



## Clinical trial results:

### A Multicenter Extension Study of the Efficacy, Tolerability, and Safety of Immune Globulin Subcutaneous (Human) IgPro20 in Subjects with Primary Immunodeficiency (IgPro20 EU Extension Study)

#### Summary

EudraCT number	2008-000830-30
Trial protocol	DE ES FR SE GB
Global end of trial date	21 December 2011

#### Results information

Result version number	v1 (current)
This version publication date	13 July 2016
First version publication date	06 August 2015

#### Trial information

##### Trial identification

Sponsor protocol code	ZLB07_002CR
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##### Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT00751621
WHO universal trial number (UTN)	-

Notes:

#### Sponsors

Sponsor organisation name	CSL Behring AG
Sponsor organisation address	Wankdorfstrasse 10, Bern 22, Switzerland, 3000
Public contact	Trial Registration Co-ordinator, CSL Behring, clinicaltrials@cslbehring.com
Scientific contact	Trial Registration Co-ordinator, CSL Behring, clinicaltrials@cslbehring.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	10 April 2012
Is this the analysis of the primary completion data?	No
Global end of trial reached?	Yes
Global end of trial date	21 December 2011
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

This study is a continuation of the study ZLB06\_001CR with the objective of assessing efficacy, tolerability, safety of IgPro, as well as long-term health-related quality of life in patients with PID.

Protection of trial subjects:

This study was carried out in accordance with the International Conference on Harmonisation (ICH) Good Clinical Practice (GCP) guidelines, the Declaration of Helsinki (version of 1996), and standard operating procedures for clinical research and development at CSL Behring and the Clinical Research Organizations involved. The study was conducted under a protocol reviewed and approved by an IEC/IRB. The study was conducted by scientifically and medically qualified persons. The benefits of the study were in proportion to the risks; the rights and welfare of the subjects were respected; the physicians conducting the study did not find the hazards to outweigh the potential benefits; the results reported are accurate; and each subject or subject's parent or legal guardian gave his or her written informed consent before any protocol-driven tests or evaluations were performed.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	13 August 2008
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	Poland: 7
Country: Number of subjects enrolled	Spain: 5
Country: Number of subjects enrolled	Sweden: 1
Country: Number of subjects enrolled	United Kingdom: 1
Country: Number of subjects enrolled	France: 1
Country: Number of subjects enrolled	Germany: 14
Country: Number of subjects enrolled	Switzerland: 1
Country: Number of subjects enrolled	Romania: 10
Worldwide total number of subjects	40
EEA total number of subjects	39

Notes:

## Subjects enrolled per age group

In utero	0
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Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	15
Adolescents (12-17 years)	7
Adults (18-64 years)	18
From 65 to 84 years	0
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details:

Subjects who had previously participated in the pivotal study ZLB06\_001CR (NCT00542997) were enrolled in the extension study ZLB07\_002CR.

### Pre-assignment

Screening details:

The number of subjects and sites was dependent on the subjects' and sites' interest to continue the IgPro20 treatment following the pivotal study ZLB06\_001CR.

### 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	IgPro20
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Arm description:

Subcutaneous (SC) administration by the subject/parent/guardian with the planned weekly dose of IgPro20 to be the same as the subject's last dose recommended by the investigator in study ZLB06\_001CR.

Arm type	Experimental
Investigational medicinal product name	IgPro20
Investigational medicinal product code	
Other name	IgG with Proline (IgPro), Hizentra
Pharmaceutical forms	Solution for infusion
Routes of administration	Subcutaneous use

Dosage and administration details:

IgPro20 is a liquid formulation of normal human IgG at a concentration of 20% administered as a SC infusion at weekly intervals. Subcutaneous administration by the subject/parent/guardian with the planned weekly dose of IgPro20 to be the same as the subject's last dose recommended by the investigator in study ZLB06\_001CR.

Number of subjects in period 1	IgPro20
Started	40
Completed	36
Not completed	4
Adverse event, serious fatal	1
Consent withdrawn by subject	1
Subject moved to another country	1
Poor adherence to asthma treatment	1

## Baseline characteristics

### Reporting groups

Reporting group title	IgPro20
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Reporting group description:

Subcutaneous (SC) administration by the subject/parent/guardian with the planned weekly dose of IgPro20 to be the same as the subject's last dose recommended by the investigator in study ZLB06\_001CR.

Reporting group values	IgPro20	Total	
Number of subjects	40	40	
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)	15	15	
Adolescents (12-17 years)	7	7	
Adults (18-64 years)	18	18	
From 65-84 years	0	0	
85 years and over	0	0	
Age continuous			
Units: years			
arithmetic mean	21.6		
standard deviation	± 15.31	-	
Gender categorical			
Units: Subjects			
Female	12	12	
Male	28	28	

## End points

### End points reporting groups

Reporting group title	IgPro20
Reporting group description: Subcutaneous (SC) administration by the subject/parent/guardian with the planned weekly dose of IgPro20 to be the same as the subject's last dose recommended by the investigator in study ZLB06_001CR.	
Subject analysis set title	HRQL - At Baseline
Subject analysis set type	Sub-group analysis
Subject analysis set description: Baseline values for those subjects in the Full-Analysis health related quality of life (HRQL) data set (defined as all subjects entered into the study who complete a baseline and at least 1 follow-up HRQL assessment), who were at least 15 years of age.	
Subject analysis set title	HRQL - At End of Study
Subject analysis set type	Sub-group analysis
Subject analysis set description: End of study values for subjects in the Full-Analysis HRQL data set (defined as all subjects entered into the study who complete a baseline and at least 1 follow-up HRQL assessment), who were at least 15 years of age.	

### Primary: Total Serum IgG Trough Levels

End point title	Total Serum IgG Trough Levels <sup>[1]</sup>
End point description: The IgG trough values per subject were aggregated to a median value, and then median values across subjects were summarized using descriptive statistics.  The full analysis/intent to treat (ITT) dataset comprised all subjects treated with IgPro20 and for whom any efficacy data was available.	
End point type	Primary
End point timeframe: Up to 42 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: Variables were summarized using descriptive statistics.	

<b>End point values</b>	IgPro20			
Subject group type	Reporting group			
Number of subjects analysed	40 <sup>[2]</sup>			
Units: g/L				
arithmetic mean (standard deviation)	7.97 (± 1.171)			

Notes:

[2] - ITT population

### Statistical analyses

No statistical analyses for this end point

### Secondary: Annualized Rate of Clinically Documented Serious Bacterial Infections (SBIs)

End point title	Annualized Rate of Clinically Documented Serious Bacterial Infections (SBIs)
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**End point description:**

The annualized rate was based on the total number of SBIs and the total number of subject study days for all subjects in the specified analysis population and adjusted to 365 days.

Potential SBIs included bacterial pneumonia, bacteremia and septicemia, osteomyelitis/septic arthritis, bacterial meningitis, and visceral abscess. If an adverse event (AE) was identified as a potential SBI, the AE was adjudicated by the Medical Monitor and Investigator to determine if the event fulfilled the predefined criteria for SBIs.

The full analysis/ITT dataset comprised all subjects treated with IgPro20 and for whom any efficacy data was available.

End point type	Secondary
End point timeframe:	
Up to 42 months	

<b>End point values</b>	IgPro20			
Subject group type	Reporting group			
Number of subjects analysed	40 <sup>[3]</sup>			
Units: SBIs per subject year				
number (not applicable)	0.048			

Notes:

[3] - Number of subject study days analyzed: 38208

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**Statistical analyses**

No statistical analyses for this end point

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**Secondary: Annualized Rate of Infection Episodes**

End point title	Annualized Rate of Infection Episodes
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**End point description:**

The annualized rate was based on the total number of infection episodes occurring during the study divided by the total number of subject study days for all subjects in the specified analysis population and adjusted to 365 days.

The full analysis/ITT dataset comprised all subjects treated with IgPro20 and for whom any efficacy data was available.

End point type	Secondary
End point timeframe:	
Up to 42 months	

<b>End point values</b>	IgPro20			
Subject group type	Reporting group			
Number of subjects analysed	40 <sup>[4]</sup>			
Units: infection episodes per subject year				
number (confidence interval 95%)	3.334 (2.993 to 3.703)			

Notes:

[4] - ITT population.

Number of Subject Study Days Analyzed: 38208

## Statistical analyses

No statistical analyses for this end point

### Secondary: Number of Infection Episodes

End point title	Number of Infection Episodes
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End point description:

Total number of infections for the ITT population.

The full analysis/ITT dataset comprised all subjects treated with IgPro20 and for whom any efficacy data was available.

End point type	Secondary
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End point timeframe:

Up to 42 months

End point values	IgPro20			
Subject group type	Reporting group			
Number of subjects analysed	40 <sup>[5]</sup>			
Units: infection episodes	349			

Notes:

[5] - ITT population

## Statistical analyses

No statistical analyses for this end point

### Secondary: Annualized Rate of Days Out of Work / School / Kindergarten / Day Care or Unable to Perform Normal Activities Due to Infections

End point title	Annualized Rate of Days Out of Work / School / Kindergarten / Day Care or Unable to Perform Normal Activities Due to Infections
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End point description:

The annualized rate was based on the total number of days out of work / school / kindergarten / day care or inability to perform normal activities due to infection, and the total number of subject diary days for all subjects in the ITT population and adjusted to 365 days.

The full analysis/ITT dataset comprised all subjects treated with IgPro20 and for whom any efficacy data was available.

End point type	Secondary
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End point timeframe:

Up to 42 months

<b>End point values</b>	IgPro20			
Subject group type	Reporting group			
Number of subjects analysed	40 <sup>[6]</sup>			
Units: days per subject year				
number (not applicable)	6.773			

Notes:

[6] - ITT population

Number of Subject Diary Days Analyzed: 38045

## Statistical analyses

No statistical analyses for this end point

## Secondary: Number of Days Out of Work / School / Kindergarten / Day Care or Unable to Perform Normal Activities Due to Infections

End point title	Number of Days Out of Work / School / Kindergarten / Day Care or Unable to Perform Normal Activities Due to Infections
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End point description:

Number of Days Out of Work / School / Kindergarten / Day Care or Unable to Perform Normal Activities Due to Infections.

The full analysis/ITT dataset comprised all subjects treated with IgPro20 and for whom any efficacy data was available.

End point type	Secondary
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End point timeframe:

Up to 42 months

<b>End point values</b>	IgPro20			
Subject group type	Reporting group			
Number of subjects analysed	40 <sup>[7]</sup>			
Units: days	706			

Notes:

[7] - ITT population

## Statistical analyses

No statistical analyses for this end point

## Secondary: Annualized Rate of Hospitalization Due to Infections

End point title	Annualized Rate of Hospitalization Due to Infections
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End point description:

The annualized rate was based on the total number of days of hospitalization due to infections and the total number of subject diary days for all subjects in the specified analysis population and adjusted to 365 days.

The full analysis/ITT dataset comprised all subjects treated with IgPro20 and for whom any efficacy data was available.

End point type	Secondary
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End point timeframe:

up to 42 months

<b>End point values</b>	IgPro20			
Subject group type	Reporting group			
Number of subjects analysed	40 <sup>[8]</sup>			
Units: days per subject year				
number (not applicable)	1.055			

Notes:

[8] - ITT population.

Number of Subject Diary Days Analyzed: 38045

## Statistical analyses

No statistical analyses for this end point

## Secondary: Number of Days of Hospitalization Due to Infections

End point title	Number of Days of Hospitalization Due to Infections
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End point description:

Total number of days of hospitalization due to infections for the ITT population.

The full analysis/ITT dataset comprised all subjects treated with IgPro20 and for whom any efficacy data was available.

End point type	Secondary
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End point timeframe:

Up to 42 months

<b>End point values</b>	IgPro20			
Subject group type	Reporting group			
Number of subjects analysed	40 <sup>[9]</sup>			
Units: days	110			

Notes:

[9] - ITT population

## Statistical analyses

No statistical analyses for this end point

## Secondary: Use of Antibiotics for Infection Prophylaxis and Treatment

End point title	Use of Antibiotics for Infection Prophylaxis and Treatment
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End point description:

Annualized rate of days with antibiotics for infection prophylaxis and treatment. The annualized rate was based on the total number of days of antibiotic use for infection prophylaxis and treatment in the efficacy period, and the total number of subject study days for all subjects in the ITT population, and adjusted to 365 days.

The full analysis/ITT dataset comprised all subjects treated with IgPro20 and for whom any efficacy data was available.

End point type	Secondary
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End point timeframe:  
up to 42 months

<b>End point values</b>	IgPro20			
Subject group type	Reporting group			
Number of subjects analysed	40 <sup>[10]</sup>			
Units: days per subject year				
number (not applicable)	72.13			

Notes:

[10] - ITT population

Number of Subject Study Days Analyzed: 38208

## Statistical analyses

No statistical analyses for this end point

## Secondary: Health Related Quality of Life (Short Form 36 Health Survey)

End point title	Health Related Quality of Life (Short Form 36 Health Survey)
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End point description:

The Short Form 36 Health Survey is a 36-item questionnaire that measures generic health concepts that are relevant across age, disease, and treatment groups. The questions are grouped into eight domains: physical functioning, role-physical, bodily pain, general health, vitality, social functioning, role-emotional, and mental health. Scores range from 0 to 100, with higher scores indicating a better health state.

End point type	Secondary
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End point timeframe:

At baseline and at the last available post-baseline observation for each subject (up to 42 months)

<b>End point values</b>	HRQL - At Baseline	HRQL - At End of Study		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	20	20		
Units: units on a scale				
median (full range (min-max))				
Physical Functioning	95 (75 to 100)	100 (20 to 100)		
Role-physical	100 (18.8 to 100)	100 (37.5 to 100)		
Role-emotional	100 (25 to 100)	100 (25 to 100)		
Social Functioning	100 (62.5 to 100)	100 (37.5 to 100)		
Bodily Pain	84 (22 to 100)	84 (22 to 100)		
Mental Health	85 (55 to 95)	80 (35 to 95)		
Vitality	65.6 (31.3 to 81.3)	75 (18.8 to 100)		
General Health	52 (15 to 82)	54.5 (20 to 92)		

## Statistical analyses

No statistical analyses for this end point

### Secondary: Clinically Relevant Changes in Vital Signs From Baseline to the Completion Visit

End point title	Clinically Relevant Changes in Vital Signs From Baseline to the Completion Visit
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End point description:

The total number of subjects with clinically relevant changes in vital signs from baseline to the completion visit. Vital signs included heart rate, systolic blood pressure, diastolic blood pressure, and body temperature.

The 'All Treated' (AT) safety data set included all subjects treated with study drug.

End point type	Secondary
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End point timeframe:

At baseline (data either from Infusion 40 or the completion visit of study ZLB06\_001CR), and at completion (up to 42 months)

End point values	IgPro20			
Subject group type	Reporting group			
Number of subjects analysed	39 <sup>[11]</sup>			
Units: participants	0			

Notes:

[11] - AT population, reporting subjects with data collected at both baseline and completion

## Statistical analyses

No statistical analyses for this end point

### Secondary: Clinically Significant Abnormal Changes in Routine Laboratory Parameters Between Baseline and the Completion Visit

End point title	Clinically Significant Abnormal Changes in Routine Laboratory Parameters Between Baseline and the Completion Visit
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End point description:

The total number of subjects with clinically significant abnormal changes in routine laboratory parameters between baseline and the completion visit. Routine laboratory parameters included haematology, serum chemistry and urinalysis.

The AT safety data set included all subjects treated with study drug.

End point type	Secondary
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End point timeframe:

At baseline (data either from Infusion 40 or the completion visit of study ZLB06\_001CR), and at completion (up to 42 months)

<b>End point values</b>	IgPro20			
Subject group type	Reporting group			
Number of subjects analysed	40 <sup>[12]</sup>			
Units: participants				
Haematology	3			
Serum Chemistry	1			
Urinalysis	0			

Notes:

[12] - AT population, reporting subjects with data collected at both baseline and completion

## Statistical analyses

No statistical analyses for this end point

## Secondary: Rate, Severity and Relatedness of Any Adverse Events (AEs) Per Infusion

End point title	Rate, Severity and Relatedness of Any Adverse Events (AEs) Per Infusion
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End point description:

The rate of AEs was the number of AEs over the number of infusions administered. Mild AE: Did not interfere with routine activities; Moderate AE: Interfered somewhat with routine activities; Severe AE: Impossible to perform routine activities. At least possibly related AEs included possibly related AEs, probably related AEs, and related AEs.

The AT safety data set included all subjects treated with study drug.

End point type	Secondary
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End point timeframe:

Up to 42 months

<b>End point values</b>	IgPro20			
Subject group type	Reporting group			
Number of subjects analysed	40 <sup>[13]</sup>			
Units: AEs per infusion				
number (not applicable)				
Total AEs	0.0936			
Mild AEs	0.0685			
Moderate AEs	0.0231			
Severe AEs	0.002			
At least possibly related AEs	0.0026			
Serious AEs	0.0033			
At least possibly related and serious AEs	0			

Notes:

[13] - AT population.

Number of Infusions Analyzed: 5405

## Statistical analyses



## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

AEs were collected for the duration of the study, up to 42 months.

Adverse event reporting additional description:

A total of 5405 weekly infusions of IgPro20 were administered to 40 subjects in this study. Three subjects received fewer than 100 infusions. The AT safety data set comprised all subjects treated with IgPro20 during any study period.

Assessment type	Systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	14.1
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### Reporting groups

Reporting group title	IgPro20
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Reporting group description:

Subcutaneous administration by the subject/parent/guardian with the planned weekly dose of IgPro20 to be the same as the subject's last dose recommended by the investigator in study ZLB06\_001CR.

Serious adverse events	IgPro20		
Total subjects affected by serious adverse events			
subjects affected / exposed	14 / 40 (35.00%)		
number of deaths (all causes)	1		
number of deaths resulting from adverse events	0		
Injury, poisoning and procedural complications			
Concussion			
subjects affected / exposed	1 / 40 (2.50%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Spinal column injury			
subjects affected / exposed	1 / 40 (2.50%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Fracture			
subjects affected / exposed	1 / 40 (2.50%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Lower limb fracture			

subjects affected / exposed	1 / 40 (2.50%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Blood and lymphatic system disorders			
Thrombocytopenic purpura			
subjects affected / exposed	1 / 40 (2.50%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Agranulocytosis			
subjects affected / exposed	1 / 40 (2.50%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
General disorders and administration site conditions			
Face oedema			
subjects affected / exposed	1 / 40 (2.50%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Gastrointestinal disorders			
Abdominal pain			
subjects affected / exposed	1 / 40 (2.50%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Coeliac disease			
subjects affected / exposed	1 / 40 (2.50%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Diarrhoea			
subjects affected / exposed	1 / 40 (2.50%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Respiratory, thoracic and mediastinal disorders			
Dyspnoea			

subjects affected / exposed	1 / 40 (2.50%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
<b>Infections and infestations</b>			
Pneumonia bacterial			
subjects affected / exposed	5 / 40 (12.50%)		
occurrences causally related to treatment / all	0 / 5		
deaths causally related to treatment / all	0 / 1		
Pneumonia			
subjects affected / exposed	1 / 40 (2.50%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Septic shock			
subjects affected / exposed	1 / 40 (2.50%)		
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>	<b>IgPro20</b>		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	39 / 40 (97.50%)		
<b>Investigations</b>			
Weight increased			
subjects affected / exposed	3 / 40 (7.50%)		
occurrences (all)	5		
<b>Injury, poisoning and procedural complications</b>			
Contusion			
subjects affected / exposed	2 / 40 (5.00%)		
occurrences (all)	3		
Ligament sprain			
subjects affected / exposed	2 / 40 (5.00%)		
occurrences (all)	2		
<b>Surgical and medical procedures</b>			

<p>Wisdom teeth removal</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>2 / 40 (5.00%)</p> <p>2</p>		
<p>Nervous system disorders</p> <p>Dizziness</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Headache</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Sciatica</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>2 / 40 (5.00%)</p> <p>3</p> <p>2 / 40 (5.00%)</p> <p>6</p> <p>2 / 40 (5.00%)</p> <p>2</p>		
<p>Blood and lymphatic system disorders</p> <p>Anaemia</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>2 / 40 (5.00%)</p> <p>2</p>		
<p>General disorders and administration site conditions</p> <p>Pyrexia</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Chest pain</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>4 / 40 (10.00%)</p> <p>6</p> <p>2 / 40 (5.00%)</p> <p>2</p>		
<p>Gastrointestinal disorders</p> <p>Diarrhoea</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Abdominal pain upper</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Aphthous stomatitis</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Constipation</p>	<p>3 / 40 (7.50%)</p> <p>5</p> <p>4 / 40 (10.00%)</p> <p>9</p> <p>3 / 40 (7.50%)</p> <p>3</p>		

<p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Gastritis</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>2 / 40 (5.00%)</p> <p>2</p> <p>2 / 40 (5.00%)</p> <p>2</p>		
<p>Respiratory, thoracic and mediastinal disorders</p> <p>Cough</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Bronchiectasis</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Productive cough</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Rhinorrhoea</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>11 / 40 (27.50%)</p> <p>34</p> <p>3 / 40 (7.50%)</p> <p>4</p> <p>2 / 40 (5.00%)</p> <p>4</p> <p>2 / 40 (5.00%)</p> <p>2</p>		
<p>Skin and subcutaneous tissue disorders</p> <p>Skin lesion</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Urticaria</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>2 / 40 (5.00%)</p> <p>2</p> <p>2 / 40 (5.00%)</p> <p>2</p>		
<p>Musculoskeletal and connective tissue disorders</p> <p>Arthralgia</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Back pain</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>6 / 40 (15.00%)</p> <p>7</p> <p>3 / 40 (7.50%)</p> <p>3</p>		
<p>Infections and infestations</p> <p>Bronchitis</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>21 / 40 (52.50%)</p> <p>51</p>		

Upper respiratory tract infection			
subjects affected / exposed	18 / 40 (45.00%)		
occurrences (all)	49		
Sinusitis			
subjects affected / exposed	13 / 40 (32.50%)		
occurrences (all)	31		
Nasopharyngitis			
subjects affected / exposed	12 / 40 (30.00%)		
occurrences (all)	19		
Rhinitis			
subjects affected / exposed	9 / 40 (22.50%)		
occurrences (all)	15		
Febrile infection			
subjects affected / exposed	6 / 40 (15.00%)		
occurrences (all)	10		
Acute sinusitis			
subjects affected / exposed	5 / 40 (12.50%)		
occurrences (all)	5		
Pharyngitis			
subjects affected / exposed	5 / 40 (12.50%)		
occurrences (all)	10		
Influenza			
subjects affected / exposed	4 / 40 (10.00%)		
occurrences (all)	4		
Viral infection			
subjects affected / exposed	4 / 40 (10.00%)		
occurrences (all)	4		
Viral upper respiratory tract infection			
subjects affected / exposed	4 / 40 (10.00%)		
occurrences (all)	5		
Conjunctivitis infective			
subjects affected / exposed	3 / 40 (7.50%)		
occurrences (all)	11		
Ear infection			
subjects affected / exposed	3 / 40 (7.50%)		
occurrences (all)	6		

Enteritis infectious			
subjects affected / exposed	3 / 40 (7.50%)		
occurrences (all)	12		
Lower respiratory tract infection			
subjects affected / exposed	3 / 40 (7.50%)		
occurrences (all)	6		
Oral herpes			
subjects affected / exposed	3 / 40 (7.50%)		
occurrences (all)	8		
Otitis media			
subjects affected / exposed	3 / 40 (7.50%)		
occurrences (all)	8		
Pneumonia			
subjects affected / exposed	2 / 40 (5.00%)		
occurrences (all)	2		
Urinary tract infection			
subjects affected / exposed	3 / 40 (7.50%)		
occurrences (all)	6		
Acute tonsillitis			
subjects affected / exposed	2 / 40 (5.00%)		
occurrences (all)	3		
Diarrhoea infectious			
subjects affected / exposed	2 / 40 (5.00%)		
occurrences (all)	3		
Enterobiasis			
subjects affected / exposed	2 / 40 (5.00%)		
occurrences (all)	3		
Gastroenteritis			
subjects affected / exposed	2 / 40 (5.00%)		
occurrences (all)	2		
Laryngitis			
subjects affected / exposed	2 / 40 (5.00%)		
occurrences (all)	6		
Otitis externa			
subjects affected / exposed	2 / 40 (5.00%)		
occurrences (all)	2		

Otitis media acute subjects affected / exposed occurrences (all)	2 / 40 (5.00%) 2		
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## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
09 January 2009	This protocol amendment included the change of the supervising investigator for Germany (Leiter der klinischen Prüfung according to German drug law) and the biometrics service provider as well as several minor editorial changes.
13 January 2009	This was a country-specific amendment applicable for study sites in the UK. To fulfill the requirements of the MHRA, the study duration was defined as exactly 30 months.
13 January 2009	This was a country-specific amendment applicable for study sites in Sweden. To fulfill the requirements of the Swedish Competent Authorities (Läkemedelsverket), the study duration was defined as exactly 30 months. Additionally, the investigators were advised to contact subjects by telephone between the 6 monthly visits.
06 July 2009	This amendment included an increase in the maximum storage temperature of IgPro20, a switch from 50 mL IgPro20 bottles to 20 mL bottles, and a clarification concerning calculation of the visit intervals.
06 December 2010	This was a country-specific amendment applicable for all study sites, except the UK. The individual study duration depended on the time between last infusion within study ZLB06_001CR and the availability of IgPro20 on the European market, and could vary from country to country. The study duration was originally expected to not exceed 30 months, but was defined as not exceeding 42 months by this amendment.
14 March 2011	This was a country-specific amendment applicable for study sites in the UK. Study duration was previously defined as exactly 30 months in Substantial Amendment 3.0 and was prolonged to 36 months in this protocol amendment to satisfy MHRA request of better defining the study duration.

Notes:

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### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported

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### Online references

<http://www.ncbi.nlm.nih.gov/pubmed/24412910>