



PLAIN LANGUAGE SUMMARY OF CLINICAL STUDY RESULTS

Study Sponsor: Gilead Sciences

Gilead Study Number: GS-US-642-5670

Date of Study: April 2023 to January 2025



Short Study Title: Study of HBV Therapeutic Vaccines GS-2829 and GS-6779 in Healthy Participants and Participants With Chronic Hepatitis B

Date of this Plain Language Summary: March 2026

The information in this summary does not include any information available after this date.

Thank you

Thank you to the participants who took part in the clinical study for **GS-2829** and **GS-6779**.

Gilead Sciences sponsored this study. This summary is prepared for study participants and the general public.

If you participated in the study and have questions about the results, please speak with a doctor or staff member at the study site.

Always talk to a doctor or healthcare provider before making any treatment changes.

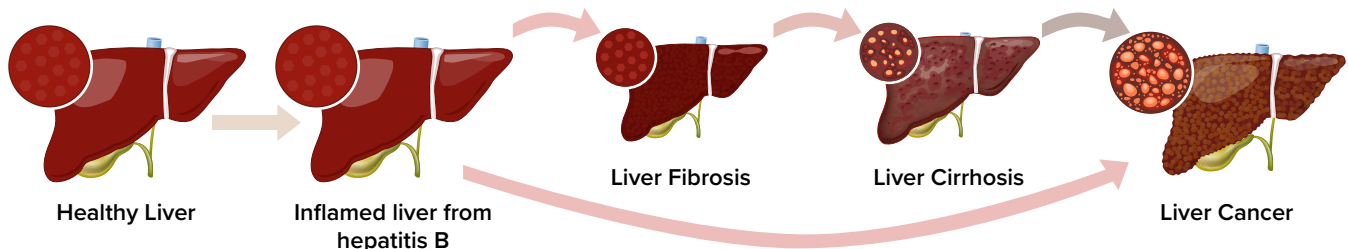
This document is a short summary of this study written for a general audience. Links to scientific summaries of this study can be found at the end of this document.

i General information of the study

What is Chronic Hepatitis B?

Hepatitis B is an infection of the liver. A virus called hepatitis B virus (HBV) causes this infection. HBV enters the body through infected blood or body fluids. It then travels to the liver, which is its main target. The virus grows inside the liver, causing inflammation and liver damage over time. In some people, the hepatitis B infection lasts for a long time, at least 6 months and is considered to be a lifelong infection. This is called chronic infection. If it is not treated, chronic hepatitis B (CHB) may cause liver inflammation (swelling or irritation), liver fibrosis (scarring or damage of liver tissue), liver cirrhosis (severe scarring or damage), and/or liver cancer.

The graphics below show stages of liver damage from CHB infection.



Current treatment options for CHB aim to keep the virus at undetectable levels in the body, but do not remove the virus completely. Because of this, people must take treatment for life, and the treatment may have side effects.

Researchers tested an alternate treatment option using 2 **therapeutic hepatitis vaccines**, GS-2829 and GS-6779, in this study. They tested these vaccines in healthy participants and in participants with CHB who were receiving HBV treatment and had undetectable viral levels in the body. These participants had virally suppressed (VS) CHB infection (VS CHB).



Unlike preventative **vaccines**, which stop infection before it starts, a therapeutic hepatitis vaccine teaches the immune system to recognize and control the virus for long term control or cure.

This was a **Phase 1a/1b** clinical study. This means that the researchers tested these vaccines in a small number of healthy participants (Phase 1a) and participants with VS CHB (Phase 1b).



What was the purpose of the study?

The purpose of this study was to check the safety and tolerability of the repeated doses of GS-2829 or GS-6779, given alone or in combination in healthy participants and in participants with VS CHB.

The main questions the researchers wanted to answer in this study were:

- How many participants had **unwanted medical events** during the study, and how many of these events were **serious**?
- How many participants had **abnormal** laboratory test results (test results that fall outside the normal range) during the study?



An **unwanted medical event** is any unwanted sign or symptom that participants may have during the study. This may or may not be caused by the study treatment.

An unwanted medical event is considered “**serious**” if it:

- results in death
- is life-threatening
- is considered by the study doctor to be medically important
- causes lasting problems
- requires hospital care
- causes a birth defect

Researchers also wanted to know if there were any **side effects** that the participants had during the study. **Side effects** are defined as unwanted medical events that the study doctors thought might be caused by the study drug.



Who took part in the study?

A total of 83 participants took part in **Phase 1a** and **Phase 1b** of the study.

Phase 1a: Healthy Participants

Phase 1b: Participants with VS CHB

People could take part in the study if they:



Were between 18 to 60 years of age



Had no past HBV infection and tested negative for hepatitis B at study start



Had adequate functioning of internal organs with no serious, fungal, bacterial or viral infections



Were between 18 to 65 years of age



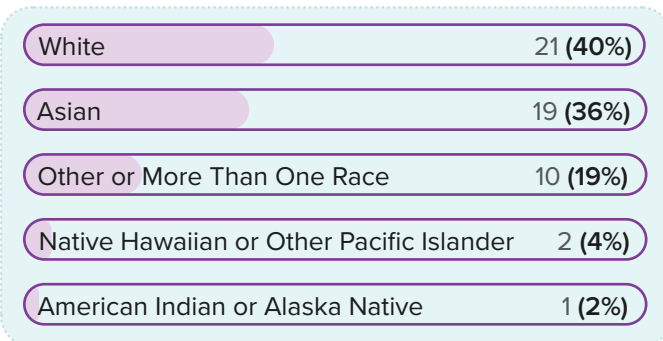
Had CHB or positive test for hepatitis B for at least 6 months before screening



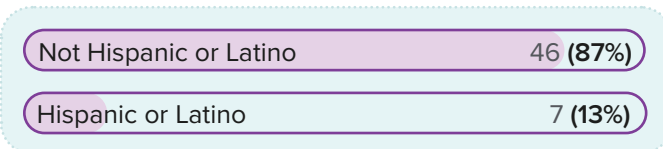
Had no report of severe liver fibrosis at least 6 months before screening

- **Phase 1a:** 53 healthy participants from **New Zealand**, aged **20** to **57** years
- **Phase 1b:** 30 participants with VS CHB from **New Zealand** and **Taiwan**, aged **28** to **62** years

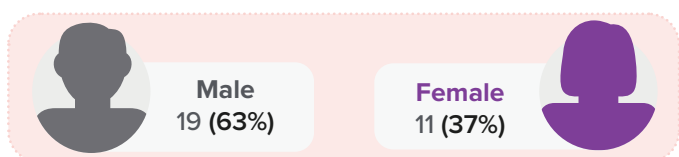
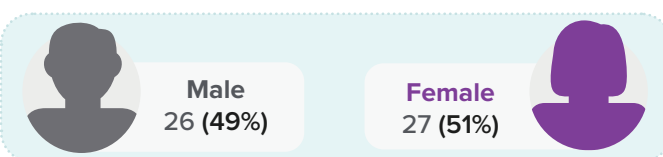
The race of participants is shown below (Number of participants (%)).



The ethnicity of participants is shown below (Number of participants (%)).



The sex of participants is shown below (Number of participants (%)).



? What happened during the study?

This was a **randomized**, **blinded**, and **placebo-controlled** study.

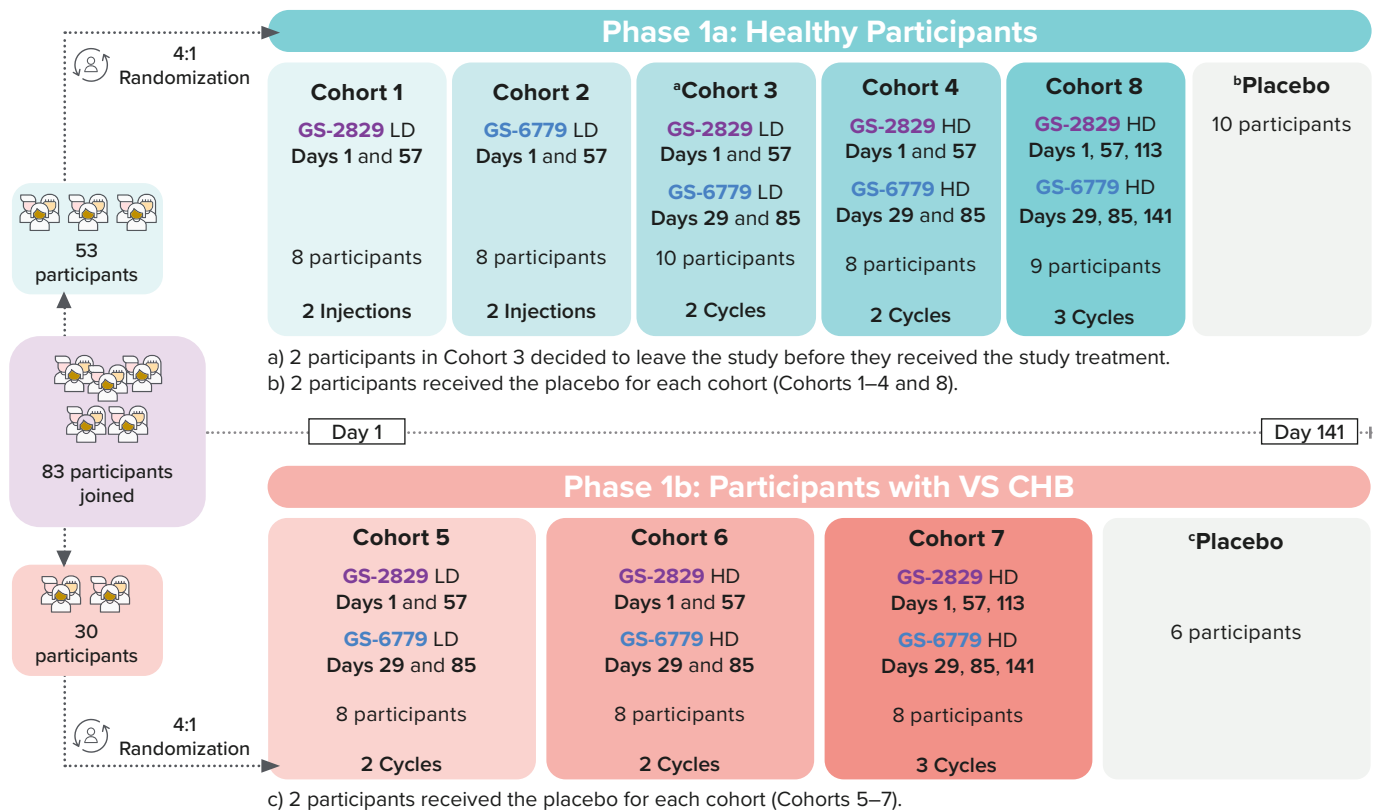
- Randomized** means the researchers used a computer program to assign participants into treatment groups by chance. This helped make sure the treatments were assigned fairly. The participants were randomized in a 4:1 ratio. This means that four times more participants received GS-2829 or GS-6779, given alone or in combination versus those who received the placebo. A placebo means a substance that looks like the drug but does not have active drug in it. In this study, the placebo looked like the vaccines.
- Blinded** means the participants, the doctors, the sponsor, and the study staff did not know the treatment the participants received. Participants were monitored closely for any side effects, and safety measures were in place to address any safety concerns.
- Placebo-controlled** means this study compared treatment drugs against placebo treatments.

Phase 1a (healthy participants) were included in **Cohorts** 1–4 and 8. A **cohort** is a group of individuals who share something in common. In this study, they shared the same treatment plan.

Phase 1b (participants with VS CHB) were included in Cohorts 5–7.

Participants received either a low dose (LD) or high dose (HD) GS-2829 or GS-6779 vaccine, alone or in combination, or a placebo. The vaccines or placebo were given as one injection (single vaccine) or two injections (alternating vaccines) per **cycle**, over 2 or 3 cycles. A **cycle** is the time (56 days) between the start of one round of treatment until the start of the next round.

The graphics below show the treatment plan in each phase:



51 participants who started treatment in Phase 1a and 30 participants who started treatment in Phase 1b completed the treatment as planned. There was 1 participant in Phase 1a, Cohort 8 who stopped treatment early (discontinued). This participant's results are still included in the study.



What were the results of the study?



This is a summary of the main results from this study. The individual results of each participant might be different and are not in this summary. A detailed presentation of the results can be found on the websites listed at the end of this summary.

How many participants had unwanted medical events during the study, and how many of these events were serious?

Researchers wanted to find out the safety and tolerability of the study vaccines. Therefore, they kept track of any unwanted medical events that participants had during the study.

The tables below show participants with unwanted medical events during the study.

Phase 1a: Healthy Participants						
	Cohort 1 GS-2829 LD (2 Injections) Out of 8 participants	Cohort 2 GS-6779 LD (2 Injections) Out of 8 participants	Cohort 3 GS-2829 LD GS-6779 LD (2 Cycles) Out of 8 participants	Cohort 4 GS-2829 HD GS-6779 HD (2 Cycles) Out of 8 participants	Cohort 8 GS-2829 HD GS-6779 HD (3 Cycles) Out of 9 participants	Placebo Out of 10 participants
	Number of participants (%)					
Participants with any unwanted medical events	8 (100%)	8 (100%)	8 (100%)	8 (100%)	9 (100%)	9 (90%)

Phase 1b: Participants with VS CHB				
	Cohort 5 GS-2829 LD GS-6779 LD (2 Cycles) Out of 8 participants	Cohort 6 GS-2829 HD GS-6779 HD (2 Cycles) Out of 8 participants	Cohort 7 GS-2829 HD GS-6779 HD (3 Cycles) Out of 8 participants	Placebo Out of 6 participants
	Number of participants (%)			
Participants with any unwanted medical events	6 (75%)	5 (63%)	6 (75%)	3 (50%)

One participant in Phase 1a (Cohort 8) had a serious event of fracture in the middle part of the foot (Lisfranc fracture). The study doctors determined that it was not caused by the study drugs. No serious events were reported among Phase 1b participants.

How many participants had abnormal laboratory test results during the study?

Laboratory tests were done before and after the vaccine/placebo to see whether any values changed to outside the normal range.

The tables below show participants with abnormal laboratory test results during the study.

Phase 1a: Healthy Participants						
	Cohort 1 GS-2829 LD (2 Injections) Out of 8 participants	Cohort 2 GS-6779 LD (2 Injections) Out of 8 participants	Cohort 3 GS-2829 LD GS-6779 LD (2 Cycles) Out of 8 participants	Cohort 4 GS-2829 HD GS-6779 HD (2 Cycles) Out of 8 participants	Cohort 8 GS-2829 HD GS-6779 HD (3 Cycles) Out of 9 participants	Placebo Out of 10 participants
	Number of participants (%)					
Participants with any laboratory abnormalities	8 (100%)	7 (88%)	8 (100%)	8 (100%)	8 (89%)	9 (90%)

Phase 1b: Participants with VS CHB

	Cohort 5 GS-2829 LD GS-6779 LD (2 Cycles) Out of 8 participants	Cohort 6 GS-2829 HD GS-6779 HD (2 Cycles) Out of 8 participants	Cohort 7 GS-2829 HD GS-6779 HD (3 Cycles) Out of 8 participants	Placebo Out of 6 participants
	Number of participants (%)			
Participants with any laboratory abnormalities	7 (88%)	8 (100%)	8 (100%)	6 (100%)

Overall, GS-2829 or GS-6779, given alone or in combination were well tolerated across all dose levels and cohorts by both healthy participants and participants with VS CHB. Most of the changes in laboratory values were mild. Some participants had larger changes, but doctors assessed them and confirmed they did not pose any risk and did not require treatment.



What side effects did participants have during the study?

The researchers kept track of side effects that participants had during the study. The results from several studies are usually needed to help decide if a study drug actually causes a side effect.

The tables below show participants with side effects during the study.

Phase 1a: Healthy Participants

	Cohort 1 GS-2829 LD (2 Injections) Out of 8 participants	Cohort 2 GS-6779 LD (2 Injections) Out of 8 participants	Cohort 3 GS-2829 LD GS-6779 LD (2 Cycles) Out of 8 participants	Cohort 4 GS-2829 HD GS-6779 HD (2 Cycles) Out of 8 participants	Cohort 8 GS-2829 HD GS-6779 HD (3 Cycles) Out of 9 participants	Placebo Out of 10 participants	Total (Out of 51 participants)
	Number of participants (%)						
How many participants had any side effects?	3 (38%)	7 (88%)	5 (63%)	8 (100%)	8 (89%)	8 (80%)	39 (76%)

Phase 1b: Participants with VS CHB

	Cohort 5 GS-2829 LD GS-6779 LD (2 Cycles) Out of 8 participants	Cohort 6 GS-2829 HD GS-6779 HD (2 Cycles) Out of 8 participants	Cohort 7 GS-2829 HD GS-6779 HD (3 Cycles) Out of 8 participants	Placebo Out of 6 participants	Total (Out of 30 participants)
	Number of participants (%)				
How many participants had any side effects?	4 (50%)	3 (38%)	5 (63%)	2 (33%)	14 (47%)

What were the serious side effects?

The study participants did not have any serious side effects during the study. No deaths were reported due to side effects.

What were the non-serious side effects?

The tables below show the most common non-serious side effects that occurred in **at least 10%** participants during the study.

Phase 1a: Healthy Participants

	Cohort 1 GS-2829 LD (2 Injections) Out of 8 participants	Cohort 2 GS-6779 LD (2 Injections) Out of 8 participants	Cohort 3 GS-2829 LD GS-6779 LD (2 Cycles) Out of 8 participants	Cohort 4 GS-2829 HD GS-6779 HD (2 Cycles) Out of 8 participants	Cohort 8 GS-2829 HD GS-6779 HD (3 Cycles) Out of 9 participants	Placebo Out of 10 participants	Total (Out of 51 participants)
Number of participants (%)							
Pain at injection site (Injection site pain)	1 (13%)	5 (63%)	5 (63%)	8 (100%)	4 (44%)	3 (30%)	26 (51%)
Extreme tiredness (Fatigue)	0	5 (63%)	3 (38%)	6 (75%)	4 (44%)	3 (30%)	21 (41%)
Headache	1 (13%)	1 (13%)	1 (13%)	7 (88%)	4 (44%)	4 (40%)	18 (35%)
A general feeling of discomfort, illness or feeling unwell (Malaise)	0	0	1 (13%)	6 (75%)	5 (56%)	1 (10%)	13 (25%)
Muscle pain (Myalgia)	2 (25%)	0	1 (13%)	5 (63%)	3 (33%)	0	11 (22%)
Fever (Pyrexia)	0	1 (13%)	1 (13%)	4 (50%)	2 (22%)	2 (20%)	10 (20%)
Injection site swelling	2 (25%)	0	1 (13%)	1 (13%)	3 (33%)	0	7 (14%)
Abnormal redness at injection site (Injection site erythema)	2 (25%)	1 (13%)	0	0	3 (33%)	0	6 (12%)
Feeling sick to the stomach (Nausea)	0	1 (13%)	0	1 (13%)	3 (33%)	0	5 (10%)

Phase 1b: Participants with VS CHB

	Cohort 5 GS-2829 LD GS-6779 LD (2 Cycles) Out of 8 participants	Cohort 6 GS-2829 HD GS-6779 HD (2 Cycles) Out of 8 participants	Cohort 7 GS-2829 HD GS-6779 HD (3 Cycles) Out of 8 participants	Placebo Out of 6 participants	Total (Out of 30 participants)
Number of participants (%)					
Extreme tiredness (Fatigue)	3 (38%)	3 (38%)	3 (38%)	1 (17%)	10 (33%)
Pain at injection site (Injection site pain)	2 (25%)	3 (38%)	2 (25%)	2 (33%)	9 (30%)
A general feeling of discomfort, illness or feeling unwell (Malaise)	1 (13%)	1 (13%)	3 (38%)	1 (17%)	6 (20%)
Headache	0	1 (13%)	1 (13%)	1 (17%)	3 (10%)

Some participants may have had more than 1 non-serious side effect.

? How has this study helped researchers?

The researchers learned more about the safety and tolerability of GS-2829 or GS-6779, given alone or in combination in healthy participants and in participants with VS CHB. The results from several studies are needed to help decide which treatments work and are safe. This summary shows only the main results from this one study. Other studies may provide new information or different results.

The results of this study will be used to support future research on whether GS-2829 or GS-6779, alone or in combination with other drugs may help to achieve long-term control or cure of CHB.

Gilead Sciences plans to have further clinical studies with GS-2829 and GS-6779.

Where can I learn more about this study?

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

Organization (Website)	Study Identifier
United States National Institutes of Health (NIH) www.clinicaltrials.gov	ClinicalTrials.gov Number: NCT05770895
Gilead Website www.gileadclinicaltrials.com	GS-US-642-5670

Please note that information on these websites may be presented in a different way from this summary.

Full Study Title: A Phase 1a/1b Study to Evaluate the Safety and Tolerability of Repeated Doses of Nonreplicating Arenavirus Vector Therapeutic Vaccines GS-2829 and GS-6779 in Healthy Participants and Participants With Chronic Hepatitis B (CHB)

To learn more about clinical trials in general, please visit this [page](#) on www.clinicaltrials.gov website

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Clinical study participants belong to a large community of people who take part in clinical research around the world. They help researchers answer important health questions and find medical treatments for patients.

