels in participants with anaemia due to CKD. Researchers also assessed the safety of this medicine.

Which medicines were studied?

On Day 1 of the 28-week treatment period, participants were included in one of the following two treatment groups by chance (randomisation).

- Daprodustat
- Placebo (no active medicine)

Participants took daprodustat or placebo tablets once daily. Neither participants nor study doctors knew who received which treatment. This is called a double-blind study.

Which participants were included in this study?

Studies have a list of requirements for participants who can enrol (inclusion criteria) and those who can't (exclusion criteria). For this study, the main inclusion and exclusion criteria are listed below.

Men and women with anaemia due to CKD were included in the study if they:

- Were at least 18 years old.
- Had Hgb levels between 8.5 grams per decilitre (g/dL) and 10 g/dL on Day 1.

Men and women were excluded from the study if they had:

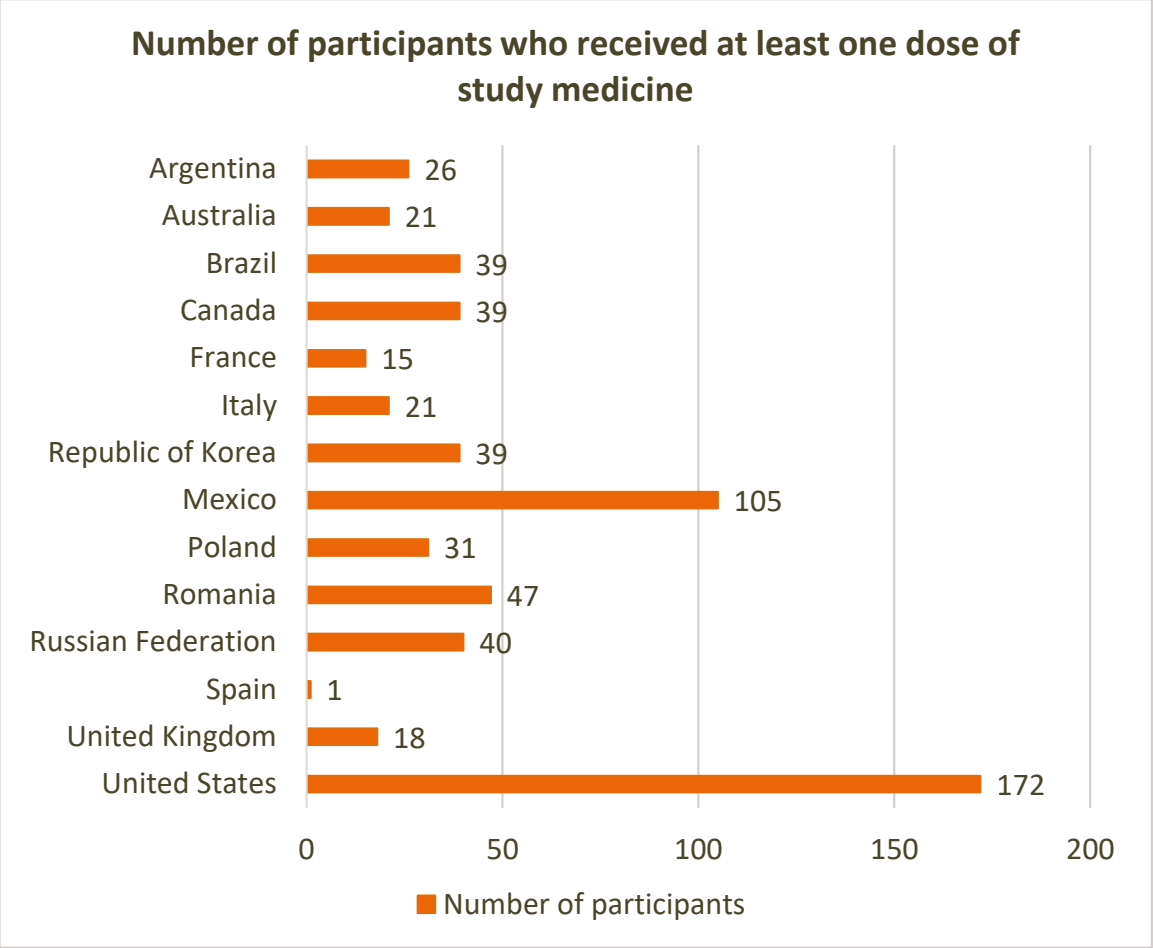
- Dialysis (a treatment that filters blood and removes waste) or needed to start dialysis within six months after Day 1.
- A planned kidney transplant.
- Uncontrolled high blood pressure.
- A heart attack, stroke, or ministroke within three months before Day 1.
- Another disease that could lead to anaemia.
- Stomach and intestinal bleeding within three months before Day 1.
- Taken medicines called erythropoiesis-stimulating agents (ESAs) within three months before Day 1.
- Any other disease(s), abnormal test results, or other medication use that would put the participant at unacceptable risk or affect the results of the study.

Overall, 614 participants received at least one dose of study medicine. The study included 260 men (42%) and 354 women (58%). The average age was 66 years. The youngest participant was 22 years old and the oldest participant was 91 years old.

For more detailed information about the participants included in this study, see the scientific results summaries (links to those summaries are provided at the end of this document).

Where was this study done?

Study sites were in 14 countries.



What were the main results of the study?

The main objective was to compare daprodustat with placebo in improving participants' Hgb levels during Week 24 to Week 28 (testing period) of the study.

Study doctors collected blood samples from the participants. They measured each participant's Hgb levels on Day 1 (baseline) and during the testing period. The difference in the participant's baseline Hgb value and the average Hgb value during the testing period was calculated. This is called the change from baseline for each participant.

The average change from baseline in Hgb levels was calculated for each treatment group. Results are shown in the table below.

Average change from baseline in Hgb levels during the testing period		
	Daprodustat 307 participants	**Placebo 307 participants**
Average change from baseline in Hgb levels	1.58 g/dL	0.19 g/dL

More information about the study results is available in the scientific results summaries (links to those summaries are provided at the end of this document).

What were the side effects?

Unwanted medical events (adverse events) can happen to people when they receive a medicine. Study doctors record these events. A summary of these events can be found in the scientific results summaries (links to those summaries are provided at the end of this document).

If the study doctor thinks that the event was caused by the study medicine, they record this as a possible side effect (adverse reaction).

In this summary, side effects refer to those events that the study doctor thinks may have been caused by the study medicine. The side effects in this summary may be different to those in the Informed Consent or other documents related to the study medicine.

In blinded studies, the study doctor does not know which study medicine the patient is taking. In some cases, side effects will be assigned to placebo.

The side effects in this summary have been reported for the 28-week treatment period. One participant who was randomised to the placebo group received daprodustat from Week 4 to Week 8 of the study. Side effects for this participant were reported in the daprodustat group.

Serious side effects

Serious side effects were reported by six participants (2%) in the daprodustat group and one participant (less than 1%) in the placebo group. The only serious side effect reported by two or more participants in either treatment group was vomiting. This was reported by two participants (less than 1%) in the daprodustat group.

Non-serious side effects

Non-serious side effects were reported by 11 participants (4%) in the daprodustat group and 13 participants (4%) in the placebo group. The table below shows the number of participants (percent) with non-serious side effects reported by two or more participants in either treatment group.

Number of participants (percent) with non-serious side effects reported by two or more participants in either treatment group		
	Daprodustat 308 participants	**Placebo 306 participants**
High blood pressure	4 (1%)	0
Diarrhoea	2 (less than 1%)	1 (less than 1%)
Dizziness	1 (less than 1%)	3 (less than 1%)
Nausea	0	2 (less than 1%)
Rash	0	2 (less than 1%)
Tiredness	0	2 (less than 1%)

How has this study helped participants and researchers?

Researchers concluded that daprodustat improved the Hgb levels in participants with anaemia due to CKD. The side effects reported were as expected in patients with anaemia due to CKD.

Are there plans for further studies?

Other studies of daprodustat in participants with anaemia due to CKD have been conducted and some are ongoing or planned.

Where can I find more information about this study?

Clinical studies have unique study numbers that are included in publications and other information about the study. The unique study numbers associated with this study are shown below with internet links to scientific summaries.

The scientific summaries include more details about the requirements for study enrolment, the study visit schedule, results from other endpoints, and more detailed information about adverse events.

Organisation and Website	Study Number
European Medicines Agency (www.clinicaltrialsregister.eu)	2017-002270-39[1]
United States National Institutes of Health (NIH) (www.clinicaltrials.gov)	NCT03409107[2]

Your doctor can help you understand more about this study and the results. Speak to your doctor about the treatment options available in your country. You should not make changes to your care based on the results of this or any single study. Keep taking your current treatment unless instructed by your doctor.

We would like to thank the participants who contributed to this study. The results of this study will help answer scientific questions about treating patients with anaemia due to CKD.

The content for this document was finalised by GSK on 9 September 2021. The information in this summary does not include additional information available after this date.

[1] https://www.clinicaltrialsregister.eu/ctr-search/search?query=2017-002270-39

[2] https://clinicaltrials.gov/ct2/show/NCT03409107