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 a combination of dolutegravir and lamivudine with tenofovir alafenamide-based regimen in adults living with HIV.

Full Scientific Title: A phase III, randomised, multicentre, parallel-group, non-inferiority study evaluating the efficacy, safety, and tolerability of switching to dolutegravir plus lamivudine in HIV-1-infected adults who are virologically suppressed (TANGO Study).

ViiV Healthcare Study Number: 204862

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 January 2018. Enrolment was closed, but the study was ongoing when this summary was finalised.

What was the main objective of this study?

HIV (human immunodeficiency virus type 1) damages the body's defence system (immune system). It weakens the ability to fight infections and increases the risk of developing diseases when not treated effectively. The HIV has ribonucleic acid (RNA) as its genetic material. Doctors can check the amount of HIV in the body (viral load) by measuring HIV RNA levels in the blood.

HIV medicines control the viral load by preventing HIV from making any more virus. Researchers consider that these medicines are working well if the participants' viral load remains undetectable (less than 50 copies per millilitre of blood [c/mL]). This means levels of HIV measured by tests that are commonly used in clinics are too low to harm the immune system.

Adults living with HIV with an undetectable viral load took part in this study. When this study started, they were being treated with tenofovir alafenamide and at least two more approved HIV medicines. This was their tenofovir alafenamide-based regimen (TBR). Researchers wanted to see how well a combination tablet of dolutegravir (DTG) and lamivudine (3TC) maintained viral loads in these participants compared with continuing TBR. They also studied the safety of these medicines.

Which medicines were studied?

On Day 1, participants were placed in one of the two treatment groups by chance (randomisation):

- DTG and 3TC group (two-medicine regimen): Participants switched from TBR to receive DTG and 3TC tablet once daily throughout the study.
- TBR group (three- to four-medicine regimen): Participants continued taking TBR. At Week 148 (about three years), participants with an undetectable viral load switch from TBR to DTG and 3TC.

Each participant and their study doctor knew which treatment the participant received (open-label study).

After Week 200 (about four years), participants could continue receiving DTG and 3TC in the study until this study medicine receives approval and is available in their country.

Which participants took part 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 HIV were included in the study if they:

- Were at least 18 years old.
- Received their TBR continuously for at least six months before starting the study.
- Had undetectable viral load for at least six months before starting the study.

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

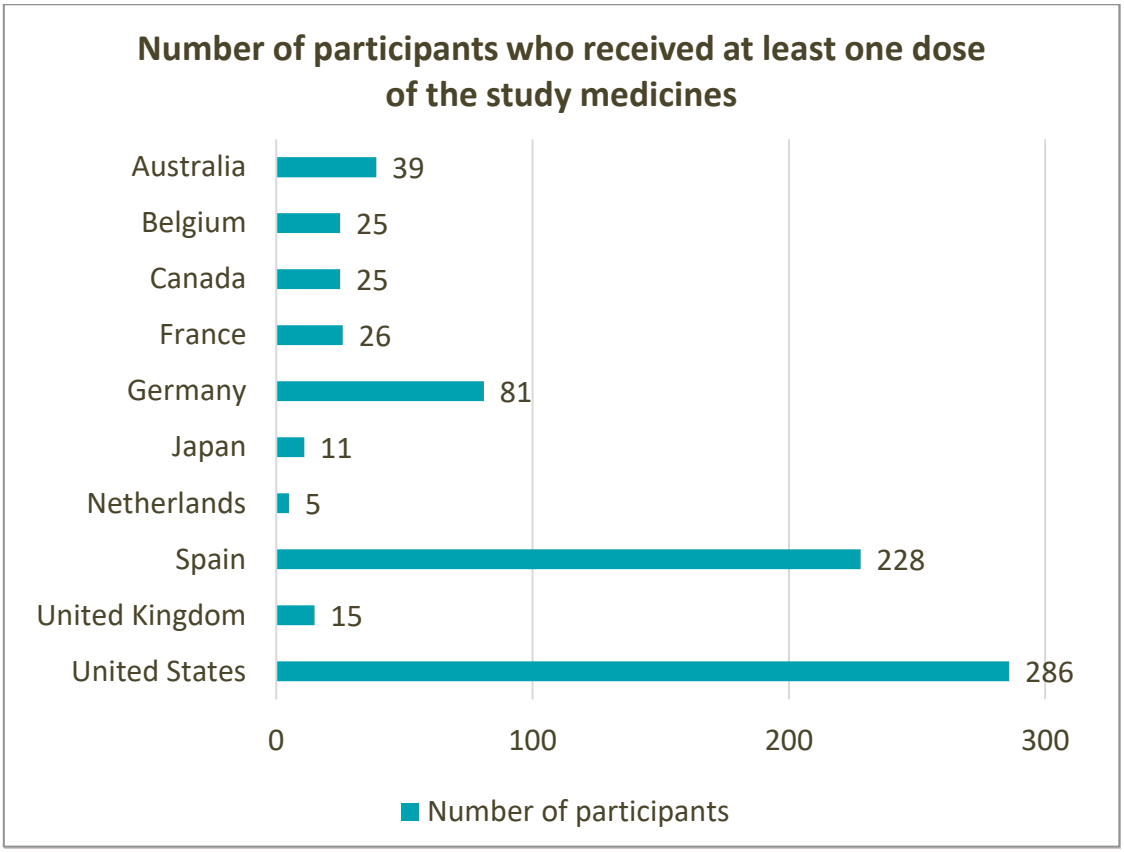
- Viral loads above 200 c/mL between six and 12 months before starting the study.
- Developed resistance (medicine no longer works) to DTG, 3TC, or similar medicines.
- Active cancer or liver disease.
- Any other disease(s), abnormal blood test results, or taken any medicine(s) that the study doctor thought would affect the results of the study.

Overall, 741 participants got at least one dose of the study medicines. The study included 683 (92%) men and 58 (8%) women. The average age was 41 years. The youngest participant was 18 years old and the oldest participant was 74 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 10 countries.



What were the main results of the study?

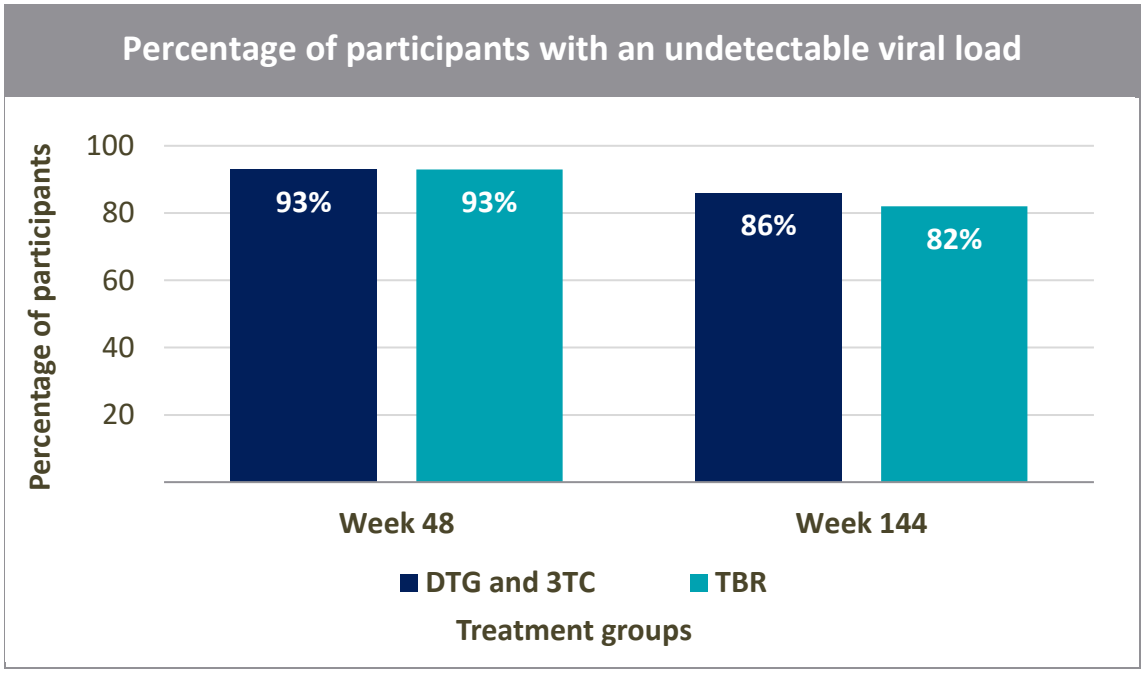
Study doctors collected blood samples and measured participants' viral loads.

The study compared the number of participants in the two treatment groups, who had a detectable viral load (50 c/mL or more) at Week 48.

One of 369 participants (less than 1%) in the DTG and 3TC group and two of 372 participants (less than 1%) in the TBR group had a detectable viral load at Week 48.

At Week 48, there were 24 participants (7%) in each treatment group with no results. These participants either left the study before or missed the Week 48 visit.

The study also compared the percentage of participants in the two treatment groups, who had an undetectable viral load (less than 50 c/mL) at Week 48 and Week 144. Results are shown in the figure below.



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?

Medical problems (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 (also called adverse reaction).

In this summary, side effects refer to those events that the study doctor thinks may have been caused by the study medicines. The side effects in this summary may be new (unexpected) and different to the expected side effects mentioned 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 148. One participant who was randomised to the TBR group did not take tenofovir alafenamide. Side effects for this participant are not reported in this summary.

Serious side effects

Serious side effects were reported by one participant (less than 1%) in the DTG and 3TC group and one participant (less than 1%) in the TBR group. The participant in the DTG and 3TC group had higher than normal levels of a liver protein in the blood. The participant in the TBR group had swelling under the skin.

Non-serious side effects

Non-serious side effects are side effects that do not result in death, hospitalisation or disability. These were reported by 54 participants (15%) in the DTG and 3TC group and 17 participants (5%) in the TBR group. The table below shows the non-serious side effects that were reported by 1% or more of participants in either treatment group.

Number of participants (percent) with non-serious side effects reported by 1% or more of participants in either treatment group		
	DTG and 3TC 369 participants	**TBR 371 participants**
Weight gain	10 (3%)	6 (2%)
Sleeplessness	6 (2%)	0
Nausea	5 (1%)	2 (less than 1%)
Diarrhoea	4 (1%)	3 (less than 1%)
Anxiety	4 (1%)	1 (less than 1%)

How has this study helped participants and researchers?

The study showed that participants who switched to a combination tablet of DTG and 3TC had a similar response in maintaining an undetectable viral load compared with participants who continued taking TBR.

The side effects reported in this study were as expected. More participants in the DTG and 3TC group reported side effects compared with those in the TBR group. This could be because participants in the TBR group continued receiving their current medicines

and were stable for several months before starting the study, while those in the DTG and 3TC group had started new medicines.

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 decide whether to approve new medicines for their country.

Are there plans for further studies?

Other studies of DTG and 3TC in adults living with HIV have been completed. 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 outcomes, 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)	2015-004401-17[1]
United States National Institutes of Health (NIH) (www.clinicaltrials.gov)	NCT03446573[2]

Your doctor or healthcare provider 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 made this study possible. The results of this study will help answer scientific questions about treating adults living with HIV.

[1] https://www.clinicaltrialsregister.eu/ctr-search/search?query=2015-004401-17

[2] https://clinicaltrials.gov/ct2/show/NCT03446573

The content for this document was finalised by ViiV Healthcare on 01 April 2022. The information in this summary does not include additional information available after this date.