



Clinical trial results:

A Phase III, open-label, extension study of eculizumab in patients with transfusion-dependent, haemolytic Paroxysmal Nocturnal Haemoglobinuria (PNH) who have participated in the TRIUMPH (C04-001), SHEPHERD (C04-002) or X03-001 studies.

Summary

EudraCT number	2005-000043-28
Trial protocol	GB IE SE DE ES IT
Global end of trial date	12 September 2008

Results information

Result version number	v1 (current)
This version publication date	06 January 2017
First version publication date	06 January 2017

Trial information

Trial identification

Sponsor protocol code	E05-001
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Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT00122317
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Alexion Pharmaceuticals Incorporated
Sponsor organisation address	100 College Street, New Haven, CT, United States, 06510
Public contact	European Clinical Trial Information, Alexion Europe SAS, +33 1 47 10 06 06, clinicaltrials.eu@alexion.com
Scientific contact	European Clinical Trial Information, Alexion Europe SAS, +33 1 47 10 06 06, clinicaltrials.eu@alexion.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?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	31 March 2010
Is this the analysis of the primary completion data?	Yes
Primary completion date	12 September 2008
Global end of trial reached?	Yes
Global end of trial date	12 September 2008
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The primary objective was to evaluate the long-term safety of eculizumab in patients with haemolytic PNH, who had completed the eculizumab TRIUMPH (C04-001), SHEPHERD (C04-002) or X03-001 studies.

The TRIUMPH study was a double-blind, placebo-controlled study in which haemolytic, transfusion-dependent patients received eculizumab (N=43) or placebo (N=44) administered by intravenous (IV) infusion for 26 weeks. The SHEPHERD study was an open-label study in which patients (N=97) received eculizumab treatment for 52 weeks. The X03-001 study was an open-label extension study of eculizumab in which patients with transfusion dependent, haemolytic, PNH continued to receive treatment for an additional 104 weeks.

Protection of trial subjects:

Patients must have been vaccinated for *Neisseria meningitidis* 14 days before the first investigational product infusion in the parent studies (C04-001 [TRIUMPH], C04-002 [SHEPHERD], or X03-001 studies).

Background therapy:

No background therapy was used.

Evidence for comparator:

This was an open-label extension study, opened to patients who had completed the eculizumab TRIUMPH (C04-001), SHEPHERD (C04-002) or X03-001 studies, and had consented to participate. Patients who had completed the randomised, double-blind, placebo-controlled TRIUMPH study were required to enroll in a 4-week blind induction period to preserve the blinded treatment before inclusion in the open-label treatment period of study E05-001.

Actual start date of recruitment	09 May 2005
Long term follow-up planned	Yes
Long term follow-up rationale	Safety
Long term follow-up duration	30 Months
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Spain: 9
Country: Number of subjects enrolled	Sweden: 5
Country: Number of subjects enrolled	United Kingdom: 44
Country: Number of subjects enrolled	Belgium: 3
Country: Number of subjects enrolled	France: 2
Country: Number of subjects enrolled	Germany: 24
Country: Number of subjects enrolled	Italy: 21
Country: Number of subjects enrolled	Australia: 14

Country: Number of subjects enrolled	Canada: 2
Country: Number of subjects enrolled	Ireland: 5
Country: Number of subjects enrolled	Netherlands: 12
Country: Number of subjects enrolled	Switzerland: 1
Country: Number of subjects enrolled	United States: 45
Worldwide total number of subjects	187
EEA total number of subjects	125

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)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	173
From 65 to 84 years	13
85 years and over	1

Subject disposition

Recruitment

Recruitment details:

A total of 46 clinical sites in the United States, Canada, Australia, Belgium, France, Germany, Ireland, Italy, the Netherlands, Sweden, Switzerland, and the United Kingdom participated in this study. Patients must have had fully completed the TRIUMPH (C04-001), SHEPHERD (C04-002), or X03-001 studies to enter this extension study.

Pre-assignment

Screening details:

A total of 187/195 patients from the 3 previous PNH studies of eculizumab elected to continue treatment in the E05-001 extension study (85 [41 eculizumab-treated patients and 44 placebo-treated patients]), 92, and 10 patients from the TRIUMPH, SHEPHERD, and X03-001 studies, respectively).

Period 1

Period 1 title	2-yr treatment period (overall period)
Is this the baseline period?	Yes
Allocation method	Non-randomised - controlled
Blinding used	Not blinded

Blinding implementation details:

This study was not blinded. Of note, patients who completed the TRIUMPH study, a 4-week blind induction period was applied to preserve the blinded treatment before inclusion in study E05-001. Patients who completed the SHEPHERD or X03-001 studies entered directly into this open-label treatment extension study because there was no blind to be maintained.

Arms

Are arms mutually exclusive?	Yes
Arm title	eculizumab (PNH studies eculizumab-treated patients)

Arm description:

This arm consisted of patients who had received eculizumab in any of the 3 previous PNH studies of eculizumab (TRIUMPH, SHEPHERD, or X03-001).

Arm type	Experimental
Investigational medicinal product name	eculizumab
Investigational medicinal product code	eculizumab
Other name	Soliris
Pharmaceutical forms	Concentrate for solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

- Patients randomised to eculizumab in the TRIUMPH study: Eculizumab at a dose of 900 mg at Weeks 0, 2, and 4, and then 900 mg and then every 2 weeks through the end of the study. These patients also received placebo at Weeks 1 and 3.
- All other patients were infused with eculizumab at a dose of 900 mg biweekly beginning at Week 0 and through the end of the study.

Arm title	eculizumab (TRIUMPH placebo-treated patients)
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Arm description:

This arm consisted of patients who had received placebo in the TRIUMPH study.

Arm type	Experimental
Investigational medicinal product name	eculizumab
Investigational medicinal product code	eculizumab
Other name	Soliris
Pharmaceutical forms	Concentrate for solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

Patients randomised to placebo in the TRIUMPH study: Eculizumab at a dose of 600 mg once a week for 4 weeks, followed by 900 mg of eculizumab 1 week later for one dose, then 900 mg of eculizumab every

2 weeks through the end of the study.

Number of subjects in period 1	eculizumab (PNH studies eculizumab-treated patients)	eculizumab (TRIUMPH placebo-treated patients)
Started	143	44
Completed	137	39
Not completed	6	5
Adverse event, serious fatal	1	2
Physician decision	1	1
Consent withdrawn by subject	-	1
Adverse event, non-fatal	3	1
Protocol deviation	1	-

Baseline characteristics

Reporting groups

Reporting group title	eculizumab (PNH studies eculizumab-treated patients)
Reporting group description:	
This arm consisted of patients who had received eculizumab in any of the 3 previous PNH studies of eculizumab (TRIUMPH, SHEPHERD, or X03-001).	
Reporting group title	eculizumab (TRIUMPH placebo-treated patients)
Reporting group description:	
This arm consisted of patients who had received placebo in the TRIUMPH study.	

Reporting group values	eculizumab (PNH studies eculizumab-treated patients)	eculizumab (TRIUMPH placebo-treated patients)	Total
Number of subjects	143	44	187
Age categorical			
Units: Subjects			
Adults (18-64 years)	131	42	173
From 65-84 years	11	2	13
85 years and over	1	0	1
Age continuous			
Units: years			
median	42.1	36	
inter-quartile range (Q1-Q3)	30.8 to 53.5	30.4 to 46.2	-
Gender categorical			
Units: Subjects			
Female	72	29	101
Male	71	15	86
Blood type			
Units: Subjects			
A-	14	1	15
A+	41	20	61
B-	6	0	6
B+	9	5	14
AB+	8	2	10
O-	9	6	15
O+	55	10	65
AB-	1	0	1
Race			
Units: Subjects			
Asian	5	1	6
Black	7	0	7
Caucasian	127	41	168
Hispanic	0	1	1
Latin	1	0	1
Saudi	1	0	1
Other	1	1	2
Jamaican	1	0	1

LDH at baseline in parent trial Units: U/L median inter-quartile range (Q1-Q3)	2139 1488 to 2829	2166.5 1701 to 2965	-
LDH Prior to First Dose in E05-001 Units: U/L median inter-quartile range (Q1-Q3)	270 215 to 326	2166.5 1701 to 2965	-
red blood count at baseline in parent trial Units: x10 ¹² /L median inter-quartile range (Q1-Q3)	2.93 2.58 to 3.34	2.78 2.55 to 3.12	-
RBC Prior to First Dose in E05-001 Units: x10 ¹² /L median inter-quartile range (Q1-Q3)	2.92 2.56 to 3.2	2.78 2.55 to 3.12	-

End points

End points reporting groups

Reporting group title	eculizumab (PNH studies eculizumab-treated patients)
Reporting group description: This arm consisted of patients who had received eculizumab in any of the 3 previous PNH studies of eculizumab (TRIUMPH, SHEPHERD, or X03-001).	
Reporting group title	eculizumab (TRIUMPH placebo-treated patients)
Reporting group description: This arm consisted of patients who had received placebo in the TRIUMPH study.	

Primary: Intravascular haemolysis measured by LDH AUC

End point title	Intravascular haemolysis measured by LDH AUC ^[1]
End point description: A quantitative assessment of haemolysis was obtained by calculating the AUC for LDH from Baseline to Month 24, and the data were analysed using a Wilcoxon signed rank test.	
End point type	Primary
End point timeframe: Change from baseline through 24 months	

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: The system EudraCT does not allow entering for statistical analysis for single arm studies.

End point values	eculizumab (PNH studies eculizumab-treated patients)	eculizumab (TRIUMPH placebo-treated patients)		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	140	44		
Units: U/L* day				
median (inter-quartile range (Q1-Q3))				
6 Months	-316018 (-420072 to -183916)	-317196 (-429293 to -248130)		
12 Months	-344930 (-478143 to -208390)	-337482 (-451391 to -240626)		
18 Months	-343846 (-485016 to -203676)	-322356 (-461607 to -240964)		
24 Months	-341977 (-492407 to -208304)	-326061 (-469426 to -237221)		

Statistical analyses

No statistical analyses for this end point

Secondary: Levels of fatigue

End point title	Levels of fatigue
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End point description:

The Quality-of-Life (QoL) instrument FACIT-Fatigue scale version 4 was utilised to collect QoL data. The scoring guideline for the FACIT-Fatigue scale version 4 instrument was used to calculate the QoL score. Per the corresponding scoring guideline, scores can range from 0 to 52, with higher scores indicating improvement in fatigue.

End point type	Secondary
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End point timeframe:

through 24 months

End point values	eculizumab (PNH studies eculizumab- treated patients)	eculizumab (TRIUMPH placebo- treated patients)		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	140	44		
Units: Total FACIT-Fatigue score				
median (inter-quartile range (Q1-Q3))				
Change from baseline at 6 months	7 (-18 to 38)	7.5 (0 to 13.5)		
Change from baseline at 12 months	7 (2 to 16)	4 (0 to 14)		
Change from baseline at 18 months	8 (1 to 14)	7.5 (0 to 15.5)		
Change from baseline at 24 months	7 (1 to 7)	7 (1 to 15)		

Statistical analyses

No statistical analyses for this end point

Secondary: Thrombosis events

End point title	Thrombosis events
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End point description:

This endpoint reports the number of patients reporting thrombosis events in the present study.

End point type	Secondary
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End point timeframe:

Through 24 months

End point values	eculizumab (PNH studies eculizumab- treated patients)	eculizumab (TRIUMPH placebo- treated patients)		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	140	44		
Units: Total number of events				
Number of events	9	0		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Information regarding AEs was collected from the time the patient signed the informed consent form up to 30 days after the last dose of eculizumab was administered.

Assessment type	Systematic
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Dictionary used

Dictionary name	MedDRA
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Dictionary version	6.1
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Reporting groups

Reporting group title	Eculizumab (overall)
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Reporting group description:

This group reports safety data in the safety population, consisting of all patients who received any amount of eculizumab in study E05-001. Overall, patients who had received eculizumab in the parent trials, TRIUMPH, SHEPHERD or X03-001, were exposed to eculizumab for a 30.3-month median duration (vs 24-month median duration for those who had received placebo in the parent trial, TRIUMPH).

Serious adverse events	Eculizumab (overall)		
Total subjects affected by serious adverse events			
subjects affected / exposed	57 / 187 (30.48%)		
number of deaths (all causes)	3		
number of deaths resulting from adverse events	0		
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Adenocarcinoma			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 1		
Chronic myelomonocytic leukaemia			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 1		
Malignant melanoma			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Metastases to bone			

subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Vascular disorders			
Hypotension			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
phlebothrombosis			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Thrombophlebitis			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Thrombosis			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 1		
General disorders and administration site conditions			
Chest pain			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Pyrexia			
subjects affected / exposed	5 / 187 (2.67%)		
occurrences causally related to treatment / all	2 / 6		
deaths causally related to treatment / all	0 / 0		
Reproductive system and breast disorders			
Erectile dysfunction			

subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Ovarian cyst ruptured			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Respiratory, thoracic and mediastinal disorders			
Pleurisy			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Psychiatric disorders			
Suicidal ideation			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Investigations			
Haemoglobin decreased			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Injury, poisoning and procedural complications			
drug toxicity			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
Wrist fracture			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Cardiac disorders			
Cardiac failure			

subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 0		
Nervous system disorders			
Cerebral haemorrhage			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
convulsion			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Headache			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Metabolic encephalopathy			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Blood and lymphatic system disorders			
Agranulocytosis			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Anaemia			
subjects affected / exposed	3 / 187 (1.60%)		
occurrences causally related to treatment / all	0 / 5		
deaths causally related to treatment / all	0 / 0		
Aplastic anaemia			
subjects affected / exposed	2 / 187 (1.07%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
Neutropenia			

subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Haemolysis			
subjects affected / exposed	5 / 187 (2.67%)		
occurrences causally related to treatment / all	0 / 5		
deaths causally related to treatment / all	0 / 0		
Paroxysmal nocturnal haemoglobinuria			
subjects affected / exposed	4 / 187 (2.14%)		
occurrences causally related to treatment / all	0 / 4		
deaths causally related to treatment / all	0 / 0		
Thrombocytopenia			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Eye disorders			
Retinal vein thrombosis			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Gastrointestinal disorders			
Abdominal pain			
subjects affected / exposed	5 / 187 (2.67%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Ascites			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Colitis			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Diarrhoea			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Gastrointestinal haemorrhage			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
sigmoiditis			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Hepatobiliary disorders			
Bile duct stone			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 4		
deaths causally related to treatment / all	0 / 0		
Cholecystitis			
subjects affected / exposed	3 / 187 (1.60%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 0		
Cholecystitis acute			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Cholelithiasis			
subjects affected / exposed	2 / 187 (1.07%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 0		
Hepatic cirrhosis			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 0		
Hepatic vein thrombosis			

subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Portal vein thrombosis			
subjects affected / exposed	2 / 187 (1.07%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
Renal and urinary disorders			
Calculus urinary			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Nephrolithiasis			
subjects affected / exposed	2 / 187 (1.07%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
renal failure acute			
subjects affected / exposed	2 / 187 (1.07%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
Renal impairment			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Musculoskeletal and connective tissue disorders			
Intervertebral disc protrusion			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Tenosynovitis stenosans			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Infections and infestations Cellulitis subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	2 / 187 (1.07%) 1 / 2 0 / 0		
Cellulitis gangrenous subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	1 / 187 (0.53%) 0 / 1 0 / 0		
Empyema subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	1 / 187 (0.53%) 0 / 2 0 / 0		
Endocarditis subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	1 / 187 (0.53%) 0 / 1 0 / 0		
Enterococcal sepsis subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	1 / 187 (0.53%) 0 / 2 0 / 0		
Gallbladder abscess subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	1 / 187 (0.53%) 0 / 1 0 / 0		
Gastroenteritis subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	1 / 187 (0.53%) 0 / 1 0 / 0		
Gastroenteritis viral subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	2 / 187 (1.07%) 0 / 2 0 / 0		
Haemophilus infection			

subjects affected / exposed	1 / 187 (0.53%)			
occurrences causally related to treatment / all	1 / 1			
deaths causally related to treatment / all	0 / 0			
Infection				
subjects affected / exposed	1 / 187 (0.53%)			
occurrences causally related to treatment / all	1 / 1			
deaths causally related to treatment / all	0 / 0			
Liver abscess				
subjects affected / exposed	1 / 187 (0.53%)			
occurrences causally related to treatment / all	0 / 3			
deaths causally related to treatment / all	0 / 0			
Lower respiratory tract infection				
subjects affected / exposed	2 / 187 (1.07%)			
occurrences causally related to treatment / all	0 / 2			
deaths causally related to treatment / all	0 / 0			
Meningococcal sepsis				
subjects affected / exposed	2 / 187 (1.07%)			
occurrences causally related to treatment / all	2 / 2			
deaths causally related to treatment / all	0 / 0			
Bacterial sepsis				
subjects affected / exposed	1 / 187 (0.53%)			
occurrences causally related to treatment / all	1 / 2			
deaths causally related to treatment / all	0 / 0			
Bronchitis				
subjects affected / exposed	1 / 187 (0.53%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Necrotising fasciitis				
subjects affected / exposed	1 / 187 (0.53%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Penile infection				

subjects affected / exposed	1 / 187 (0.53%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Pneumonia				
subjects affected / exposed	2 / 187 (1.07%)			
occurrences causally related to treatment / all	0 / 2			
deaths causally related to treatment / all	0 / 0			
Respiratory tract infection				
subjects affected / exposed	2 / 187 (1.07%)			
occurrences causally related to treatment / all	1 / 2			
deaths causally related to treatment / all	0 / 0			
Sepsis				
subjects affected / exposed	1 / 187 (0.53%)			
occurrences causally related to treatment / all	1 / 1			
deaths causally related to treatment / all	0 / 0			
Septic shock				
subjects affected / exposed	2 / 187 (1.07%)			
occurrences causally related to treatment / all	2 / 2			
deaths causally related to treatment / all	0 / 0			
Staphylococcal infection				
subjects affected / exposed	1 / 187 (0.53%)			
occurrences causally related to treatment / all	0 / 3			
deaths causally related to treatment / all	0 / 0			
Upper respiratory tract infection				
subjects affected / exposed	1 / 187 (0.53%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Urinary tract infection				
subjects affected / exposed	2 / 187 (1.07%)			
occurrences causally related to treatment / all	0 / 2			
deaths causally related to treatment / all	0 / 0			
Viral infection				

subjects affected / exposed	3 / 187 (1.60%)		
occurrences causally related to treatment / all	0 / 4		
deaths causally related to treatment / all	0 / 0		
Viral upper respiratory tract infection			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Metabolism and nutrition disorders			
Hypokalaemia			
subjects affected / exposed	1 / 187 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Hyponatraemia			
subjects affected / exposed	1 / 187 (0.53%)		
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 %

Non-serious adverse events	Eculizumab (overall)		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	182 / 187 (97.33%)		
Injury, poisoning and procedural complications			
Contusion			
subjects affected / exposed	22 / 187 (11.76%)		
occurrences (all)	37		
Vascular disorders			
Haematoma			
subjects affected / exposed	12 / 187 (6.42%)		
occurrences (all)	23		
Cardiac disorders			
Chest pain			
subjects affected / exposed	10 / 187 (5.35%)		
occurrences (all)	17		
Nervous system disorders			

Dizziness subjects affected / exposed occurrences (all)	23 / 187 (12.30%) 30		
Headache subjects affected / exposed occurrences (all)	69 / 187 (36.90%) 155		
General disorders and administration site conditions			
Influenza like illness subjects affected / exposed occurrences (all)	29 / 187 (15.51%) 56		
Pyrexia subjects affected / exposed occurrences (all)	22 / 187 (11.76%) 33		
Oedema peripheral subjects affected / exposed occurrences (all)	14 / 187 (7.49%) 15		
Fatigue subjects affected / exposed occurrences (all)	16 / 187 (8.56%) 16		
Gastrointestinal disorders			
Diarrhoea subjects affected / exposed occurrences (all)	44 / 187 (23.53%) 70		
Abdominal pain subjects affected / exposed occurrences (all)	28 / 187 (14.97%) 49		
Abdominal pain upper subjects affected / exposed occurrences (all)	18 / 187 (9.63%) 41		
Dyspepsia subjects affected / exposed occurrences (all)	16 / 187 (8.56%) 22		
Nausea subjects affected / exposed occurrences (all)	39 / 187 (20.86%) 54		
Respiratory, thoracic and mediastinal disorders			

Cough subjects affected / exposed occurrences (all)	30 / 187 (16.04%) 47		
Epistaxis subjects affected / exposed occurrences (all)	15 / 187 (8.02%) 16		
Pharyngolaryngeal pain subjects affected / exposed occurrences (all)	26 / 187 (13.90%) 32		
Skin and subcutaneous tissue disorders Pruritus subjects affected / exposed occurrences (all)	12 / 187 (6.42%) 24		
Rash subjects affected / exposed occurrences (all)	13 / 187 (6.95%) 19		
Psychiatric disorders Depression subjects affected / exposed occurrences (all)	12 / 187 (6.42%) 13		
Insomnia subjects affected / exposed occurrences (all)	16 / 187 (8.56%) 35		
Musculoskeletal and connective tissue disorders Arthralgia subjects affected / exposed occurrences (all)	39 / 187 (20.86%) 65		
Back pain subjects affected / exposed occurrences (all)	35 / 187 (18.72%) 45		
muscle cramp subjects affected / exposed occurrences (all)	13 / 187 (6.95%) 17		
Myalgia subjects affected / exposed occurrences (all)	18 / 187 (9.63%) 22		

Neck pain			
subjects affected / exposed	12 / 187 (6.42%)		
occurrences (all)	18		
Pain in extremity			
subjects affected / exposed	26 / 187 (13.90%)		
occurrences (all)	40		
Infections and infestations			
Bronchitis			
subjects affected / exposed	10 / 187 (5.35%)		
occurrences (all)	17		
Gastroenteritis			
subjects affected / exposed	12 / 187 (6.42%)		
occurrences (all)	14		
Gastroenteritis viral			
subjects affected / exposed	10 / 187 (5.35%)		
occurrences (all)	11		
Herpes simplex			
subjects affected / exposed	12 / 187 (6.42%)		
occurrences (all)	16		
Influenza			
subjects affected / exposed	10 / 187 (5.35%)		
occurrences (all)	11		
Nasopharyngitis			
subjects affected / exposed	74 / 187 (39.57%)		
occurrences (all)	148		
Respiratory tract infection			
subjects affected / exposed	10 / 187 (5.35%)		
occurrences (all)	10		
Sinusitis			
subjects affected / exposed	15 / 187 (8.02%)		
occurrences (all)	16		
Upper respiratory tract infection			
subjects affected / exposed	58 / 187 (31.02%)		
occurrences (all)	102		
Urinary tract infection			

subjects affected / exposed	22 / 187 (11.76%)		
occurrences (all)	31		
Viral infection			
subjects affected / exposed	19 / 187 (10.16%)		
occurrences (all)	30		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported

Online references

<http://www.ncbi.nlm.nih.gov/pubmed/17702897>