

Study Results

Participant Flow

Pre-assignment Details	This study is a sub study of the master protocol (NCT03967223). The results presented are until the primary completion date. Data collection is still ongoing and additional results will be provided after study completion.
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Reporting Groups

	Description
Letetresgene Autoleucel (Lete-cel)	Eligible participants were leukapheresed to manufacture autologous lete-cel. Participants underwent lymphodepleting chemotherapy which generally consisted of fludarabine 30 mg/m ² /day on day -7 through day -4 and cyclophosphamide 900 milligrams per meter square per day (mg/m ² /day) on day -6 through day -4. followed by a single infusion of lete-cel on Day 1. The dose of lete-cel was within the range of 1×10 ⁹ to 15×10 ⁹ transduced T cells.

Overall Study

	Letetresgene Autoleucel (Lete-cel)
Started	7
Received T Cell Infusion	5
Completed	1
Not Completed	6
Did not meet treatment eligibility criteria	2
Ongoing	4

Baseline Characteristics

Reporting Groups

	Description
Letetresgene Autoleucel (Lete-cel)	Eligible participants were leukapheresed to manufacture autologous lete-cel. Participants underwent lymphodepleting chemotherapy which generally consisted of fludarabine 30 mg/m ² /day on day -7 through day -4 and cyclophosphamide 900 milligrams per meter square per day (mg/m ² /day) on day -6 through day -4. followed by a single infusion of lete-cel on Day 1. The dose of lete-cel was within the range of 1×10 ⁹ to 15×10 ⁹ transduced T cells.

Baseline Measures

		Letetresgene Autoleucel (Lete-cel)
Overall Number of Participants		7
Age, Continuous	Mean (Standard Deviation) Unit of years measure: Number Analyzed	7 participants
		49.4 (16.70)
Age, Customized	Measure Count of Type: Participants Unit of participants measure: Number Analyzed	7 participants
<=18 years		1 14.29%
19-64 years		6 85.71%
Sex: Female, Male	Measure Count of Type: Participants Unit of participants measure: Number Analyzed	7 participants
	Female	5 71.43%
	Male	2 28.57%
Ethnicity	Measure Count of	7 participants

		Letetresgene Autoleucel (Lete-cel)
(NIH/OMB)	Type: Participants Unit of participants measure: Number Analyzed	
	Hispanic or Latino	3 42.86%
	Not Hispanic or Latino	4 57.14%
	Unknown or Not Reported	0 0%
Race (NIH/OMB)	Measure Count of Type: Participants Unit of participants measure: Number Analyzed	7 participants
	American Indian or Alaska Native	0 0%
	Asian	0 0%
	Native Hawaiian or Other Pacific Islander	0 0%
	Black or African American	0 0%
	White	7 100%
	More than one race	0 0%
	Unknown or Not Reported	0 0%
Region of Enrollment	Measure Number Type: Unit of participants measure: Number Analyzed	7 participants
Canada		1
Netherlands		2

		Letetresgene Autoleucel (Lete-cel)
United Kingdom		1
United States		3

Outcome Measures

1. Primary Outcome Measure:

Measure Title	Overall Response Rate (ORR)
Measure Description	ORR is defined as the percentage of participants with a confirmed complete response (CR) or confirmed partial response (PR) via investigator assessment per Response Evaluation Criteria in Solid Tumors Criteria (RECIST) version 1.1 relative to the total number of participants in the analysis population. CR is defined as disappearance of all target lesions. Any pathological lymph nodes (whether target or non-target) must have reduction in short axis to less than (<)10 millimeters (mm). PR is defined as at least a 30% decrease in the sum of the diameters of target lesions, taking as a reference, the baseline sum of the diameters (e.g., percent change from baseline). 95% CI is based on Clopper-Pearson exact confidence interval.
Time Frame	Up to approximately 36 months

Analysis Population Description

Modified intent-to-treat (mITT) population included all participants who received any dose of Lete-cel.

Reporting Groups

	Description
Letetresgene Autoleucel (Lete-cel)	Eligible participants were leukapheresed to manufacture autologous lete-cel. Participants underwent lymphodepleting chemotherapy which generally consisted of fludarabine 30 mg/m ² /day on day -7 through day -4 and cyclophosphamide 900 milligrams per meter square per day (mg/m ² /day) on day -6 through day -4, followed by a single infusion of lete-cel on Day 1. The dose of lete-cel was within the range of 1×10 ⁹ to 15×10 ⁹ transduced T cells.

Measured Values

	Letetresgene Autoleucel (Lete-cel)
Overall Number of Participants Analyzed	5
Overall Response Rate (ORR)	Number (95% Confidence Interval) Unit of measure: percentage of participants 80 (28.4 to 99.5)

2. Secondary Outcome Measure:

Measure Title	Time to Response (TTR)
Measure Description	Time to response was defined as the interval of time between the date of T-cell infusion and the first documented evidence of the confirmed response (PR or CR), in the subset of participants with a confirmed PR or CR as their best confirmed overall response. CR is defined as disappearance of all target lesions. Any pathological lymph nodes (whether target or non-target) must have reduction in short axis to less than (<)10 millimeters (mm). PR is defined as at least a 30% decrease in the sum of the diameters of target lesions, taking as a reference, the baseline sum of the diameters (e.g., percent change from baseline).
Time Frame	Up to approximately 54 months
Anticipated Reporting Date	July 2025

Outcome Measure Data Not Reported

3. Secondary Outcome Measure:

Measure Title	Duration of Response (DOR)
Measure Description	Duration of response was defined as the interval between the initial date of confirmed response (PR/CR) and the date of progressive disease as assessed by local investigators, or death among participants with a confirmed response per RECIST 1.1. CR is defined as disappearance of all target lesions. Any pathological lymph nodes (whether target or non-target) must have reduction in short axis to less than (<)10 millimeters (mm). PR is defined as at least a 30% decrease in the sum of the diameters of target lesions, taking as a reference, the baseline sum of the diameters (e.g., percent change from baseline).
Time Frame	Up to approximately 54 months
Anticipated Reporting Date	July 2025

Outcome Measure Data Not Reported

4. Secondary Outcome Measure:

Measure Title	Disease Control Rate (DCR)
Measure Description	DCR is defined as the percentage of participants with a confirmed CR, PR, or stable disease (SD) with a minimal 12 weeks (84 days \pm 7 day window) duration relative to the total number of participants within the analysis population at the time of primary analysis as determined by local investigators per RECIST v1.1. CR is defined as disappearance of all target lesions. Any pathological lymph nodes (whether target or non-target) must have reduction in short axis to less than (<)10 millimeters (mm). PR is defined as at least a 30% decrease in the sum of the diameters of target lesions, taking as a reference, the baseline sum of the diameters (e.g., percent change from baseline). SD is defined as neither sufficient shrinkage to qualify for PR nor sufficient increase to qualify for progressive disease. The disease progression (PD) is defined as the date of radiological disease progression based on imaging data per RECIST v1.1. 95% CI is based on Clopper-Pearson exact confidence interval.
Time Frame	Up to approximately 36 months

Analysis Population Description

Modified intent-to-treat (mITT) population included all participants who received any dose of Lete-cel.

Reporting Groups

	Description
Letetresgene Autoleucel (Lete-cel)	Eligible participants were leukapheresed to manufacture autologous leto-cel. Participants underwent lymphodepleting chemotherapy which generally consisted of fludarabine 30 mg/m ² /day on day -7 through day -4 and cyclophosphamide 900 milligrams per meter square per day (mg/m ² /day) on day -6 through day -4. followed by a single infusion of leto-cel on Day 1. The dose of leto-cel was within the range of 1x10 ⁹ to 15x10 ⁹ transduced T cells.

Measured Values

	Letetresgene Autoleucel (Lete-cel)
Overall Number of Participants Analyzed	5
Disease Control Rate (DCR)	Number (95% Confidence Interval) Unit of measure: Percentage of Participants 80.0 (28.4 to 99.5)

5. Secondary Outcome Measure:

Measure Title	Progression Free Survival (PFS)
Measure Description	PFS is defined as the interval of time between from the date of T-cell infusion to the earliest date of radiological progression of disease (PD) as assessed by local investigator per RECIST v1.1, or death due to any cause. The PD is defined as the date of radiological disease progression based on imaging data per RECIST v1.1.
Time Frame	Up to approximately 54 months
Anticipated Reporting Date	July 2025

Outcome Measure Data Not Reported

6. Secondary Outcome Measure:

Measure Title	Number of Participants With Treatment Emergent Adverse Events (TEAEs) and Treatment Emergent Serious Adverse Events (TESAEs)
Measure Description	An AE is any untoward medical occurrence in a clinical investigation participant, temporally associated with the use of a medicinal product, whether or not considered related to the medicinal product. SAE is defined as any untoward medical occurrence that, at any dose results in death, is life-threatening, requires hospitalization or prolongation of existing hospitalization, results in disability/incapacity, is a congenital anomaly/birth defect, other situations which involve medical or scientific judgment or is associated with liver injury and impaired liver function.

Time Frame	Up to approximately 54 months
Anticipated Reporting Date	July 2025

Outcome Measure Data Not Reported

7. Secondary Outcome Measure:

Measure Title	Number of Participants With AEs of Special Interest (AESIs)
Measure Description	An AESI may be of scientific and medical concern related to the treatment, monitored, and rapidly communicated by investigator to sponsor. AESIs included cytokine release syndrome (CRS), hematopoietic cytopenias (including pancytopenia and aplastic anemia), graft vs host disease (GVHD), ICANS, Guillain-Barre syndrome, treatment-related inflammatory response at tumor site(s), and neutropenia Grade 4 lasting ≥ 28 days.
Time Frame	Up to approximately 54 months
Anticipated Reporting Date	July 2025

Outcome Measure Data Not Reported

8. Secondary Outcome Measure:

Measure Title	Number of Participants With TEAEs and TSEAEs by Severity
Measure Description	An AE is any untoward medical occurrence in a clinical investigation participant, temporally associated with the use of a medicinal product, whether or not considered related to the medicinal product. SAE is defined as any untoward medical occurrence that, at any dose results in death, is life-threatening, requires hospitalization or prolongation of existing hospitalization, results in disability/incapacity, is a congenital anomaly/birth defect, other situations which involve medical or scientific judgment or is associated with liver injury and impaired liver function. AEs and SAEs were graded according to National Cancer Institute-Common Toxicity Criteria for Adverse Events (NCI-CTCAE) version 5.0. Grade 1- Mild; Grade 2- Moderate; Grade 3- Severe or medically significant but not immediately life-threatening; Grade 4- Life-threatening consequences; Grade 5- Death related to AE.
Time Frame	Up to approximately 54 months
Anticipated Reporting Date	July 2025

Outcome Measure Data Not Reported

9. Secondary Outcome Measure:

Measure Title	Number of Participants With AESIs by Severity
Measure Description	An AESI may be of scientific and medical concern related to the treatment, monitored, and rapidly communicated by investigator to sponsor. AESIs included cytokine release syndrome (CRS), hematopoietic cytopenias (including pancytopenia and aplastic anemia), graft vs host disease (GVHD), ICANS, Guillain-Barre syndrome, treatment-related inflammatory response at tumor site(s), and neutropenia Grade 4 lasting ≥ 28 days.
Time Frame	Up to approximately 54 months

Anticipated Reporting Date	July 2025
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Outcome Measure Data Not Reported

10. Secondary Outcome Measure:

Measure Title	Percentage of Participants With Replication Competent Lentivirus (RCL) Positive
Measure Description	RCL was monitored using a polymerase chain reaction (PCR)-based assay that detects and measures copies of the gene coding for the vector's envelope protein, namely vesicular stomatitis virus G protein (VSV-G).
Time Frame	Up to approximately 54 months
Anticipated Reporting Date	July 2025

Outcome Measure Data Not Reported

11. Secondary Outcome Measure:

Measure Title	Instances of Insertional Oncogenesis (IO)
Measure Description	Instances of Insertional Oncogenesis (IO) was summarized descriptively.
Time Frame	Up to approximately 54 months
Anticipated Reporting Date	July 2025

Outcome Measure Data Not Reported

12. Secondary Outcome Measure:

Measure Title	Maximum Transgene Expansion (Cmax)
Measure Description	Cmax was defined as maximum observed persistence, determined directly from the persistence–time data. Blood samples were collected for PK analysis.
Time Frame	Up to approximately 14 days

Analysis Population Description

Pharmacokinetic (PK) population included participants in the safety population from whom at least one persistence sample was obtained, analyzed and was measurable.

Reporting Groups

	Description
Letetresgene Autoleucel (Lete-cel)	Eligible participants were leukapheresed to manufacture autologous lete-cel. Participants underwent lymphodepleting chemotherapy which generally consisted of fludarabine 30 mg/m ² /day on day -7 through day -4 and cyclophosphamide 900 milligrams per meter square per day (mg/m ² /day) on day -6 through day -4. followed by a single infusion of lete-cel on Day 1. The dose of lete-cel was within the range of 1×10 ⁹ to 15×10 ⁹ transduced T cells.

Measured Values

	Letetresgene Autoleucel (Lete-cel)
Overall Number of Participants Analyzed	5
Maximum Transgene Expansion (Cmax)	Geometric Mean (Geometric Coefficient of Variation) Unit of measure: Copies per microgram DNA 119701.64 (68.267%)

13. Secondary Outcome Measure:

Measure Title	Time to Cmax (Tmax)
Measure Description	Tmax was defined as time to reach Cmax, determined directly from the persistence–time data. Blood samples were collected for PK analysis.
Time Frame	Up to approximately 14 days

Analysis Population Description
Pharmacokinetic (PK) population

Reporting Groups

	Description
Letetresgene Autoleucel (Lete-cel)	Eligible participants were leukapheresed to manufacture autologous lete-cel. Participants underwent lymphodepleting chemotherapy which generally consisted of fludarabine 30 mg/m ² /day on day -7 through day -4 and cyclophosphamide 900 milligrams per meter square per day (mg/m ² /day) on day -6 through day -4. followed by a single infusion of lete-cel on Day 1. The dose of lete-cel was within the range of 1×10 ⁹ to 15×10 ⁹ transduced T cells.

Measured Values

	Letetresgene Autoleucel (Lete-cel)
Overall Number of Participants Analyzed	5
Time to Cmax (Tmax)	Median (Full Range) Unit of measure: Days 6.90 (1.9 to 13.6)

14. Secondary Outcome Measure:

Measure Title	Area Under the Time Curve From Zero to Time 28 Days (AUC[0-28])
Measure Description	Area under the persistence–time curve from time zero to Day 28. Blood samples were collected for PK analysis.
Time Frame	Up to 28 days

Analysis Population Description
Pharmacokinetic (PK) population

Reporting Groups

	Description
Letetresgene Autoleucel (Lete-cel)	Eligible participants were leukapheresed to manufacture autologous lete-cel. Participants underwent lymphodepleting chemotherapy which generally consisted of fludarabine 30 mg/m ² /day on day -7 through day -4 and cyclophosphamide 900 milligrams per meter square per day (mg/m ² /day) on day -6 through day -4. followed by a single infusion of lete-cel on Day 1. The dose of lete-cel was within the range of 1×10 ⁹ to 15×10 ⁹ transduced T cells.

Measured Values

	Letetresgene Autoleucel (Lete-cel)
Overall Number of Participants Analyzed	5
Area Under the Time Curve From Zero to Time 28 Days (AUC[0-28])	<div>Geometric Mean (Geometric Coefficient of Variation)</div> <div>Unit of measure: Copies per microgram gDNA times days</div> <div>1911782.96 (53.709%)</div>

Reported Adverse Events

Time Frame	All cause mortality, non-serious adverse events (Non-SAEs) and serious adverse events (SAEs) were collected maximum up to approximately 36 months. Data collection is still ongoing and additional results will be provided after study completion.
Adverse Event Reporting Description	All-Cause mortality, Non-SAEs and SAEs were collected for intent-to-treat population that included all participants who started leukapheresis procedure.

Reporting Groups

	Description
Letetresgene Autoleucel (Lete-cel)	Eligible participants were leukapheresed to manufacture autologous let-e-cel. Participants underwent lymphodepleting chemotherapy which generally consisted of fludarabine 30 mg/m ² /day on day -7 through day -4 and cyclophosphamide 900 milligrams per meter square per day (mg/m ² /day) on day -6 through day -4. followed by a single infusion of let-e-cel on Day 1. The dose of let-e-cel was within the range of 1×10 ⁹ to 15×10 ⁹ transduced T cells.

All-Cause Mortality

	Letetresgene Autoleucel (Lete-cel)	
	Affected/At Risk (%)	# Events
Total All-Cause Mortality	1/7 (14.29%)	

Serious Adverse Events

	Letetresgene Autoleucel (Lete-cel)	
	Affected/At Risk (%)	# Events
Total	4/7 (57.14%)	
Blood and lymphatic system disorders		
Anaemia ^A †	1/7 (14.29%)	1
Gastrointestinal disorders		
Gastrointestinal haemorrhage ^A †	1/7 (14.29%)	1
Nausea ^A †	1/7 (14.29%)	2
Small intestinal obstruction ^A †	1/7 (14.29%)	1
Vomiting ^A †	1/7 (14.29%)	2
Immune system disorders		
Cytokine release syndrome ^A †	1/7 (14.29%)	1
Graft versus host disease ^A †	1/7 (14.29%)	1
Injury, poisoning and procedural complications		
Radiation pneumonitis ^A †	1/7 (14.29%)	1
Investigations		
Weight decreased ^A †	1/7 (14.29%)	1
Metabolism and nutrition disorders		

	Letetresgene Autoleucel (Lete-cel)	
	Affected/At Risk (%)	# Events
Dehydration ^A †	1/7 (14.29%)	2
Neoplasms benign, malignant and unspecified (incl cysts and polyps)		
Tumour haemorrhage ^A †	1/7 (14.29%)	1
Respiratory, thoracic and mediastinal disorders		
Haemoptysis ^A †	1/7 (14.29%)	1

†Indicates events were collected by systematic assessment.

A Term from vocabulary, MedDRA 25.1

Other Adverse Events

Frequency Threshold Above Which Other Adverse Events are Reported: 5%

	Letetresgene Autoleucel (Lete-cel)	
	Affected/At Risk (%)	# Events
Total	5/7 (71.43%)	
Blood and lymphatic system disorders		
Anaemia ^A †	2/7 (28.57%)	2
Eosinophilia ^A †	1/7 (14.29%)	1
Neutropenia ^A †	1/7 (14.29%)	1
Cardiac disorders		
Sinus tachycardia ^A †	1/7 (14.29%)	2
Gastrointestinal disorders		
Abdominal discomfort ^A †	1/7 (14.29%)	1
Abdominal pain ^A †	2/7 (28.57%)	2
Constipation ^A †	3/7 (42.86%)	4
Diarrhoea ^A †	1/7 (14.29%)	1
Dysphagia ^A †	1/7 (14.29%)	2
Frequent bowel movements ^A †	1/7 (14.29%)	1
Gastrooesophageal reflux disease ^A †	3/7 (42.86%)	3
Nausea ^A †	3/7 (42.86%)	6

	Letetresgene Autoleucel (Lete-cel)	
	Affected/At Risk (%)	# Events
Vomiting ^A †	1/7 (14.29%)	5
General disorders		
Axillary pain ^A †	1/7 (14.29%)	1
Catheter site phlebitis ^A †	1/7 (14.29%)	1
Fatigue ^A †	4/7 (57.14%)	6
Non-cardiac chest pain ^A †	1/7 (14.29%)	1
Oedema peripheral ^A †	2/7 (28.57%)	2
Pyrexia ^A †	1/7 (14.29%)	2
Hepatobiliary disorders		
Hyperbilirubinaemia ^A †	1/7 (14.29%)	1
Immune system disorders		
Cytokine release syndrome ^A †	4/7 (57.14%)	4
Graft versus host disease ^A †	1/7 (14.29%)	2
Infections and infestations		
COVID-19 ^A †	3/7 (42.86%)	3
Cytomegalovirus infection reactivation ^A †	1/7 (14.29%)	1
Enterocolitis infectious ^A †	1/7 (14.29%)	1
Pneumonia ^A †	1/7 (14.29%)	1
Rhinitis ^A †	1/7 (14.29%)	2
Injury, poisoning and procedural complications		
Infusion related reaction ^A †	1/7 (14.29%)	1
Investigations		
Alanine aminotransferase increased ^A †	3/7 (42.86%)	3
Aspartate aminotransferase increased ^A †	2/7 (28.57%)	2
Blood alkaline phosphatase increased ^A †	1/7 (14.29%)	1
Blood fibrinogen decreased ^A †	2/7 (28.57%)	3
Blood lactate dehydrogenase increased ^A †	1/7 (14.29%)	1

	Letetresgene Autoleucel (Lete-cel)	
	Affected/At Risk (%)	# Events
Lymphocyte count decreased ^A †	1/7 (14.29%)	1
Neutrophil count decreased ^A †	2/7 (28.57%)	5
Platelet count decreased ^A †	2/7 (28.57%)	2
Weight decreased ^A †	1/7 (14.29%)	1
White blood cell count decreased ^A †	2/7 (28.57%)	2
Metabolism and nutrition disorders		
Hypervolaemia ^A †	1/7 (14.29%)	1
Hypoalbuminaemia ^A †	1/7 (14.29%)	1
Hypocalcaemia ^A †	1/7 (14.29%)	1
Hypokalaemia ^A †	2/7 (28.57%)	4
Hyponatraemia ^A †	1/7 (14.29%)	1
Hypophosphataemia ^A †	1/7 (14.29%)	1
Musculoskeletal and connective tissue disorders		
Arthralgia ^A †	2/7 (28.57%)	2
Back pain ^A †	1/7 (14.29%)	1
Bone pain ^A †	1/7 (14.29%)	1
Myalgia ^A †	1/7 (14.29%)	1
Nervous system disorders		
Dysgeusia ^A †	1/7 (14.29%)	1
Headache ^A †	1/7 (14.29%)	1
Paraesthesia ^A †	1/7 (14.29%)	1
Psychiatric disorders		
Anxiety ^A †	1/7 (14.29%)	3
Depression ^A †	1/7 (14.29%)	1
Insomnia ^A †	1/7 (14.29%)	2
Reproductive system and breast disorders		
Menstruation irregular ^A †	1/7 (14.29%)	1

	Letetresgene Autoleucel (Lete-cel)	
	Affected/At Risk (%)	# Events
Respiratory, thoracic and mediastinal disorders		
Cough ^A †	2/7 (28.57%)	2
Dysphonia ^A †	1/7 (14.29%)	1
Dyspnoea ^A †	3/7 (42.86%)	5
Productive cough ^A †	1/7 (14.29%)	1
Pulmonary embolism ^A †	1/7 (14.29%)	1
Rhinitis allergic ^A †	1/7 (14.29%)	1
Sleep apnoea syndrome ^A †	1/7 (14.29%)	1
Skin and subcutaneous tissue disorders		
Alopecia ^A †	1/7 (14.29%)	1
Dry skin ^A †	1/7 (14.29%)	1
Onychomadesis ^A †	1/7 (14.29%)	1
Pruritus ^A †	1/7 (14.29%)	1
Rash maculo-papular ^A †	2/7 (28.57%)	2
Vascular disorders		
Hot flush ^A †	1/7 (14.29%)	1

†Indicates events were collected by systematic assessment.

A Term from vocabulary, MedDRA 25.1

Limitations and Caveats

[Not specified]

More Information

Certain Agreements:

Principal Investigators are NOT employed by the organization sponsoring the study.

There IS an agreement between the Principal Investigator and the Sponsor (or its agents) that restricts the PI's rights to discuss or publish trial results after the trial is completed.

GSK agreements may vary with individual investigators, but will not prohibit any investigator from publishing. GSK supports the publication of results

from all centers of a multi-center trial but requests that reports based on single site data not precede the primary publication of the entire clinical trial.

Results Point of Contact:

Name/Official Title: GSK Response Center

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