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 compare cabotegravir and rilpivirine injections with an antiretroviral tablet in adults living with HIV infection who had not received antiretroviral medicines.

Full Scientific Title: A phase III, randomised, multicentre, parallel-group, open-label study evaluating the efficacy, safety, and tolerability of long-acting intramuscular cabotegravir and rilpivirine for maintenance of virologic suppression following switch from an integrase inhibitor single tablet regimen in HIV-1 infected antiretroviral therapy naive adult participants.

ViiV Healthcare Study Number: 201584

Who sponsored this study?

ViiV Healthcare
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 October 2016. Enrolment is closed, but the study was ongoing when this summary was finalised.

What was the main objective of this study?

Human immunodeficiency virus type 1 (HIV) damages the body's defence system (immune system). It weakens the ability to fight infections and increases the risk of developing diseases. Doctors monitor the amount of HIV in the body (viral load) by measuring HIV RNA levels in the blood.

Antiretroviral medicines treat HIV infection by controlling the viral load. Researchers consider that these medicines worked well if the patients' viral load was reduced and remained undetectable (less than 50 copies per millilitre [c/mL]).

In this study, adults living with HIV infection who had not received HIV treatment were given daily antiretroviral medicines as a single tablet. After 20 weeks, if their viral load was undetectable, patients would continue taking the daily tablet and this became their current antiretroviral regimen (CAR) or they were switched to begin receiving cabotegravir (CAB) and rilpivirine (RPV).

Researchers wanted to see how monthly CAB and RPV injections work compared with a daily antiretroviral medicine tablet. Researchers also assessed the safety of these medicines.

Which medicines were studied?

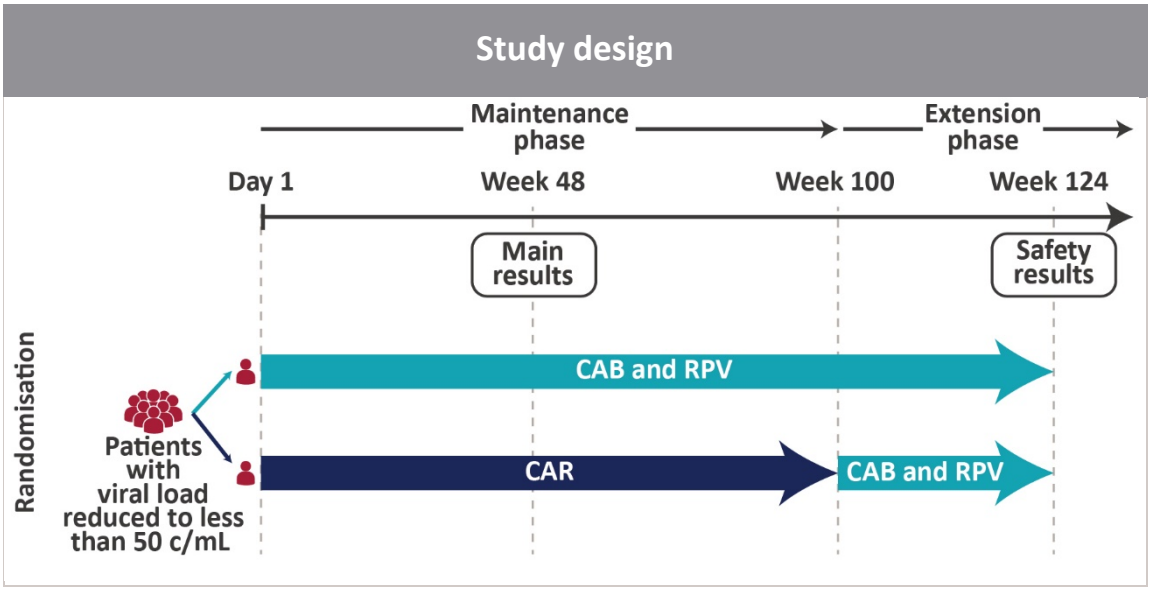
Patients whose viral load was undetectable after receiving antiretroviral medicine for 20 weeks could enter the maintenance phase and then the extension phase.

On Day 1 of the maintenance phase, patients were placed in one of the following two treatment groups by chance (randomisation):

- CAB and RPV group: Patients switched to daily CAB and RPV tablets for the first four weeks. Then they moved to monthly CAB and RPV injections.
- CAR group: Patients continued taking the daily antiretroviral medicine tablet.

After Week 100, all patients with an undetectable viral load could choose to receive monthly CAB and RPV injections until these study medicines were available in their country. This is called the extension phase.

The patient and the study doctor knew which treatment the patient received.



Which patients were included in this study?

Studies have a list of requirements for patients 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 HIV infection were included in the study if they:

- Were at least 18 years old.
- Had not received antiretroviral medicines for HIV infection.
- Had a viral load of 1000 c/mL or more before starting the study.

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

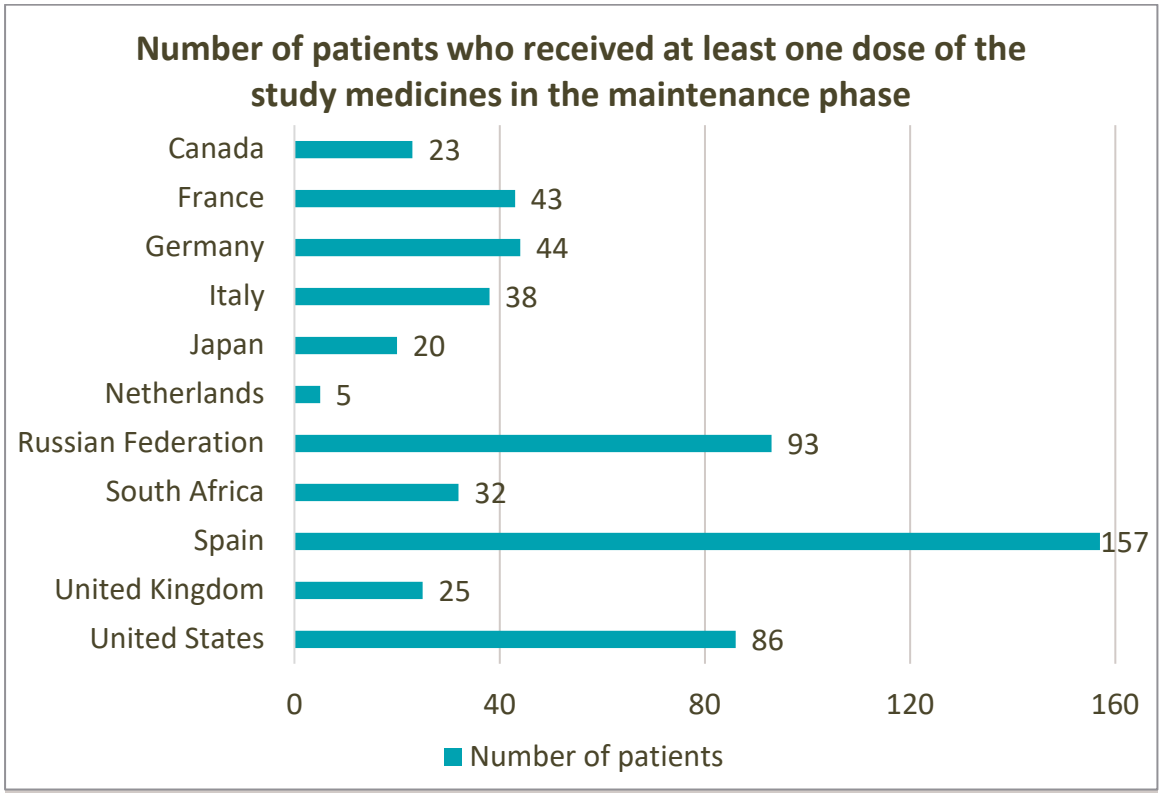
- Hepatitis B virus infection.
- Unstable liver disease.
- Certain active cancers.
- Known resistance to certain medicines used to treat HIV infection.
- Any other disease(s) or taken any medicine(s) that the study doctor thought would affect the results of the study.

Overall, 566 patients received at least one dose of the study medicines in the maintenance phase. The study included 439 patients (78%) who were assigned male at birth and 127 patients (22%) who were assigned female at birth. Of these, 437 patients identified as male and 129 patients identified as female. The average age was 36 years. The youngest patient was 18 years old and the oldest patient was 68 years old.

For more detailed information about the patients 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 11 countries.



What were the main results of the study?

Study doctors collected blood samples and measured patients' viral load.

The table below shows the results for patients who had viral load assessed as:

- Detectable: 50 c/mL or more at Week 48.
- Undetectable: Less than 50 c/mL at Week 48.

Number of patients (percent) by viral load		
	CAB and RPV group 283 patients	**CAR group 283 patients**
50 c/mL or more	6 (2%)	7 (3%)
Less than 50 c/mL	265 (94%)	264 (93%)

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 medicines and/or injections. The side effects in this summary may be different to those in the Informed Consent for this study or other documents related to the study medicines.

The side effects in this summary have been reported from Day 1 to Week 124.

Serious side effects

One of the 283 patients (less than 1%) in the CAB and RPV group had a serious side effect of inflammation in the joints.

No serious side effects were reported in the CAR group from Day 1 to Week 100. Of the 283 patients in the CAR group, 232 patients switched from CAR to CAB and RPV at

Week 100. One of the 232 patients (less than 1%) reported a serious side effect of cancer of the immune system after switching to CAB and RPV. The researchers reviewed the medical record for this patient and believe it was unlikely that the cancer was caused by the study medicines.

Non-serious side effects

The table below shows the non-serious side effects that were reported by 5% or more of patients in the CAB and RPV group.

Number of patients (percent) with non-serious side effects reported by 5% or more of patients in the CAB and RPV group	
	CAB and RPV (Day 1 to Week 124) 283 patients
Injection-related non-serious side effects	
Pain	236 (83%)
Lump	63 (22%)
Hardness	51 (18%)
Swelling	32 (11%)
Itchiness	26 (9%)
Redness	17 (6%)
Study medicine-related non-serious side effects	
Fever	18 (6%)
Headache	15 (5%)

No non-serious side effects were reported by 5% or more of patients in the CAR group from Day 1 to Week 100. The table below shows the non-serious side effects that were reported by 5% or more of patients who switched from CAR to CAB and RPV at Week 100.

Number of patients (percent) with non-serious side effects reported by 5% or more of patients who switched from CAR to CAB and RPV at Week 100	
	CAR to CAB and RPV (Week 100 to Week 124) 232 patients
Injection-related non-serious side effects	
Pain	152 (66%)
Hardness	23 (10%)
Lump	18 (8%)

How has this study helped patients and researchers?

This study compared monthly CAB and RPV injections with a daily antiretroviral medicine tablet in adults living with HIV infection who had not received antiretroviral medicines before enrolling in this study. Researchers concluded that patients in both treatment groups had a similar response in maintaining an undetectable viral load. The side effects reported in this study were not unexpected and were limited in number.

This was a Phase III study. Phase III studies collect information about how well new medicines work and how safe they are. The results help government regulators make decisions about new medicines for their country.

Are there plans for further studies?

Other studies of CAB and RPV in adults living with HIV infection 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. When the study is complete, final results will be available in the scientific summaries.

Organisation and Website	Study Number
European Medicines Agency (www.clinicaltrialsregister.eu)	2016-001646-25[1]
United States National Institutes of Health (NIH) (www.clinicaltrials.gov)	NCT02938520[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 patients who contributed to this study. The results of this study will help answer scientific questions about treating adults living with HIV infection.

The content for this document was finalised by ViiV Healthcare on 3 June 2021. The information in this summary does not include additional information available after this date.

[1] https://www.clinicaltrialsregister.eu/ctr-search/search?query=2016-001646-25
[2] https://clinicaltrials.gov/ct2/show/NCT02938520?term=NCT02938520&rank=1