

Summary of Clinical Trial Results

A comparative study to look at how safe crovalimab is and how well it works compared with eculizumab in people with a blood disorder called 'paroxysmal nocturnal haemoglobinuria' (PNH) who were previously taking another C5 inhibitor

See the end of the summary for the full title of the study.

About this summary

This is a summary of the results of a clinical trial (called a 'study' in this document) – written for:

- members of the public; and
- people who took part in the study.

This summary is based on information known at the time of writing.

The study started in September 2020 and this summary includes results that were collected and analysed in November 2022. At the time of writing this summary, this study is still happening – this summary presents the complete results for one part of the study. Here we report on the comparative part of the study; another part of the study will be reported on at a later date.

No single study can tell us everything about the risks and benefits of a medicine. It takes lots of people in many studies to find out everything we need to know. The results from this study may be different from those of other studies of the same medicine. This medicine was given to people for the first time in this study.

This means that you should not make decisions based on this one summary – always speak to your doctor before making any decisions about your treatment.

Contents of the summary

1. General information about this study
2. Who is taking part in this study?
3. What has happened during the study so far?
4. What are the results of the study to date?
5. What are the side effects to date?
6. How has this study helped research?
7. Are there plans for other studies?
8. Where can I find more information?

Glossary

- C5 inhibitor = type of medicine that blocks C5, one of the proteins responsible for allowing red blood cells to be destroyed
- Crovalimab = C5 inhibitor medicine under investigation
- Eculizumab = C5 inhibitor medicine
- Haemolysis = destruction of red blood cells
- PNH = paroxysmal nocturnal haemoglobinuria

Thank you to the people who are taking part in this study

The people who are taking part have helped researchers to answer important questions about paroxysmal nocturnal haemoglobinuria (PNH) and the medicine studied – ‘crovalimab’.

Key information about this study

- This study was done to see how safe crovalimab is and how well it works in people who have PNH who have previously been treated with another C5 inhibitor medicine.
- In this study, people were given either the medicine being studied (called ‘crovalimab’) or an existing medicine already available (called ‘eculizumab’) – it was decided by chance which treatment each person was given.
 - Everyone in the comparative part of the study had taken eculizumab before joining this study.
- The comparative part of the study includes 89 people with PNH in 25 countries.
- After people took crovalimab or eculizumab for 24 weeks, the study showed that:
 - Around 32% of people (14 out of 44 people) who took crovalimab had side effects that their doctors thought were caused by crovalimab. None of the 42 people who took eculizumab had side effects that their doctors thought were caused by eculizumab. The differences in these numbers do not reflect an increased risk with crovalimab treatment. These differences may be because the people who took crovalimab were new to crovalimab treatment, but the people who took eculizumab had been previously taking eculizumab. Side effects are more likely to occur when a person first starts a new treatment. Also, there are some risks that were unique to people who took crovalimab in study, such as temporary reactions and reactions to injection just under the skin. Further explanation of the side effects are given on pages 11–13.
 - No one in the study had a serious side effect that their doctors thought was caused by either crovalimab or eculizumab.
 - A total of 7 out of 44 people (16%) who took crovalimab had a temporary reaction when they switched from eculizumab to crovalimab due to the presence of two different drugs that both inhibit C5. It’s primarily a mild-to-moderate joint pain and/or a rash occurring about 2 weeks after the switch from one drug to the other.
 - Levels of lactate dehydrogenase (LDH; a protein that increases in the blood when red blood cells burst) remained at levels considered ‘normal’ in 93% of people who took crovalimab and 94% of people who took eculizumab. High levels of LDH can mean that a breakdown of red blood cells is happening.
 - Levels of haemoglobin (a protein in red blood cells, of which the level decreases when more red blood cells are destroyed) stayed stable in 23 out of 39 people (59%) who took crovalimab and 26 out of 37 people (70%) who took eculizumab.

- Around 79% of people (31 out of 39) who took crovalimab and 78% of people (29 out of 37) who took eculizumab did not need blood transfusions during 24 weeks of treatment in this study.
- Breakthrough haemolysis (the destruction of red blood cells even with treatment to prevent it) occurred in 4 out of 39 people (10%) who took crovalimab, and 5 out of 37 people (14%) who took eculizumab.
- After 24 weeks of treatment, both people who took crovalimab and people who took eculizumab had similar levels of tiredness as they did at the start of the study (as shown by similar fatigue questionnaire scores). Fatigue questionnaire scores increased by 1.1 points on average in people who took crovalimab (indicating that people felt somewhat less tired) and decreased by 2.6 points on average in people who took eculizumab (indicating that people felt somewhat more tired).
- After taking crovalimab for 17 weeks, 85% of the people (33 out of 39) who were taking eculizumab before they joined the study said that they preferred crovalimab over eculizumab. People preferred crovalimab because the way treatment was given was easier, the time taken to administer treatment was shorter and there were fewer hospital visits associated with treatment required.

1. General information about this study

Why is this study being done?

PNH is a blood disorder that leads to the breakdown of red blood cells ('haemolysis').

PNH is caused by a genetic change (mutation) in the blood cells. This mutation causes certain proteins in the body to destroy red blood cells, causing anaemia (low levels of haemoglobin) and other problems. This can lead to people having symptoms like tiredness, headaches, trouble breathing, reduced appetite, difficulty exercising or concentrating, and stomach or chest pain. If haemolysis destroys too many red blood cells, a person may need to receive blood from a donor (a blood transfusion). People with PNH also have a higher risk of blood clots, which can be life threatening.

Doctors can measure how much damage to red blood cells is happening in people with PNH by doing blood tests to look at levels of:

- Lactate dehydrogenase (LDH – a protein that increases in the blood when red blood cells burst). High levels of LDH can mean that there is a breakdown of red blood cells occurring.
- Haemoglobin (the protein in red blood cells that gives blood its red colour and carries oxygen from the lungs to the rest of the body); if haemoglobin levels are low, it can mean that red blood cells are being destroyed.

PNH can be treated with a type of medicine called a 'C5 inhibitor', the standard treatment globally. This type of medicine blocks (inhibits) C5, one of the proteins that allow red blood cells to be destroyed. C5 inhibitors that are already approved as treatment for PNH reduce the symptoms and effects of PNH in many people, increasing their lifespan to that of the normal population. The currently available C5 inhibitors are mostly given as a drip (infusion) into a vein (called an intravenous or IV infusion), which means that people go to their doctor

or hospital to get the treatment. The need to frequently receive IV treatment can increase the burden of the disease for those living with or caring for someone with PNH. C5 inhibitors have significantly improved the lives of people with PNH but some people still experience haemolysis even with treatment to prevent it – this is called ‘breakthrough haemolysis’.

In order to improve the treatment experience of people with PNH, and reduce the burden on the healthcare system, crovalimab was developed. Crovalimab is a new C5 inhibitor that, after the first few IV doses given by a doctor or at the hospital, can be taken at home as an injection under the skin (called a subcutaneous injection). A person with PNH can get the injection at home (either self-administered or administered by a caregiver) or receive the injection in a healthcare setting. The injection process for crovalimab takes just a few minutes.

In this study, researchers want to see if crovalimab is safe – and how well it works – in people with PNH who had taken a C5 inhibitor called eculizumab before joining this study.

The researchers measured safety by looking at the side effects the people had in this study, and how serious these were. Side effects are medical problems (such as feeling dizzy) that can happen in people while taking crovalimab. Researchers also measured how well crovalimab worked by looking at the people’s blood LDH and haemoglobin levels, and seeing how many of them had breakthrough haemolysis or needed blood transfusions. They also used questionnaires to measure how people felt while taking crovalimab, and whether they preferred crovalimab or eculizumab.

What is the medicine being studied?

This study is looking at two medicines:

- Eculizumab – existing medicine.
- Crovalimab – the medicine that was studied.

Eculizumab is an existing medicine given to people with PNH.

- You say this as ‘ek-oo-liz-oo-mab’.
- Eculizumab is a type of medicine called a C5 inhibitor.
- Eculizumab works by blocking C5, one of the proteins in the body that allows the breakdown of red blood cells.
- Eculizumab may reduce haemolysis and the problems caused by haemolysis (such as the need for transfusions, having breakthrough haemolysis, unstable haemoglobin levels, and feeling tired), so people can feel better and do more in their daily lives.

Crovalimab is the medicine being studied here.

- You say this as ‘croh-VA-lih-mab’.
- Crovalimab is a type of medicine called a C5 inhibitor.
- Crovalimab works by blocking C5, one of the proteins in the body that allows the breakdown of red blood cells.
- Crovalimab may reduce haemolysis and the problems caused by haemolysis, so people can feel better and do more in their daily lives.

What do researchers want to find out?

Researchers are doing this study to compare crovalimab with eculizumab to find out how safe crovalimab is – by checking how many people have side effects during this study and seeing how serious they are (see section 4 “What were the results of the study” and section 5 “What are the side effects to date?”). They also want to see how well crovalimab works at preventing haemolysis and its effects (see section 4 “What were the results of the study?”).

The main questions that researchers want to answer are:

1. How many people had side effects in the study?
2. How many people had serious side effects in the study?
3. How many people had temporary reactions when switching from eculizumab to crovalimab?

Other questions that researchers want to answer to see how well crovalimab works include:

4. What happened to people’s blood LDH levels during the study?
5. What happened to people’s haemoglobin levels during the study?
6. How many people did not need blood transfusions during the study?
7. How many people had breakthrough haemolysis during the study?
8. How tired did people feel during the study?
9. Did people prefer taking crovalimab or eculizumab?

What kind of study is this?

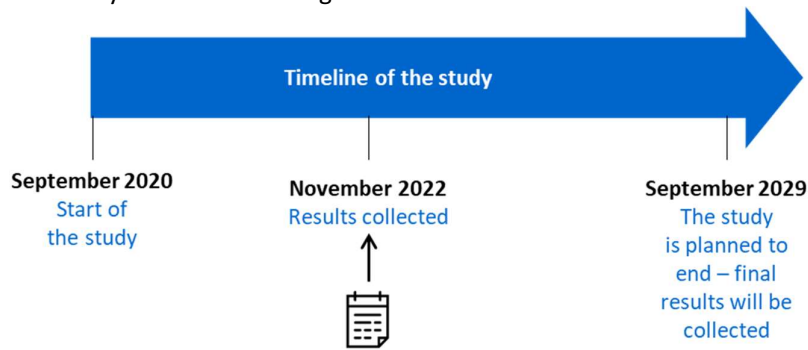
This study is a ‘Phase 3’ study. This means that crovalimab was tested in a larger number of people with PNH, after it had been tested in a smaller number of people with PNH before this study. In this study, a larger number of people with PNH either took crovalimab or eculizumab (a standard treatment for PNH) – this was to find out about the side effects of crovalimab and if crovalimab worked to reduce haemolysis and the problems caused by haemolysis. It can then be decided whether the treatment can be approved for doctors to give to people with PNH.

This study has two parts and the main part was ‘randomised’. This means that it was decided by chance which of the medicines people in the study would have – like tossing a coin. Randomly choosing which medicine people take, makes it more likely that the types of people in both groups (for example, age, race) will be a similar mix. Apart from the exact medicines being tested in each group, all other aspects of care were the same between the groups.

The study is ‘open-label’. This means that all the doctors and all the people in the study knew whether they were taking crovalimab or eculizumab.

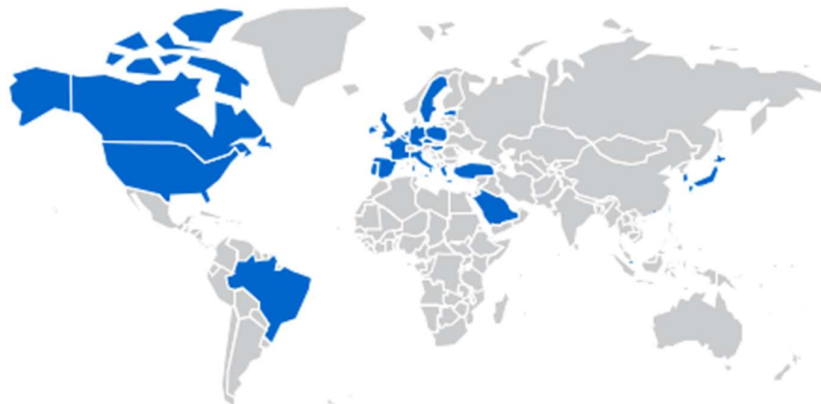
When and where is the study taking place?

The study started in September 2020 and this summary includes results that were collected and analysed in November 2022. At the time of writing this summary, this study is still happening – this summary presents the complete results for one part of the study. The timeline of the study is shown in this figure.



The symbol on the timeline (📅) shows when the information in this summary was collected (November 2022 – about 26 months or around 2 years after the study started).

The study is taking place at 70 study centres across 25 countries. This map shows the countries/regions where this study is taking place.



- Belgium
- Brazil
- Canada
- Czech Republic
- Estonia
- France
- Germany
- Greece
- Hong Kong
- Hungary
- Ireland
- Italy
- Japan
- Korea, Republic of
- Netherlands
- Poland
- Portugal
- Saudi Arabia
- Singapore
- Spain
- Sweden
- Taiwan
- Türkiye
- United Kingdom
- United States

2. Who is taking part in this study?

The study has two parts, with the main part being randomised. Results reported here are for the randomised part only.

A total of 89 people with PNH are taking part in the randomised part of the study.

People who are taking part in the study are between 21 and 85 years of age. Forty-three of the 89 people (48%) are male and 46 of the 89 people (52%) are female.

People can take part in the randomised part of the study if they:

- have PNH
- are aged 18 years or older
- weigh 40 kg or more
- have taken a C5 inhibitor called eculizumab for 6 months or longer before joining this study
- have LDH levels that were not considered high
- have been vaccinated against infection caused by a bacteria called *Neisseria meningitidis*.

People cannot take part in the study if they have:

- experienced a major adverse vascular event, such as a heart attack or stroke in the 6 months before joining the study
- experienced an allergic or life-threatening reaction (anaphylaxis) to antibody medicines before joining the study
- had an infection called meningococcal meningitis before joining the study.

3. What has happened during the study so far?

During the study, people were selected by chance to get one of two treatments. The treatments were selected at random by a computer. People had an equal chance of being selected to receive either treatment. The treatment groups were:

- **Crovalimab** (the medicine being studied). People initially took crovalimab as a drip (infusion) into a vein (called an intravenous or IV infusion) on Day 1 of the study. They were then given crovalimab as a subcutaneous injection (just under the skin) weekly for 3 weeks. These first doses are called 'loading doses'. After taking the loading doses, people were then given crovalimab as a subcutaneous injection every 4 weeks. These next doses are called 'maintenance doses'. This table shows the loading and maintenance doses of crovalimab by the weight of the person.

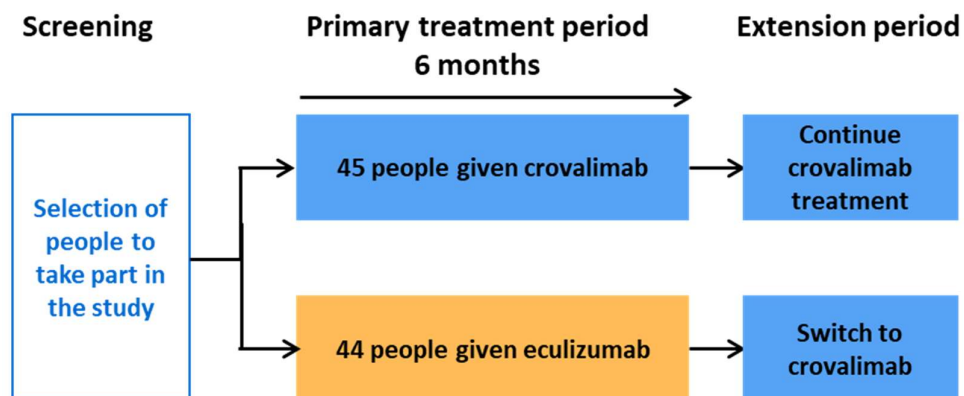
Body weight	Loading doses		Maintenance doses
	Day 1	Days 2, 8, 15 and 22	Day 29 and every 4 weeks after that
40 to <100 kg	1000 mg as an IV infusion	340 mg as a subcutaneous injection	680 mg as a subcutaneous injection
≥100 kg	1500 mg as an IV infusion	340 mg as a subcutaneous injection	1020 mg as a subcutaneous injection

After taking crovalimab for 8 weeks, people could take the crovalimab injection at home (either self-administered or administered by a caregiver) or receive the injection at their doctor's office or in a clinic.

- Eculizumab (existing medicine). people continued taking a 900 mg dose of eculizumab as a drip (infusion) into a vein (IV infusion) every 2 weeks.

This study flowchart shows the stages of the randomised part of the study. After people took crovalimab or eculizumab for 24 weeks (or around 6 months), the main study period, known as the 'primary treatment period' ended. After this, people who continued in the

study (in a period called the 'extension period') either continued crovalimab or switched from eculizumab to crovalimab.



This study is still happening so some people are still being treated with the study medicines. When the study finishes, the people who took part will be asked to go back to their study centre for more visits – to check their overall health. Look below to see more information about what has happened in the study so far (this summary includes results that were collected and analysed in November 2022) and what the next steps are.

4. What are the results of the study to date?

Researchers looked at whether crovalimab was safe and how well it worked over the first 24 weeks of treatment, in people with PNH who had taken eculizumab before joining this study.

Question 1: How many people had side effects in the study?

- The study showed that 32% of people (14 out of 44 people) who took crovalimab had side effects that their doctors thought were caused by crovalimab.
- None of the 42 people who took eculizumab had side effects that their doctors thought were caused by eculizumab.
- The differences in these numbers do not reflect an increased risk with crovalimab treatment. These differences may be because the people who took crovalimab were new to crovalimab treatment, but the people who took eculizumab had been previously taking eculizumab. Side effects are more likely to occur when a person first starts a new treatment.
- Also, there are some risks that were unique to people who took crovalimab in study, such as temporary reactions (primarily mild or moderate joint pain and/or rash that occurs in people who switch between eculizumab and crovalimab due to the presence of two different drugs in the body that both inhibit C5), and reactions to injection just under the skin.
- Additionally, reactions to IV infusion tend to occur early during treatment with a C5 inhibitor. Therefore, they were less likely to occur in people taking eculizumab in this study as they had already been taking eculizumab before joining the study.
- The types of side effects are described in section 5.

Question 2: How many people had serious side effects while in the study?

A side effect is considered 'serious' if it is life-threatening, needs hospital care or causes lasting problems.

- No one in the study had a serious side effect that their doctors thought was caused by either crovalimab or eculizumab.

Question 3: How many people had temporary reactions when switching from eculizumab to crovalimab?

For people with PNH switching between eculizumab and crovalimab, there is a risk for a temporary reaction due to the presence of two different drugs that both inhibit C5. It's an event specific to the switch that does not impact how well crovalimab works, and has been seen in about one out of five people in previous crovalimab clinical trials.

- In this study, 7 out of 44 people (16%) who took crovalimab had a temporary reaction when they switched from eculizumab to crovalimab.
- Most of these temporary reactions were mild or moderate.
- These temporary reactions occurred around 9 to 15 days after people switched from eculizumab to crovalimab.
- Symptoms of these temporary reactions were rash (in five people), and joint pain and/or muscle pain (in five people).
- All temporary reactions resolved with no change in crovalimab treatment.
- People were given painkillers or anti-inflammatory medicines to treat joint pain, and anti-allergy medicines or steroids to treat rashes, caused by these temporary reactions.

Question 4: What happened to people's blood LDH levels during the study?

When treating people with PNH, doctors aim to get levels of LDH – a protein that increases in the blood when red blood cells burst – below the level considered to be 'high' in this study. High levels of LDH can mean that breakdown of red blood cells is happening.

- Levels of LDH remained at levels considered 'normal' in 93% of people who took crovalimab and 94% of people who took eculizumab.

Question 5: What happened to people's haemoglobin levels during the study?

People with PNH often have low haemoglobin (a protein in red blood cells that can be measured) levels because haemoglobin levels decrease when more red blood cells are destroyed (haemolysis).

- Levels of haemoglobin stayed stable in 23 out of 39 people (59%) who took crovalimab and 26 out of 37 people (70%) who took eculizumab.

Question 6: How many people did not need blood transfusions during the study?

If haemolysis destroys too many red blood cells, a person may need to receive blood transfusions.

Around 79% of people (31 out of 39) who took crovalimab and 78% of people (29 out of 37) who took eculizumab did not need blood transfusions during 24 weeks of treatment in this study.

Question 7: How many people had breakthrough haemolysis during the study?

'Breakthrough haemolysis' is when a person's C5 inhibitor medicine does not block C5 completely and destruction of their red blood cells happens.

During the first 24 weeks of treatment:

- A total of 4 out of 39 people (10%) who took crovalimab and 5 out of 37 people (14%) who took eculizumab had breakthrough haemolysis.

Question 8: How tired did people feel during the study?

Researchers can check how tired people are feeling whilst they are taking a study medicine by asking them to fill out questionnaires when they visit the study clinic for a check-up or to get their medicine. The answers are scored, so researchers can see over time whether the person is feeling more tired (lower score) or less tired (higher score).

- After 24 weeks of treatment, both people who took crovalimab and people who took eculizumab had similar levels of tiredness as they did at the start of the study (as shown by similar fatigue questionnaire scores). Fatigue questionnaire scores increased by an average of 1.1 points in people who took crovalimab (indicating that people felt somewhat less tired), and decreased by an average of 2.6 points in people who took eculizumab (indicating that people felt somewhat more tired).

Question 9: Did people prefer taking crovalimab or eculizumab?

Researchers checked whether people preferred taking crovalimab or eculizumab by asking people who were taking eculizumab before they joined the study to fill out a questionnaire after they took crovalimab for 17 weeks.

- After taking crovalimab for 17 weeks, 85% of people (33 out of 39 people) said that they preferred crovalimab over eculizumab. People preferred crovalimab because the way treatment was given was easier, the time taken to administer treatment was shorter and there were fewer treatment-related hospital visits required.

This section only shows the key results from this study. You can find information about all other results on the websites at the end of this summary (see section 8).

5. What are the side effects to date?

Side effects are medical problems (such as feeling dizzy) that happen during the study in people taking the study medicines.

- The study doctors believed the side effects described in this summary were related to the treatment in the study.
- Not all people in this study had the same side effects.
- Side effects may be mild to very serious, and can be different from person to person.
- It is important to be aware that the side effects reported here are from this one study. They may be different from the side effects seen in other studies or those listed in the medicine leaflet.

Serious and common side effects are listed in the following sections.

Serious side effects

A side effect is considered 'serious' if it is life-threatening, needs hospital care or causes lasting problems.

During this study:

- No one in the study had a serious side effect that their doctor thought was caused by either crovalimab or eculizumab.
- No one in the study died.
- No one in the study decided to stop taking their medicine because of side effects.

Common side effects

During this study, 32% of people (14 out of 44 people) who took crovalimab had side effects that their doctors thought were caused by crovalimab that were not considered serious. None of the people who took eculizumab had side effects that their doctors thought were caused by eculizumab.

The differences in these numbers do not reflect an increased risk with crovalimab treatment. These differences may be because the people who took crovalimab were new to crovalimab treatment, but the people who took eculizumab had been previously taking eculizumab. Side effects are more likely to occur when a person first starts a new treatment.

Also, there are some risks that were unique to people who took crovalimab in study, such as temporary reactions (primarily mild or moderate joint pain and/or rash that occurs in people who switch between eculizumab and crovalimab due to the presence of two different drugs in the body that both inhibit C5), and reactions to injection just under the skin. Additionally, reactions to IV infusion into a vein tend to occur early during treatment with a C5 inhibitor. Therefore, they were less likely to occur in people taking eculizumab in this study as they had already been taking eculizumab before joining the study.

The most common side effects are shown in the following table – these are the side effects that occurred in at least two people that doctors thought were caused by the study medicine. Some people had more than one side effect, which means that they are included in more than one row in the table.

Most common side effects reported in this study	People taking crovalimab (44 people total)	People taking eculizumab (42 people total)
Temporary reaction (primarily joint pain and/or rash)	16% (7 out of 44 (number of people in this treatment group))	Not applicable (Temporary reactions are not applicable to people taking eculizumab in this study as they only occur in people who switch from one C5 inhibitor to another)
Reaction to IV infusion into a vein	14% (6 out of 44)	0% (0 out of 42. These reactions tend to occur early during treatment with a C5 inhibitor. Therefore, they were less likely to occur in people taking eculizumab in this study as they had already been taking eculizumab before joining the study)
Reaction to subcutaneous injection just under the skin	7% (3 out of 44)	Not applicable (These reactions are not applicable to people taking eculizumab in this study as eculizumab was given as an IV infusion)

Temporary reactions can occur in people who switch between eculizumab and crovalimab due to the presence of two different drugs in the body that both inhibit C5. It's primarily a mild to moderate joint pain and/or a rash occurring about 2 weeks after the switch from one drug to the other, and can last for about 2 weeks. These events are specific to switching medicines and do not impact how well crovalimab works.

In this study, 7 out of 44 people (16%) who took crovalimab had a temporary reaction when they switched from eculizumab to crovalimab. Most of these temporary reactions were mild or moderate, except for 1 patient who had a severe reaction. Symptoms of these temporary reactions were rash (in 5 people), and joint pain and/or muscle pain (in 5 people).

These temporary reactions occurred around 9 to 15 days after people switched from eculizumab to crovalimab. All temporary reactions resolved with no change in crovalimab treatment. People were given painkillers or anti-inflammatory medicines to treat joint pain, and anti-allergy medicines or steroids to treat rashes caused by these temporary reactions.

Other side effects

You can find information about other side effects (not shown in the sections above) on the websites listed at the end of this summary – see section 8.

6. How has this study helped research?

The information presented here is from 89 people in a single study of PNH. These results helped researchers learn more about PNH and crovalimab. In this study, researchers compared crovalimab with eculizumab to see if crovalimab is safe and how well it works in people with PNH who had taken eculizumab before joining this study.

This study showed that about 32% of people (14 out of 44) with PNH who took crovalimab had side effects related to this medicine, but none of the side effects were serious. The study also demonstrated the following:

- Seven out of 44 people (16%) who took crovalimab had a temporary reaction when they switched from eculizumab to crovalimab due to the presence of two different drugs in the body that both inhibit C5. It's primarily a mild-to-moderate joint pain and/or a rash occurring about two weeks after the switch from one drug to the other.
- Levels of LDH remained at levels considered 'normal' in 93% of people who took crovalimab and 94% of people who took eculizumab. High levels of LDH can mean that breakdown of red blood cells is happening.
- Levels of haemoglobin stayed stable in 23 out of 39 people (59%) who took crovalimab and 26 out of 37 people (70%) who took eculizumab.
- Around 79% of the people (31 out of 39) who took crovalimab and 78% of the people (29 out of 37) who took eculizumab did not need blood transfusions during 24 weeks of treatment in this study.
- After 24 weeks of treatment, both people who took crovalimab and people who took eculizumab had similar levels of tiredness as they did at the start of the study (as shown by similar fatigue questionnaire scores). Fatigue questionnaire scores increased by an average of 1.1 points in people who took crovalimab (indicating that people felt somewhat less tired) and decreased by an average of 2.6 points in people who took eculizumab (indicating that people felt somewhat more tired).
- Overall, 85% of the people (33 out of 39) who were taking eculizumab before they joined the study said that they preferred crovalimab over eculizumab after taking crovalimab for 17 weeks. People preferred crovalimab because the way treatment was given was easier, the time taken to administer treatment was shorter and there were fewer hospital visits associated with treatment required.

No single study can tell us everything about how safe a medicine is and how well it works. It takes lots of people in many studies to find out everything we need to know. The results from this study may be different from those of other studies with the same medicine.

- **This means that you should not make decisions based on this one summary – always speak to your doctor before making any decisions about your treatment.**

7. Are there plans for other studies?

Other studies of crovalimab are taking place. These studies are comparing crovalimab with eculizumab or studying crovalimab in people with PNH who have not taken C5 inhibitors before (these studies are called COMMODORE 2 and COMMODORE 3).

Another non-comparative part of this COMMODORE 1 study is also taking place (enrolment has ended). This non-randomised part of the study is studying how safe crovalimab is and how well it works in people with PNH who:

- are <18 years old and were taking eculizumab before they joined the study
- were taking another type of C5 inhibitor medicine called ‘ravulizumab’ before they joined the study
- were taking eculizumab at a dose that was higher than the approved dose before they joined the study
- have a particular genetic mutation.

You can find more information on these other studies on the websites listed below:

- COMMODORE 1: <https://clinicaltrials.gov/study/NCT04432584>
- COMMODORE 2: <https://clinicaltrials.gov/ct2/show/NCT04434092>
- COMMODORE 3: <https://clinicaltrials.gov/ct2/show/NCT04654468>

8. Where can I find more information?

You can find more information about this study on the websites listed below:

- <https://clinicaltrials.gov/study/NCT04432584>
- <https://www.clinicaltrialsregister.eu/ctr-search/search?query=2020-000597-26>
- <https://forpatients.roche.com/en/trials/autoimmune-disorder/pnh/a-study-evaluating-the-efficacy-and-safety-of-crovalima-16124.html>

If you would like to find out more about the results of this study, the full title of the scientific paper is:

‘Phase 3 randomized COMMODORE 1 trial: crovalimab versus eculizumab in complement inhibitor-experienced patients with paroxysmal nocturnal hemoglobinuria’. The authors of the paper are: Phillip Scheinberg, Diego Villa Clé, Jin Seok Kim, Erfan Nur, Mustafa N. Yenerel, and others. This paper is published in the journal ‘American Journal of Hematology’, 2024; 1-11; doi: [10.1002/ajh.27413](https://doi.org/10.1002/ajh.27413).

Who can I contact if I have questions about this study?

If you have any further questions after reading this summary:

- Visit the ForPatients platform and fill out the contact form – <https://forpatients.roche.com/en/trials/autoimmune-disorder/pnh/a-study-evaluating-the-efficacy-and-safety-of-crovalima-16124.html>.
- Contact a representative from your local Roche office.

If you took part in this study and have any questions about the results:

- Speak with the study doctor or staff at the study hospital or clinic.

If you have questions about your own treatment:

- Speak to the doctor in charge of your treatment.

Who organised and paid for this study?

This study was organised and paid for by F. Hoffmann-La Roche Ltd who have their headquarters in Basel, Switzerland, and Chugai Pharmaceutical Co., Ltd, who have their headquarters in Tokyo, Japan.

Full title of the study and other identifying information

The full title of this study is: “A Study Evaluating The Safety, Pharmacokinetics, and Efficacy Of Crovalimab Versus Eculizumab In Participants With Paroxysmal Nocturnal Haemoglobinuria (PNH) Currently Treated With Complement Inhibitors (COMMODORE 1)”.

The study is known as ‘COMMODORE 1’.

- The protocol number for this study is: BO42161.
- The ClinicalTrials.gov identifier for this study is: NCT04432584.
- The EudraCT number for this study is: 2020-000597-26.