Clinical trial results:
Inhibition of complement activation (eculizumab®) in Guillain-Barré Syndrome study

Summary

EudraCT number	2013-000228-33
Trial protocol	GB
Global end of trial date	30 July 2016

Results information

Result version number	v1 (current)
This version publication date	27 February 2020
First version publication date	27 February 2020

Trial information

Trial identification

Sponsor protocol code	GN12NE462

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT02029378
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	University of Glasgow
Sponsor organisation address	126 University Place, Glasgow, United Kingdom, G12 8TA
Public contact	Prof. Hugh J. Willison, University of Glasgow, 0044 141 330 8384, Hugh.Willison@glasgow.ac.uk
Scientific contact	Prof. Hugh J. Willison, University of Glasgow, 0044 141 330 8384, Hugh.Willison@glasgow.ac.uk
Sponsor organisation name	NHS Greater Glasgow and Clyde
Sponsor organisation address	Grahamston Road, Paisley, United Kingdom, PA2 7DE
Public contact	Maureen Travers, NHS Greater Glasgow and Clyde, Maureen.Travers@ggc.scot.nhs.uk
Scientific contact	Maureen Travers, NHS Greater Glasgow and Clyde, Maureen.Travers@ggc.scot.nhs.uk

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	30 July 2016
Is this the analysis of the primary completion data?	Yes
Primary completion date	30 July 2016
Global end of trial reached?	Yes
Global end of trial date	30 July 2016
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

To evaluate safety and tolerability, of eculizumab in patients with GBS.

Protection of trial subjects:

All the patients with GBS receive standard treatment either IVIg or Plasma exchange. Only those patients who would be eligible for IVIg treatment will be screened for the study. Patient's participation will not delay the commencement of standard IVIg treatment. All the patients will be recruited within 14 days of onset of weakness, provided that the study drug can be started within this 14 day time period.

Background therapy:

All participants received ciprofloxacin as a prophylactic antibiotic for 10 weeks.

Evidence for comparator: -

Actual start date of recruitment	01 September 2013
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	United Kingdom: 8
Worldwide total number of subjects	8
EEA total number of subjects	8

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)	6
From 65 to 84 years	2
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Participants recruited between Aug 2014 to Jul 2016.

Pre-assignment

Screening details:

All patients diagnosed with GBS and unable to walk within 2 weeks were screened.

Period 1

Period 1 title	Baseline (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator, Data analyst, Carer

Arms

Are arms mutually exclusive?	Yes
Arm title	Eculizumab

Arm description:

Following consent, participants will be randomly assigned in a ratio of 2:1 to receive either Eculizumab or matching placebo by contacting the interactive webresponse system (IWRS). Drug treatment will be commenced as soon as is practical, after consent is obtained.

Arm type	Experimental
Investigational medicinal product name	Eculizumab
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Powder and solvent for solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

administered intravenously at a dose of 900mg weekly for 4 weeks (day 0, week 1, week 2 and week 3)

Arm title	Placebo

Arm description:

Following consent, participants will be randomly assigned in a ratio of 2:1 to receive either Eculizumab or matching placebo by contacting the interactive webresponse system (IWRS). Drug treatment will be commenced as soon as is practical, after consent is obtained

Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Powder and solvent for concentrate for solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

administered intravenously at a dose of 900mg weekly for 4 weeks (day 0, week 1, week 2 and week 3)

Number of subjects in period 1	Eculizumab	Placebo
Started	5	3
Completed	5	2
Not completed	0	1
Physician decision	-	1

Baseline characteristics

Reporting groups	
Reporting group title	Baseline

Reporting group description: -

Reporting group values	Baseline	Total	
Number of subjects	8	8	
Age categorical Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	6	6	
From 65-84 years	2	2	
85 years and over	0	0	
Gender categorical Units: Subjects			
Female	4	4	
Male	4	4	

End points

End points reporting groups

Reporting group title	Eculizumab

Reporting group description:

Following consent, participants will be randomly assigned in a ratio of 2:1 to receive either Eculizumab or matching placebo by contacting the interactive webresponse system (IWRS). Drug treatment will be commenced as soon as is practical, after consent is obtained.

Reporting group title	Placebo

Reporting group description:

Following consent, participants will be randomly assigned in a ratio of 2:1 to receive either Eculizumab or matching placebo by contacting the interactive webresponse system (IWRS). Drug treatment will be commenced as soon as is practical, after consent is obtained

Primary: Functional outcome on the GBS disability scale at set time intervals

End point title	Functional outcome on the GBS disability scale at set time intervals[1]

End point description:

End point type	Primary

End point timeframe:

Assessed from week 0 to week 4

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: Because of the relevantly small number of participants and the primary end endpoint being an improvement in a scale, there was no statistical analysis formed and the improvement in the GBS scale for each participant simply reported.

End point values	Eculizumab	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	5	2		
Units: GB Improvement over 4 weeks	2	2		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

From time of consent to 30 days following the last study visit.

Assessment type	Non-systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	22

Reporting groups

Reporting group title	Eculizaumab
Reporting group description: -	
Reporting group title	Placebo

Reporting group description: -

Serious adverse events	Eculizaumab	Placebo	
Total subjects affected by serious adverse events			
subjects affected / exposed	2 / 5 (40.00%)	0 / 2 (0.00%)	
number of deaths (all causes)	1	1	
number of deaths resulting from adverse events	1	0	
Injury, poisoning and procedural complications			
Toxicity to various agents	Additional description: Toxicity to Opioid		
subjects affected / exposed	1 / 5 (20.00%)	0 / 2 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Respiratory, thoracic and mediastinal disorders			
Aspiration	Additional description: Aspiration Pneumonia		
subjects affected / exposed	1 / 5 (20.00%)	0 / 2 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Infections and infestations			
Lower respiratory tract infection			
subjects affected / exposed	1 / 5 (20.00%)	0 / 2 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Septic shock			

subjects affected / exposed	1 / 5 (20.00%)	0 / 2 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	

Frequency threshold for reporting non-serious adverse events: 0 %

Non-serious adverse events	Eculizaumab	Placebo	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	5 / 5 (100.00%)	2 / 2 (100.00%)	
Investigations			
liver function test abnormal			
subjects affected / exposed	2 / 5 (40.00%)	1 / 2 (50.00%)	
occurrences (all)	2	1	
Transaminases increased			
subjects affected / exposed	3 / 5 (60.00%)	0 / 2 (0.00%)	
occurrences (all)	3	0	
Cardiac disorders			
Ventricular extrasystoles			
subjects affected / exposed	1 / 5 (20.00%)	0 / 2 (0.00%)	
occurrences (all)	1	0	
Nervous system disorders			
Facial paresis			
subjects affected / exposed	1 / 5 (20.00%)	0 / 2 (0.00%)	
occurrences (all)	1	0	
General disorders and administration site conditions			
Chest discomfort			
subjects affected / exposed	1 / 5 (20.00%)	0 / 2 (0.00%)	
occurrences (all)	1	0	
Fatigue			
subjects affected / exposed	1 / 5 (20.00%)	0 / 2 (0.00%)	
occurrences (all)	1	0	
Gastrointestinal disorders			
Nausea			
subjects affected / exposed	1 / 5 (20.00%)	0 / 2 (0.00%)	
occurrences (all)	1	0	
Hepatobiliary disorders			

Cholelithiasis			
subjects affected / exposed	1 / 5 (20.00%)	0 / 2 (0.00%)	
occurrences (all)	1	0	
Respiratory, thoracic and mediastinal disorders			
Pneumothorax	Additional description: HydroPneumothorax		
subjects affected / exposed	1 / 5 (20.00%)	0 / 2 (0.00%)	
occurrences (all)	1	0	
Skin and subcutaneous tissue disorders			
Rash			
subjects affected / exposed	2 / 5 (40.00%)	0 / 2 (0.00%)	
occurrences (all)	2	0	
Psychiatric disorders			
Depressed mood			
subjects affected / exposed	1 / 5 (20.00%)	0 / 2 (0.00%)	
occurrences (all)	1	0	
Musculoskeletal and connective tissue disorders			
Back pain			
subjects affected / exposed	0 / 5 (0.00%)	1 / 2 (50.00%)	
occurrences (all)	0	1	
Limb discomfort			
subjects affected / exposed	1 / 5 (20.00%)	0 / 2 (0.00%)	
occurrences (all)	1	0	
Infections and infestations			
Lower respiratory tract infection			
subjects affected / exposed	3 / 5 (60.00%)	0 / 2 (0.00%)	
occurrences (all)	3	0	
Metabolism and nutrition disorders			
Gout			
subjects affected / exposed	0 / 5 (0.00%)	1 / 2 (50.00%)	
occurrences (all)	0	1	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
08 January 2016	Protocol change and updated patient alert card

Notes:

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/27801990