



## Clinical trial results:

### A Multicenter, Open-label Study to Evaluate the Safety, Efficacy, and Pharmacokinetics of Velaglucerase Alfa in Chinese Subjects With Type 1 Gaucher Disease

#### Summary

EudraCT number	2022-002323-35
Trial protocol	Outside EU/EEA
Global end of trial date	05 August 2024

#### Results information

Result version number	v1 (current)
This version publication date	20 February 2025
First version publication date	20 February 2025

#### Trial information

##### Trial identification

Sponsor protocol code	TAK-669-3001
-----------------------	--------------

##### Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT05529992
WHO universal trial number (UTN)	-

Notes:

#### Sponsors

Sponsor organisation name	Takeda
Sponsor organisation address	95 Hayden Ave, Lexington, Massachusetts, United States, 02421
Public contact	Study Director, Takeda, TrialDisclosures@takeda.com
Scientific contact	Study Director, Takeda, TrialDisclosures@takeda.com

Notes:

#### Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	Yes

Notes:

## Results analysis stage

Analysis stage	Final
Date of interim/final analysis	05 August 2024
Is this the analysis of the primary completion data?	No
Global end of trial reached?	Yes
Global end of trial date	05 August 2024
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

The main aim of this study was to evaluate the safety of VPRIV in participants with type 1 Gaucher disease.

Protection of trial subjects:

Each participant or their parents/guardians/legally authorized representatives signed an informed consent form (ICF) before participating in the study.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	03 January 2023
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

## Population of trial subjects

### Subjects enrolled per country

Country: Number of subjects enrolled	China: 20
Worldwide total number of subjects	20
EEA total number of subjects	0

Notes:

### Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	10
Adolescents (12-17 years)	5
Adults (18-64 years)	5
From 65 to 84 years	0
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details:

Participants took part in the study at various investigative sites in China from 3 January 2023 to 5 August 2024.

### Pre-assignment

Screening details:

Participants with a diagnosis of type 1 Gaucher disease were enrolled in this study to receive velaglucerase alfa (VPRIV) as intravenous (IV) infusion.

### Period 1

Period 1 title	Overall Study (overall period)
Is this the baseline period?	Yes
Allocation method	Not applicable
Blinding used	Not blinded

### Arms

Arm title	VPRIV
-----------	-------

Arm description:

Participants received VPRIV IV infusion at 60 U/kg body weight once EOW for 60 (+10) minutes up to Week 51.

Arm type	Experimental
Investigational medicinal product name	Velaglucerase Alfa (VPRIV)
Investigational medicinal product code	TAK-669
Other name	VPRIV
Pharmaceutical forms	Powder and solvent for solution for infusion
Routes of administration	Intravenous use, Infusion

Dosage and administration details:

VPRIV IV infusion at 60 U/kg body weight once every other week (EOW) for 60 (+10) minutes for up to 51 weeks.

Number of subjects in period 1	VPRIV
Started	20
Completed	19
Not completed	1
Consent withdrawn by subject	1

## Baseline characteristics

### Reporting groups

Reporting group title	VPRIV
-----------------------	-------

Reporting group description:

Participants received VPRIV IV infusion at 60 U/kg body weight once EOW for 60 (+10) minutes up to Week 51.

Reporting group values	VPRIV	Total	
Number of subjects	20	20	
Age Categorical			
Units: Subjects			

Age continuous			
Units: years			
arithmetic mean	14.3		
standard deviation	± 9.68	-	
Gender categorical			
Units: Subjects			
Female	13	13	
Male	7	7	
Race (NIH/OMB)			
Units: Subjects			
American Indian or Alaska Native	0	0	
Asian	20	20	
Native Hawaiian or Other Pacific Islander	0	0	
Black or African American	0	0	
White	0	0	
More than one race	0	0	
Unknown or Not Reported	0	0	
Ethnicity (NIH/OMB)			
Units: Subjects			
Hispanic or Latino	0	0	
Not Hispanic or Latino	20	20	
Unknown or Not Reported	0	0	

## End points

### End points reporting groups

Reporting group title	VPRIV
Reporting group description:	
Participants received VPRIV IV infusion at 60 U/kg body weight once EOW for 60 (+10) minutes up to Week 51.	

### Primary: Percentage of Participants With at Least One Serious Treatment-Emergent Adverse Event (TEAE)

End point title	Percentage of Participants With at Least One Serious Treatment-Emergent Adverse Event (TEAE) <sup>[1]</sup>
-----------------	---

End point description:

Adverse event(AE)=any untoward medical occurrence in clinical investigation participant administered drug;it does not necessarily have to have causal relationship with this treatment. AE can therefore be any unfavorable&unintended sign (example,clinically significant abnormal laboratory value),symptom/disease temporally associated with use of drug whether/not it is considered related to drug. TEAE=any event emerging/manifesting at or after initiation of investigational product or any existing event that worsens in either intensity or frequency following exposure to investigational product. SAE=any untoward clinical manifestation of signs, symptoms/outcomes(whether considered related to investigational product or not)&at any dose: results in death,is life-threatening,requires in-patient hospitalization/prolongation of hospitalization,results in persistent/significant disability/incapacity,results in congenital abnormality/birth defect,or is an important medical event.

End point type	Primary
----------------	---------

End point timeframe:

Up to 56.2 weeks

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: Only descriptive analysis was planned for this endpoint.

End point values	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	20			
Units: percentage of participants				
number (not applicable)	20			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Percentage of Participants With TEAEs

End point title	Percentage of Participants With TEAEs
-----------------	---------------------------------------

End point description:

An AE is defined as any untoward medical occurrence in a clinical investigation participant administered a drug; it does not necessarily have to have a causal relationship with this treatment. An AE can therefore be any unfavorable and unintended sign (example, a clinically significant abnormal laboratory value), symptom, or disease temporally associated with the use of a drug whether or not it is considered related to the drug. A TEAE is defined as any event emerging or manifesting at or after the initiation of the investigational product or any existing event that worsens in either intensity or frequency following exposure to the investigational product. The Safety Set (SAF) included all participants in the ITT Set

who received at least 1 dose of VPRIV.

End point type	Secondary
End point timeframe:	
Up to 56.2 weeks	

<b>End point values</b>	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	20			
Units: percentage of participants				
number (not applicable)	95			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Percentage of Participants With Infusion-related Reactions Reported as an Adverse Event

End point title	Percentage of Participants With Infusion-related Reactions Reported as an Adverse Event
-----------------	---

End point description:

An AE is defined as any untoward medical occurrence in a clinical investigation participant administered a drug; it does not necessarily have to have a causal relationship with this treatment. An AE can therefore be any unfavorable and unintended sign (example, a clinically significant abnormal laboratory value), symptom, or disease temporally associated with the use of a drug whether or not it is considered related to the drug. An infusion-related AE was defined as an AE that 1) began either during or within 12 hours after the start of the infusion and 2) was judged as possibly or probably related to the study treatment. The SAF included all participants in the ITT Set who received at least 1 dose of VPRIV.

End point type	Secondary
End point timeframe:	
Up to 56.2 weeks	

<b>End point values</b>	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	20			
Units: percentage of participants				
number (not applicable)	5			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Percentage of Participants With Development of Anti-VPRIV Antibodies and Neutralizing Antibodies at Week 53

End point title	Percentage of Participants With Development of Anti-VPRIV Antibodies and Neutralizing Antibodies at Week 53
End point description:	
Percentages were rounded off to the nearest single decimal place. The SAF included all participants in the ITT Set who received at least 1 dose of VPRIV. Subjects analysed is the number of participants with data available for analyses.	
End point type	Secondary
End point timeframe:	
Week 53	

<b>End point values</b>	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	19			
Units: percentage of participants				
number (not applicable)				
Anti-VPRIV Antibodies	15.8			
Neutralizing Antibodies	10.5			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Number of Participants With Clinically Significant Changes in Laboratory Assessments at Week 53

End point title	Number of Participants With Clinically Significant Changes in Laboratory Assessments at Week 53
End point description:	
Clinical laboratory assessments included hematology and serum chemistry. Any clinically significant changes in the clinical laboratory assessment values based on the investigator's interpretation were reported. Only categories with at least one participant with event are presented. MCH stands for mean corpuscular hemoglobin. The SAF included all participants in the ITT Set who received at least 1 dose of VPRIV. Subjects analysed is the number of participants with data available for analyses. 'n' indicates the number of participants with data available for analysis for the specified category.	
End point type	Secondary
End point timeframe:	
Week 53	

<b>End point values</b>	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	19			
Units: participants				
Hematology: Erythrocytes MCH Concentration	2			
Hematology: Erythrocytes MCH	3			

Hematology: Erythrocytes Mean Corpuscular Volume	2			
Hematology: Erythrocytes	2			
Hematology: Hematocrit	5			
Hematology: Hemoglobin	4			
Hematology: Leukocytes	2			
Hematology: Lymphocytes	1			
Hematology: Monocytes	1			
Hematology: Neutrophils	2			
Hematology: Platelets	14			
Serum Chemistry: Bilirubin	3			
Serum Chemistry: Ferritin	5			
Serum Chemistry: Iron	2			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Number of Participants With Abnormal Changes in Laboratory Assessments at Week 53: Urinalysis

End point title	Number of Participants With Abnormal Changes in Laboratory Assessments at Week 53: Urinalysis
-----------------	---

End point description:

Any abnormal changes in the urinalysis assessment values based on the investigator's interpretation were reported. Urinalysis comprised of the following parameters: bilirubin, ketones, glucose, nitrite, occult blood, protein, and urobilinogen. The SAF included all participants in the ITT Set who received at least 1 dose of VPRIV. Subjects analysed is the number of participants with data available for analyses. 'n' indicates the number of participants with data available for analysis for the specified category.

End point type	Secondary
----------------	-----------

End point timeframe:

Week 53

End point values	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	19			
Units: participants				
Urinalysis: Bilirubin	1			
Urinalysis: Ketones	0			
Urinalysis: Glucose	1			
Urinalysis: Nitrite	1			
Urinalysis: Occult Blood	7			
Urinalysis: Protein	3			
Urinalysis: Urobilinogen	3			

### Statistical analyses



## Secondary: Number of Participants With at Least One Abnormal Change in an Infusion Vital Sign Parameter at Week 53

End point title	Number of Participants With at Least One Abnormal Change in an Infusion Vital Sign Parameter at Week 53
-----------------	---

### End point description:

Participants with atleast 1 abnormal change (above or below normal) in an infusion vital sign parameter of pulse, temperature, respiratory rate,& blood pressure were reported. Normal ranges for each vital sign parameter were, pulse (beats per minutes [bpm]): 40-100( $\geq 12$  years old), 55-95( $\geq 6$  but  $< 12$  years old), 65-110( $\geq 2$  but  $< 6$  years old); body temperature(degree Celsius[ $^{\circ}\text{C}$ ]): 36.5 to 37.2(all age groups),respiration rate(breaths/minutes):12-24( $\geq 12$  years old),12-22 ( $\geq 6$  but  $< 12$  years old),20-30( $\geq 2$  but  $< 6$  years old);systolic blood pressure(BP) [millimeters of mercury{mm Hg}]: high:  $\geq 140$  ( $\geq 18$  years old),  $\geq 20 + 80 + 2 \cdot \text{age}$  ( $< 18$  years old), low:  $< 90$  ( $\geq 18$  years old),  $< -20 + 80 + 2 \cdot \text{age}$  ( $< 18$  years old); diastolic BP(mm Hg):high: $\geq 90$  ( $\geq 18$  years old),  $\geq 20 + (80 + 2 \cdot \text{age}) \cdot (2/3)$  ( $< 18$  years old) low:  $< 50$  ( $\geq 18$  years old),  $< -20 + (80 + 2 \cdot \text{age}) \cdot (2/3)$  ( $< 18$  years old). As per planned analysis,data was collected in a combined manner for all participants irrespective of age. Only non-zero categories are presented.

End point type	Secondary
----------------	-----------

### End point timeframe:

Week 53

End point values	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	20			
Units: participants				
Pulse: Above Normal	15			
Body Temperature: Above Normal	1			
Body Temperature: Below Normal	18			
Respiratory Rate: Above Normal	9			
Systolic BP: Above Normal	11			
Systolic BP: Below Normal	5			
Diastolic BP: Above Normal	8			
Diastolic BP: Below Normal	3			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Number of Participants With Clinically Significant Changes in Electrocardiogram (ECG) Measurements at Week 53

End point title	Number of Participants With Clinically Significant Changes in Electrocardiogram (ECG) Measurements at Week 53
-----------------	---

### End point description:

Participants with clinically significant changes in any ECG measurement, such as PR, QRS, QT, corrected QT intervals, and heart rate based on the investigator's interpretation were reported. The SAF included all participants in the ITT Set who received at least 1 dose of VPRIV. Subjects analysed is the number of participants with data available for analyses.

End point type	Secondary
----------------	-----------

End point timeframe:

Week 53

<b>End point values</b>	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	19			
Units: participants	1			

### Statistical analyses

No statistical analyses for this end point

#### Secondary: Change From Baseline to Week 53 in Hemoglobin Concentration

End point title	Change From Baseline to Week 53 in Hemoglobin Concentration
-----------------	---

End point description:

The ITT Set included all participants who signed the ICF (and assent form, if applicable) and were eligible for the study based on the defined inclusion/exclusion criteria. Subjects analysed is the number of participants with data available for analyses.

End point type	Secondary
----------------	-----------

End point timeframe:

Baseline, Week 53

<b>End point values</b>	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	18			
Units: grams per deciliter (g/dL)				
arithmetic mean (standard deviation)	2.34 (± 1.305)			

### Statistical analyses

No statistical analyses for this end point

#### Secondary: Change From Baseline to Week 53 in Platelet Count

End point title	Change From Baseline to Week 53 in Platelet Count
-----------------	---

End point description:

The ITT Set included all participants who signed the ICF (and assent form, if applicable) and were eligible for the study based on the defined inclusion/exclusion criteria. Subjects analysed is the number of participants with data available for analyses.

End point type	Secondary
----------------	-----------

End point timeframe:

Baseline, Week 53

<b>End point values</b>	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	18			
Units: platelets*10 <sup>9</sup> /liter				
arithmetic mean (standard deviation)	42.1 (± 27.68)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Change From Baseline to Week 53 in Normalized Liver Volume

End point title	Change From Baseline to Week 53 in Normalized Liver Volume
End point description:	
Normalized liver volume was measured by abdominal magnetic resonance imaging (MRI) or computed tomography (CT) scan. Liver volume was normalized for percent body weight. The ITT Set included all participants who signed the ICF (and assent form, if applicable) and were eligible for the study based on the defined inclusion/exclusion criteria. Subjects analysed is the number of participants with data available for analyses.	
End point type	Secondary
End point timeframe:	
Baseline, Week 53	

<b>End point values</b>	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	19			
Units: percentage of body weight (%BW)				
arithmetic mean (standard deviation)	-1.11 (± 0.917)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Change From Baseline to Week 53 in Normalized Spleen Volume

End point title	Change From Baseline to Week 53 in Normalized Spleen Volume
End point description:	
Spleen volume was normalized for percent body weight. The ITT Set included all participants who signed the ICF (and assent form, if applicable) and were eligible for the study based on the defined inclusion/exclusion criteria. Subjects analysed is the number of participants with data available for analyses.	

End point type	Secondary
End point timeframe:	
Baseline, Week 53	

<b>End point values</b>	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	19			
Units: % BW				
arithmetic mean (standard deviation)	-3.09 (± 1.627)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Change From Baseline to Week 53 in 36-item Short Form General Health Survey (SF-36) Scores

End point title	Change From Baseline to Week 53 in 36-item Short Form General Health Survey (SF-36) Scores
-----------------	--

End point description:

SF-36 Version 2 is a multipurpose, participant completed, short-form health survey with 36 questions that consists of an 8-scale profile of functional health and well-being scores as well as psychometrically-based physical and mental health summary measures. Physical component summary (PCS) is mostly contributed by physical function (PF), role physical (RP), bodily pain (BP), and general health (GH). Mental component summary (MCS) is mostly contributed by mental health (MH), role emotional (RE), social function (SF), and vitality (VT). Each component on the SF-36 item health survey is scored from 0 (best) to 100 (worst). Total score ranges from 0-100 for each component summary (i.e., PCS and MCS), where higher scores are associated with less disability and better quality of life. The SAF included all participants in the ITT Set who received at least 1 dose of VPRIV. Subjects analysed is the number of participants with data available for analyses.

End point type	Secondary
End point timeframe:	
Baseline, Week 53	

<b>End point values</b>	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	4			
Units: score on a scale				
arithmetic mean (standard deviation)				
Physical Component Summary	7.015 (± 5.8464)			
Mental Component Summary	2.858 (± 12.5103)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Change From Baseline to Week 53 in Childhood Health Questionnaire-Parent Form 50 (CHQ-PF50) Scores

End point title	Change From Baseline to Week 53 in Childhood Health Questionnaire-Parent Form 50 (CHQ-PF50) Scores
-----------------	--

End point description:

The CHQ-PF-50 is a 50-item questionnaire to be completed by the parents or guardians of children between 5 and 18 years of age. The 50 questions measure 14 domains (global health, physical functioning, role/social limitations (emotional/behavioral and physical), bodily pain/discomfort, behavior, global behavior, mental health, self-esteem, general health perceptions, change in health, parental impact (emotional and time), family activities, and family cohesion) which were summarized as the physical and psychological summary scores. Each summary score was transformed and could range from 0 to 100, with higher score indicating better physical and psychosocial health. A positive change from Baseline indicates improved well-being. The SAF included all participants in the ITT Set who received at least 1 dose of VPRIV. Subjects analysed is the number of participants with data available for analyses.

End point type	Secondary
----------------	-----------

End point timeframe:

Baseline, Week 53

<b>End point values</b>	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: score on a scale				
arithmetic mean (standard deviation)				
Physical Summary Score	-0.02 (± 12.745)			
Psychosocial Summary Score	0.38 (± 11.462)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Cmax: Maximum Observed Serum Concentration for VPRIV at Week 1

End point title	Cmax: Maximum Observed Serum Concentration for VPRIV at Week 1
-----------------	--

End point description:

The Pharmacokinetic (PK) Set included all naïve participants in the ITT set who received at least 1 dose of VPRIV and provided evaluable PK concentration data.

End point type	Secondary
----------------	-----------

End point timeframe:

Pre-dose and at multiple timepoints up to 120 minutes post-dose on Day 1 of Week 1

End point values	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	16			
Units: nanograms per milliliter (ng/mL)				
arithmetic mean (standard deviation)	5220 ( $\pm$ 1610)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Serum Concentration for VPRIV at Week 37

End point title	Serum Concentration for VPRIV at Week 37
-----------------	--

End point description:

The PK Set included all naïve participants in the ITT set who received at least 1 dose of VPRIV and provided evaluable PK concentration data. Subjects analysed is the number of participants with data available for analyses.

End point type	Secondary
----------------	-----------

End point timeframe:

Within 3 minutes prior to the end of the 60-minute infusion at Week 37

End point values	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: ng/mL				
arithmetic mean (standard deviation)	3450 ( $\pm$ 1390)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Tmax: Time to Reach the Maximum Serum Concentration (Cmax) for VPRIV

End point title	Tmax: Time to Reach the Maximum Serum Concentration (Cmax) for VPRIV
-----------------	--

End point description:

The PK Set included all naïve participants in the ITT set who received at least 1 dose of VPRIV and provided evaluable PK concentration data.

End point type	Secondary
----------------	-----------

End point timeframe:

Pre-dose and at multiple timepoints up to 120 minutes post-dose on Day 1 of Week 1

End point values	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	16			
Units: minutes (min)				
median (full range (min-max))	49.00 (19.00 to 60.00)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: AUCinf: Area Under the Plasma Concentration-time Curve from Time 0 to Infinity for VPRIV

End point title	AUCinf: Area Under the Plasma Concentration-time Curve from Time 0 to Infinity for VPRIV
-----------------	--

End point description:

ng\*min/mL denotes nanograms\*minutes per milliliter. The PK Set included all naïve participants in the ITT set who received at least 1 dose of VPRIV and provided evaluable PK concentration data.

End point type	Secondary
----------------	-----------

End point timeframe:

Pre-dose and at multiple timepoints up to 120 minutes post-dose on Day 1 of Week 1

End point values	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	16			
Units: ng*min/mL				
arithmetic mean (standard deviation)	235000 (± 85000)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Terminal Phase Elimination Half-life (T1/2) for VPRIV

End point title	Terminal Phase Elimination Half-life (T1/2) for VPRIV
-----------------	---

End point description:

The PK Set included all naïve participants in the ITT set who received at least 1 dose of VPRIV and provided evaluable PK concentration data.

End point type	Secondary
----------------	-----------

End point timeframe:

Pre-dose and at multiple timepoints up to 120 minutes post-dose on Day 1 of Week 1

End point values	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	16			
Units: min				
arithmetic mean (standard deviation)	10.12 ( $\pm$ 2.81)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Oral Clearance (CL) for VPRIV

End point title	Oral Clearance (CL) for VPRIV
End point description: mL/min/kg denotes milliliters per minutes per kilogram. The PK Set included all naïve participants in the ITT set who received at least 1 dose of VPRIV and provided evaluable PK concentration data.	
End point type	Secondary
End point timeframe: Pre-dose and at multiple timepoints up to 120 minutes post-dose on Day 1 of Week 1	

End point values	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	16			
Units: mL/min/kg				
arithmetic mean (standard deviation)	7.27 ( $\pm$ 2.87)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Apparent Steady-state Volume of Distribution (Vss) for VPRIV

End point title	Apparent Steady-state Volume of Distribution (Vss) for VPRIV
End point description: The PK Set included all naïve participants in the ITT set who received at least 1 dose of VPRIV and provided evaluable PK concentration data.	
End point type	Secondary
End point timeframe: Pre-dose and at multiple timepoints(up to 120 minutes post-dose on Day 1 of Week 1	



End point values	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	16			
Units: milliliters per kilogram (mL/kg)				
arithmetic mean (standard deviation)	96.3 (± 52.0)			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Percent Change from Baseline to Week 53 in Biomarker: Plasma Chemokine [C-C motif] Ligand 18

End point title	Percent Change from Baseline to Week 53 in Biomarker: Plasma Chemokine [C-C motif] Ligand 18
-----------------	--

End point description:

The ITT Set included all participants who signed the ICF (and assent form, if applicable) and were eligible for the study based on the defined inclusion/exclusion criteria. Subjects analysed is the number of participants with data available for analyses.

End point type	Secondary
----------------	-----------

End point timeframe:

Baseline, Week 53

End point values	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	19			
Units: percent change				
arithmetic mean (standard deviation)	-58.94 (± 14.339)			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Percent Change from Baseline to Week 53 in Biomarker: Glucopsychosine

End point title	Percent Change from Baseline to Week 53 in Biomarker: Glucopsychosine
-----------------	---

End point description:

The ITT Set included all participants who signed the ICF (and assent form, if applicable) and were eligible for the study based on the defined inclusion/exclusion criteria. Subjects analysed is the number of participants with data available for analyses.

End point type	Secondary
----------------	-----------

End point timeframe:

Baseline, Week 53

<b>End point values</b>	VPRIV			
Subject group type	Reporting group			
Number of subjects analysed	19			
Units: percent change				
arithmetic mean (standard deviation)	-63.88 ( $\pm$ 14.359)			

### Statistical analyses

---

No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

Up to 56.2 weeks

Adverse event reporting additional description:

The SAF Set included all participants in the ITT Set who received at least 1 dose of VPRIV.

Assessment type	Systematic
-----------------	------------

### Dictionary used

Dictionary name	MedDRA
-----------------	--------

Dictionary version	27.0
--------------------	------

### Reporting groups

Reporting group title	Velaglucerase Alfa
-----------------------	--------------------

Reporting group description:

Participants received VPRIV IV infusion at 60 U/kg body weight once EOW for 60 (+10) minutes up to Week 51.

Serious adverse events	Velaglucerase Alfa		
Total subjects affected by serious adverse events			
subjects affected / exposed	4 / 20 (20.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Injury, poisoning and procedural complications			
Splenic injury			
subjects affected / exposed	1 / 20 (5.00%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Pneumonia			
subjects affected / exposed	1 / 20 (5.00%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Pneumonia mycoplasmal			
subjects affected / exposed	1 / 20 (5.00%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Metabolism and nutrition disorders			
Diabetes mellitus inadequate control			

subjects affected / exposed	1 / 20 (5.00%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 5 %

<b>Non-serious adverse events</b>	Velaglucerase Alfa		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	19 / 20 (95.00%)		
Investigations			
Urinary occult blood positive			
subjects affected / exposed	2 / 20 (10.00%)		
occurrences (all)	2		
Injury, poisoning and procedural complications			
Fall			
subjects affected / exposed	2 / 20 (10.00%)		
occurrences (all)	3		
Cardiac disorders			
Supraventricular extrasystoles			
subjects affected / exposed	2 / 20 (10.00%)		
occurrences (all)	3		
General disorders and administration site conditions			
Pyrexia			
subjects affected / exposed	3 / 20 (15.00%)		
occurrences (all)	4		
Respiratory, thoracic and mediastinal disorders			
Cough			
subjects affected / exposed	5 / 20 (25.00%)		
occurrences (all)	5		
Musculoskeletal and connective tissue disorders			
Osteoporosis			
subjects affected / exposed	2 / 20 (10.00%)		
occurrences (all)	2		
Infections and infestations			

Conjunctivitis			
subjects affected / exposed	2 / 20 (10.00%)		
occurrences (all)	2		
Nasopharyngitis			
subjects affected / exposed	2 / 20 (10.00%)		
occurrences (all)	2		
Urinary tract infection			
subjects affected / exposed	2 / 20 (10.00%)		
occurrences (all)	3		
Pneumonia			
subjects affected / exposed	2 / 20 (10.00%)		
occurrences (all)	2		
Upper respiratory tract infection			
subjects affected / exposed	14 / 20 (70.00%)		
occurrences (all)	27		
Metabolism and nutrition disorders			
Hypertriglyceridaemia			
subjects affected / exposed	2 / 20 (10.00%)		
occurrences (all)	3		

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
02 August 2022	The following changes were made as per Amendment 01: 1. Increased the frequency of the body weight test as body weight changes requires to recalculate the dose of investigational product. 2. Increased the number of clinical sites from '5 to 6' to 'at least 8' to increase the recruitment capability. 3. Updated the previous inclusion criteria.

Notes:

---

### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported