



## Clinical trial results:

### COR-1, an anti- $\beta$ 1 receptor antibody cyclopeptide in heart failure: a phase II, multicentre, randomised, double-blind and placebo controlled study with parallel groups

#### Summary

EudraCT number	2010-022579-68
Trial protocol	DE
Global end of trial date	28 August 2013

#### Results information

Result version number	v1 (current)
This version publication date	15 July 2016
First version publication date	15 July 2016

#### Trial information

##### Trial identification

Sponsor protocol code	COR-1/02; 54452840HFA2002
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##### Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01391507
WHO universal trial number (UTN)	-

Notes:

#### Sponsors

Sponsor organisation name	CorImmun GmbhH
Sponsor organisation address	Johnson & Johnson Platz 1, Neuss, Germany, 41470
Public contact	Clinical Registry group, Janssen-Cilag International N.V, +31 715242166, ClinicalTrialsEU@its.jnj.com
Scientific contact	Clinical Registry group, Janssen-Cilag International N.V, +31 715242166, ClinicalTrialsEU@its.jnj.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	28 August 2013
Is this the analysis of the primary completion data?	Yes
Primary completion date	28 August 2013
Global end of trial reached?	Yes
Global end of trial date	28 August 2013
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

The primary objective is to investigate whether intravenous COR-1 administration every 4 weeks in addition to standard therapy enhances cardiac function at rest in patients with heart failure due to DCM, compared to standard therapy alone after 6 months.

Protection of trial subjects:

Safety data, including but not limited to adverse events, serious adverse events, treatment discontinuation, changes in vital signs, electrocardiogram (ECG) parameters, echocardiography parameters, circulating anti-1-AR autoantibodies, laboratory values, and use of concomitant medications were summarized in summary tables and/or frequency tabulations were analysed throughout the study.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	25 October 2011
Long term follow-up planned	Yes
Long term follow-up rationale	Safety
Long term follow-up duration	1 Years
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

## Population of trial subjects

### Subjects enrolled per country

Country: Number of subjects enrolled	Germany: 36
Worldwide total number of subjects	36
EEA total number of subjects	36

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)	23

From 65 to 84 years	13
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details: -

### Pre-assignment

Screening details:

A total of 36 participants were enrolled in the study. Ten participants were randomized to placebo and 8, 6, and 12 participants were randomized to JNJ-54452840 20 mg, 80 mg, and 160 mg, respectively.

### Period 1

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

### Arms

Are arms mutually exclusive?	Yes
<b>Arm title</b>	Placebo

Arm description:

Matching placebo (0.9 percent sodium chloride solution) was administered intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.

Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection/infusion in pre-filled syringe
Routes of administration	Intravenous use

Dosage and administration details:

Matching placebo (0.9 percent sodium chloride solution) was administered intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.

<b>Arm title</b>	COR-1 20 mg
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Arm description:

COR-1 (JNJ-54452840) was administered at a dose of 20 milligram (mg) intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.

Arm type	Experimental
Investigational medicinal product name	COR-1
Investigational medicinal product code	
Other name	JNJ-54452840
Pharmaceutical forms	Solution for injection/infusion in pre-filled syringe
Routes of administration	Intravenous use

Dosage and administration details:

COR-1 (JNJ-54452840) was administered at a dose of 20 milligrams (mg) intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.

<b>Arm title</b>	COR-1 80 mg
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Arm description:

COR-1 was administered at a dose of 80 milligram (mg) intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.

Arm type	Experimental
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Investigational medicinal product name	COR-1
Investigational medicinal product code	
Other name	JNJ-54452840
Pharmaceutical forms	Solution for injection/infusion in pre-filled syringe
Routes of administration	Intravenous use

Dosage and administration details:

COR-1 (JNJ-54452840) was administered at a dose of 80 milligrams (mg) intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.

<b>Arm title</b>	COR-1 160 mg
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Arm description:

COR-1 was administered at a dose of 160 milligram (mg) intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.

Arm type	Experimental
Investigational medicinal product name	COR-1
Investigational medicinal product code	
Other name	JNJ-54452840
Pharmaceutical forms	Solution for injection/infusion in pre-filled syringe
Routes of administration	Intravenous use

Dosage and administration details:

COR-1 was administered at a dose of 160 milligram (mg) intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.

<b>Number of subjects in period 1</b>	Placebo	COR-1 20 mg	COR-1 80 mg
Started	10	8	6
Completed	6	4	2
Not completed	4	4	4
Adverse event, serious fatal	-	-	-
Consent withdrawn by subject	1	2	1
Adverse event, non-fatal	-	-	1
Other	-	-	2
Protocol Violation	2	1	-
Adverse event, serious non-fatal	1	1	-

<b>Number of subjects in period 1</b>	COR-1 160 mg
Started	12
Completed	5
Not completed	7
Adverse event, serious fatal	1
Consent withdrawn by subject	1
Adverse event, non-fatal	-
Other	-
Protocol Violation	3
Adverse event, serious non-fatal	2



## Baseline characteristics

### Reporting groups

Reporting group title	Placebo
Reporting group description: Matching placebo (0.9 percent sodium chloride solution) was administered intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.	
Reporting group title	COR-1 20 mg
Reporting group description: COR-1 (JNJ-54452840) was administered at a dose of 20 milligram (mg) intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.	
Reporting group title	COR-1 80 mg
Reporting group description: COR-1 was administered at a dose of 80 milligram (mg) intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.	
Reporting group title	COR-1 160 mg
Reporting group description: COR-1 was administered at a dose of 160 milligram (mg) intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.	

Reporting group values	Placebo	COR-1 20 mg	COR-1 80 mg
Number of subjects	10	8	6
Title for AgeCategorical Units: subjects			
Children (2-11 years)	0	0	0
Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	7	6	3
From 65 to 84 years	3	2	3
85 years and over	0	0	0
Title for AgeContinuous Units: years			
arithmetic mean	59.4	57.5	62
standard deviation	± 9.61	± 10.92	± 13.59
Title for Gender Units: subjects			
Female	3	2	1
Male	7	6	5

Reporting group values	COR-1 160 mg	Total	
Number of subjects	12	36	
Title for AgeCategorical Units: subjects			
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	7	23	
From 65 to 84 years	5	13	
85 years and over	0	0	
Title for AgeContinuous Units: years			
arithmetic mean	59.8		

standard deviation	$\pm 11.88$	-	
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Title for Gender			
Units: subjects			
Female	2	8	
Male	10	28	



## End points

### End points reporting groups

Reporting group title	Placebo
Reporting group description: Matching placebo (0.9 percent sodium chloride solution) was administered intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.	
Reporting group title	COR-1 20 mg
Reporting group description: COR-1 (JNJ-54452840) was administered at a dose of 20 milligram (mg) intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.	
Reporting group title	COR-1 80 mg
Reporting group description: COR-1 was administered at a dose of 80 milligram (mg) intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.	
Reporting group title	COR-1 160 mg
Reporting group description: COR-1 was administered at a dose of 160 milligram (mg) intravenously in addition to the standard therapy for heart failure every 4 weeks for a total of 6 doses.	

### Primary: Change From Baseline in Left Ventricular Ejection Fraction (LVEF) at Month 6

End point title	Change From Baseline in Left Ventricular Ejection Fraction (LVEF) at Month 6 <sup>[1]</sup>
End point description: The LVEF is a fraction of blood (in percent) pumped out of the left ventricle of the heart (the main pumping chamber). Ejection fraction percentages greater than (>) 55% are considered normal. It was measured by biplane echocardiography (central assessment).	
End point type	Primary
End point timeframe: Baseline and Month 6	

#### 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: Inferential Statistical analysis was not reported.

End point values	Placebo	COR-1 20 mg	COR-1 80 mg	COR-1 160 mg
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	10	8	6	12
Units: participants				
arithmetic mean (standard deviation)				
Baseline	35.4 (± 11.72)	29.4 (± 12.6)	35 (± 13.42)	32.4 (± 10.77)
Change at Month 6	-1.6 (± 5.94)	0.8 (± 5.55)	5.4 (± 10.11)	-0.9 (± 3.09)

### Statistical analyses

No statistical analyses for this end point

**Primary: Change From Baseline in Local Left Ventricular Ejection Fraction (LVEF) at Month 9**

End point title	Change From Baseline in Local Left Ventricular Ejection Fraction (LVEF) at Month 9 <sup>[2]</sup>
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End point description:

The LVEF is a measure of how much blood is pumped out of the left ventricle of the heart (the main pumping chamber). Ejection fraction percentages greater than (>) 55% are considered normal. It was measured by biplane echocardiography (local assessment).

End point type	Primary
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End point timeframe:

Baseline and Month 9

Notes:

[2] - 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: No statistical analyses for this end point.

End point values	Placebo	COR-1 20 mg	COR-1 80 mg	COR-1 160 mg
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	10	8	6	12
Units: participants				
arithmetic mean (standard deviation)				
Baseline	32.6 (± 5.78)	33.6 (± 9.77)	35.3 (± 8.57)	32.5 (± 9.27)
Change at Month 9	-0.8 (± 4.39)	-1.9 (± 5.99)	3.8 (± 4.02)	-1.8 (± 3.13)

**Statistical analyses**

No statistical analyses for this end point

**Primary: Change From Baseline in N-Terminal Pro B-Type Natriuretic Peptide (NTProBNP) Level at Month 6**

End point title	Change From Baseline in N-Terminal Pro B-Type Natriuretic Peptide (NTProBNP) Level at Month 6 <sup>[3]</sup>
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End point description:

The NT-ProBNP is a biomarker (a biologic molecule) that has been shown to predict cardiac events.

End point type	Primary
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End point timeframe:

Baseline and Month 6

Notes:

[3] - 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: No statistical analyses for this end point.

End point values	Placebo	COR-1 20 mg	COR-1 80 mg	COR-1 160 mg
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	10	8	6	12
Units: Participants				
arithmetic mean (standard deviation)				
Baseline	5678 (± 9347.1)	2215.9 (± 1692.1)	971.4 (± 665.1)	2299.4 (± 2024.1)
Change at Month 6	-805.7 (± 1241)	1363.4 (± 3948.7)	392.8 (± 295.7)	1109.6 (± 2130.6)

## Statistical analyses

No statistical analyses for this end point

### Secondary: Change From Baseline in Central Transmitral Flow Velocity Time Integral (VTI) at Month 6

End point title	Change From Baseline in Central Transmitral Flow Velocity Time Integral (VTI) at Month 6
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End point description:

Transmitral flow VTI measures how blood flows through the heart. This was measured by echocardiogram. Most of the values for transmitral flow VTI were not provided in the reports from central core echocardiographic laboratory due to technical reasons. 'N' (number of participants analyzed) signifies those participants who were evaluable for this measure. Standard deviation was not reported since only 1 participant was evaluable for this arm group i.e Change at Month 6.

End point type	Secondary
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End point timeframe:

Baseline and Month 6

End point values	Placebo	COR-1 20 mg	COR-1 80 mg	COR-1 160 mg
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	2	1	0 <sup>[4]</sup>	0 <sup>[5]</sup>
Units: Participants				
arithmetic mean (standard deviation)				
Baseline	45 (± 31.11)	21 (± 0.99999)	()	()
Change at Month 6	0 (± 0)	0 (± 0.99999)	()	()

Notes:

[4] - None of the participant was evaluable.

[5] - None of the participant was evaluable.

## Statistical analyses

No statistical analyses for this end point

### Secondary: Change From Baseline in Central Tissue E-Wave Doppler Mitral Annular Velocity at Month 6

End point title	Change From Baseline in Central Tissue E-Wave Doppler Mitral Annular Velocity at Month 6
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End point description:

Tissue doppler mitral annular velocity is a measure of how well the heart fills with blood. This was measured by echocardiogram. Most of the values for E-wave were not provided in the reports from central core echocardiographic laboratory due to technical reasons. Standard deviation was not reported since only 1 participant was evaluable for this arm group i.e COR-1 80 mg.

End point type	Secondary
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End point timeframe:

Baseline and Month 6

End point values	Placebo	COR-1 20 mg	COR-1 80 mg	COR-1 160 mg
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	5	5	1	4
Units: Participants				
arithmetic mean (standard deviation)				
Baseline	5.6 (± 1.52)	5.2 (± 1.1)	4 (± 99999)	5.8 (± 1.71)
Change at Month 6	-0.2 (± 0.45)	0 (± 0)	0 (± 99999)	0 (± 0)

### Statistical analyses

No statistical analyses for this end point

### Secondary: Change From Baseline in Distance Walked During Six-minute Walk Test at Month 6

End point title	Change From Baseline in Distance Walked During Six-minute Walk Test at Month 6
End point description:	A standardized 6-minute walk test was performed and the distance covered in 6 minutes was measured.
End point type	Secondary
End point timeframe:	Baseline and Month 6

End point values	Placebo	COR-1 20 mg	COR-1 80 mg	COR-1 160 mg
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	10	8	6	12
Units: Participants				
arithmetic mean (standard deviation)				
Baseline	421.1 (± 113.29)	451.1 (± 51.2)	395.2 (± 81.3)	420.7 (± 109.77)
Change at Month 6	38.7 (± 63.11)	-8.7 (± 104.35)	12.8 (± 57.7)	2.4 (± 41.01)

### Statistical analyses

No statistical analyses for this end point

### Secondary: Number of Participants With New York Heart Association (NYHA) Classification of Disease Progression

End point title	Number of Participants With New York Heart Association (NYHA) Classification of Disease Progression
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End point description:

Disease progression (morbidity) was measured by the NYHA classification. The NYHA classification assesses the severity of symptoms of heart failure as judged by the investigator and is comprised of 4 stages. Stage I- No symptoms/limitation in ordinary physical activity (for example, shortness of breath when walking, climbing stairs); Stage II-Mild symptoms (mild shortness of breath and/or angina) and slight limitation during ordinary activity; Stage III- Marked limitation in activity due to symptoms, even during less-than-ordinary activity, (for example, walking short distances [20-100 m]), comfortable only

End point type	Secondary
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End point timeframe:

Baseline and Month 6

End point values	Placebo	COR-1 20 mg	COR-1 80 mg	COR-1 160 mg
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	10	8	6	12
Units: number of participants				
Baseline: Stage II (n= 10, 8, 6, 12)	7	8	3	7
Baseline: Stage III (n= 10, 8, 6, 12)	3	0	3	5
Month 6: Stage I (n= 7, 7, 5, 8)	1	1	0	0
Month 6: Stage II (n= 7, 7, 5, 8)	3	4	3	6
Month 6: Stage III (n= 7, 7, 5, 8)	3	2	2	2

## Statistical analyses

No statistical analyses for this end point

## Secondary: Change From Baseline in Minnesota Living With Heart Failure Questionnaire Score at Month 6

End point title	Change From Baseline in Minnesota Living With Heart Failure Questionnaire Score at Month 6
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End point description:

Minnesota living with heart failure questionnaire is a self-administered, disease-specific measure of health related quality of life (QOL) that assesses participant's perceptions of the influence of heart failure on physical, socioeconomic and psychological aspects of life. Participants responded to 21 items using a six-point response scale (0-5). The total summary score can range from 0-105 with a lower score reflecting better heart failure related QOL.

End point type	Secondary
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End point timeframe:

Baseline and Month 6

End point values	Placebo	COR-1 20 mg	COR-1 80 mg	COR-1 160 mg
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	7	7	5	11
Units: Participants				
arithmetic mean (standard deviation)				
Baseline	23.7 (± 11.57)	21.4 (± 12.9)	33.2 (± 23.9)	25.9 (± 25.27)
Change at Month 6	3.3 (± 10.7)	3.3 (± 16.26)	1.8 (± 9.5)	2.4 (± 20.5)

## Statistical analyses

No statistical analyses for this end point

### Secondary: Change From Baseline in Holter Electrocardiography (ECG) Parameters (Heart Rate) at Month 6

End point title	Change From Baseline in Holter Electrocardiography (ECG) Parameters (Heart Rate) at Month 6
End point description: A Holter monitor is a portable device which monitors the electrical activity (electrocardiography) of the heart. Mean heart rate, maximum heart rate and minimum heart rate were evaluated. 'N' (number of participants analyzed) signifies those participants who were evaluable for this measure.	
End point type	Secondary
End point timeframe: Baseline and Month 6	

End point values	Placebo	COR-1 20 mg	COR-1 80 mg	COR-1 160 mg
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	7	7	5	11
Units: Participants				
arithmetic mean (standard deviation)				
Baseline: Mean Heart Rate	74.6 (± 7)	76.9 (± 10.92)	84.2 (± 11.43)	75.3 (± 8.59)
Change at Month 6: Mean Heart Rate	1.3 (± 6.68)	-0.9 (± 3.63)	-5.8 (± 10.18)	1.4 (± 6.97)
Baseline: Maximum Heart Rate	126.4 (± 18.28)	130.3 (± 33.26)	123 (± 15.26)	125.1 (± 35.23)
Change at Month 6: Maximum Heart	-0.8 (± 15.24)	5.4 (± 40.15)	0 (± 25.3)	-2 (± 31.56)
Baseline: Minimum Heart Rate	51.6 (± 11.54)	59.3 (± 13.12)	66 (± 4.16)	58.7 (± 6.65)
Change at Month 6: Minimum Heart	0.5 (± 3.39)	0.1 (± 3.93)	-7.8 (± 4.5)	-2.3 (± 10.09)

## Statistical analyses

No statistical analyses for this end point

### Secondary: Number of Participants With Holter Electrocardiography (ECG) Parameters

End point title	Number of Participants With Holter Electrocardiography (ECG) Parameters
End point description:	
End point type	Secondary

<b>End point values</b>	Placebo	COR-1 20 mg	COR-1 80 mg	COR-1 160 mg
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	7	7	5	11
Units: number of participants				
Baseline: No block	7	7	5	7
Baseline: AV block I	0	0	0	3
Baseline: AV block II	0	0	0	0
Baseline: AV block III	0	0	0	0
Baseline: Sinus rhythm	5	4	4	7
Baseline: Atrial fibrillation	0	0	0	0
Baseline: Atrial fibrillation- paroxysmal/persistent	2	1	1	1
Baseline: Other	0	2	0	2
Baseline: AV junctional, 0-240/24h	5	6	4	6
Baseline: AV junctional, 241-1000/24h	2	0	0	3
Baseline: AV junctional, 1001-2400/24h	0	0	1	1
Baseline: Ventricular, 0-240/24h	1	1	1	4
Baseline: Ventricular, 241-1000/24h	2	2	2	1
Baseline: Ventricular, 1001-2400/24h	4	3	2	5
Baseline: 0 No VES	0	1	0	0
Baseline: I Occasional individual VES (<30/h)	3	0	1	4
Baseline: II Frequent VES (>30/h)	0	2	0	0
Baseline: IIIa Polymorphous VES	1	0	0	1
Baseline: IIIb Ventricular bigeminy	0	0	0	1
Baseline: IVa Couplets, repetitive VES	1	2	2	1
Baseline: IVb Runs, repetitive VES	2	2	1	3
Baseline: V Early occurring VES(R-on T phenomenon)	0	0	0	0
Baseline: II, IIIa, IVa, IVb	0	0	1	0
Baseline: Normal	2	0	2	1
Baseline: Abnormal, NCS	5	5	1	8
Baseline: Abnormal, CS	0	2	2	1
Month 6: No block	6	7	5	5
Month 6: AV block I	0	0	0	1
Month 6: AV block II	0	0	0	1
Month 6: AV block III	0	0	0	0
Month 6: Sinus rhythm	2	4	3	6
Month 6: Atrial fibrillation	0	0	0	0
Month 6: Atrial fibrillation paroxysmal/persistent	2	2	1	0
Month 6: Other	2	1	1	1
Month 6: AV junctional, 0-240/24h	5	5	4	4
Month 6: AV junctional, 241-1000/24h	1	2	1	1
Month 6: AV junctional, 1001-2400/24h	0	0	0	2
Month 6: Ventricular, 0-240/24h	2	2	1	2
Month 6: Ventricular, 241-1000/24h	0	2	1	1

Month 6: Ventricular, 1001-2400/24h	4	3	3	4
Month 6: 0 No VES	0	1	0	0
Month 6: I Occasional individual VES (<30/h)	2	0	2	2
Month 6: II Frequent VES (>30/h)	0	0	0	1
Month 6: IIIa Polymorphous VES	2	3	1	1
Month 6: IVa Couplets, repetitive VES	1	1	0	1
Month 6: IVb Runs, repetitive VES	1	1	1	2
Month 6: V Early occurring VES (R-on Tphenomenon)	0	0	0	0
Month 6: II, IIIa, IVa, IVb	0	1	1	0
Month 6: Normal	0	0	1	1
Month 6: Abnormal, NCS	6	6	3	5
Month 6: Abnormal, CS	0	1	1	1

## Statistical analyses

No statistical analyses for this end point



## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

Timeframe for AE

Assessment type	Non-systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	16.0
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### Reporting groups

Reporting group title	Placebo
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Reporting group description:

Placebo intravenously once per visit

Reporting group title	160 mg COR-1
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Reporting group description: -

Reporting group title	80 mg COR-1
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Reporting group description: -

Reporting group title	20 mg COR-1
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Reporting group description: -

Serious adverse events	Placebo	160 mg COR-1	80 mg COR-1
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 7 (14.29%)	6 / 11 (54.55%)	1 / 5 (20.00%)
number of deaths (all causes)	0	1	0
number of deaths resulting from adverse events			
Investigations			
Ejection Fraction Decreased			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Weight Increased			
alternative assessment type: Systematic			
subjects affected / exposed	1 / 7 (14.29%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Ovarian Cancer			
alternative assessment type: Systematic			

subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Prostate Cancer			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Cardiac disorders			
Cardiac Failure			
alternative assessment type: Systematic			
subjects affected / exposed	1 / 7 (14.29%)	2 / 11 (18.18%)	1 / 5 (20.00%)
occurrences causally related to treatment / all	0 / 1	0 / 3	0 / 6
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
Cardiogenic Shock			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
Heart Valve Incompetence			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Sinus Arrest			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Surgical and medical procedures			
Haemodialysis			
alternative assessment type: Systematic			

subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
Nervous system disorders			
Loss of Consciousness			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Presyncope			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
General disorders and administration site conditions			
Cardiac Death			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
Respiratory, thoracic and mediastinal disorders			
Dyspnoea			
alternative assessment type: Systematic			
subjects affected / exposed	1 / 7 (14.29%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pulmonary Oedema			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
Psychiatric disorders			
Mental Disorder			

alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 4	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Renal and urinary disorders			
Renal Failure			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
Infections and infestations			
Lobar Pneumonia			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumonia			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0

<b>Serious adverse events</b>	20 mg COR-1		
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 7 (14.29%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events			
Investigations			
Ejection Fraction Decreased			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Weight Increased			
alternative assessment type: Systematic			

subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Ovarian Cancer			
alternative assessment type: Systematic			
subjects affected / exposed	1 / 7 (14.29%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Prostate Cancer			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Cardiac disorders			
Cardiac Failure			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Cardiogenic Shock			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Heart Valve Incompetence			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Sinus Arrest			
alternative assessment type: Systematic			

subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Surgical and medical procedures			
Haemodialysis			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Nervous system disorders			
Loss of Consciousness			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Presyncope			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
General disorders and administration site conditions			
Cardiac Death			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Respiratory, thoracic and mediastinal disorders			
Dyspnoea			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Pulmonary Oedema			

alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Psychiatric disorders			
Mental Disorder			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Renal and urinary disorders			
Renal Failure			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Lobar Pneumonia			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Pneumonia			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		

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

<b>Non-serious adverse events</b>	Placebo	160 mg COR-1	80 mg COR-1
Total subjects affected by non-serious adverse events			
subjects affected / exposed	4 / 7 (57.14%)	8 / 11 (72.73%)	5 / 5 (100.00%)
Vascular disorders			

Venous Insufficiency alternative assessment type: Systematic subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1	0 / 11 (0.00%) 0	0 / 5 (0.00%) 0
Surgical and medical procedures Wisdom Teeth Removal alternative assessment type: Systematic subjects affected / exposed occurrences (all)	0 / 7 (0.00%) 0	1 / 11 (9.09%) 1	0 / 5 (0.00%) 0
General disorders and administration site conditions Asthenia alternative assessment type: Systematic subjects affected / exposed occurrences (all)  Chest Pain alternative assessment type: Systematic subjects affected / exposed occurrences (all)  Fatigue alternative assessment type: Systematic subjects affected / exposed occurrences (all)  Injection Site Haematoma alternative assessment type: Systematic subjects affected / exposed occurrences (all)  General Physical Health Deterioration alternative assessment type: Systematic subjects affected / exposed occurrences (all)  Oedema Peripheral alternative assessment type: Systematic subjects affected / exposed occurrences (all)  Pyrexia	0 / 7 (0.00%) 0  0 / 7 (0.00%) 0  0 / 7 (0.00%) 0  1 / 7 (14.29%) 1  0 / 7 (0.00%) 0  1 / 7 (14.29%) 1	1 / 11 (9.09%) 1  1 / 11 (9.09%) 1  1 / 11 (9.09%) 2  0 / 11 (0.00%) 0  1 / 11 (9.09%) 1  0 / 11 (0.00%) 0	0 / 5 (0.00%) 0  0 / 5 (0.00%) 0  0 / 5 (0.00%) 0  0 / 5 (0.00%) 0  2 / 5 (40.00%) 2



alternative assessment type: Systematic subjects affected / exposed occurrences (all)	1 / 7 (14.29%) 1	1 / 11 (9.09%) 2	1 / 5 (20.00%) 1
Reproductive system and breast disorders Gynaecomastia alternative assessment type: Systematic subjects affected / exposed occurrences (all)	0 / 7 (0.00%) 0	1 / 11 (9.09%) 1	0 / 5 (0.00%) 0
Respiratory, thoracic and mediastinal disorders Cough alternative assessment type: Systematic subjects affected / exposed occurrences (all)  Rhonchi alternative assessment type: Systematic subjects affected / exposed occurrences (all)	0 / 7 (0.00%) 0  1 / 7 (14.29%) 1	2 / 11 (18.18%) 2  0 / 11 (0.00%) 0	0 / 5 (0.00%) 0  0 / 5 (0.00%) 0
Psychiatric disorders Hallucination alternative assessment type: Systematic subjects affected / exposed occurrences (all)  Mental Disorder alternative assessment type: Systematic subjects affected / exposed occurrences (all)	0 / 7 (0.00%) 0  0 / 7 (0.00%) 0	1 / 11 (9.09%) 1  1 / 11 (9.09%) 1	0 / 5 (0.00%) 0  0 / 5 (0.00%) 0
Investigations Blood Creatine Increased alternative assessment type: Systematic subjects affected / exposed occurrences (all)  Blood Potassium Increased alternative assessment type: Systematic	0 / 7 (0.00%) 0	0 / 11 (0.00%) 0	0 / 5 (0.00%) 0

subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences (all)	0	1	0
Blood Pressure Decreased			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	0	0	0
Carotid Bruit			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	1 / 5 (20.00%)
occurrences (all)	0	0	1
Glomerular Filtration Rate Abnormal			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	1 / 5 (20.00%)
occurrences (all)	0	0	1
Heart Rate Increased			
alternative assessment type: Systematic			
subjects affected / exposed	1 / 7 (14.29%)	1 / 11 (9.09%)	1 / 5 (20.00%)
occurrences (all)	1	2	1
Hepatic Enzyme Increased			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	1 / 5 (20.00%)
occurrences (all)	0	0	1
Prostatic Specific Antigen Increased			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences (all)	0	1	0
Weight Increased			
alternative assessment type: Systematic			
subjects affected / exposed	1 / 7 (14.29%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	1	0	0
Injury, poisoning and procedural complications			
Excoriation			
alternative assessment type: Systematic			

subjects affected / exposed	1 / 7 (14.29%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	1	0	0
Face Injury			
alternative assessment type: Systematic			
subjects affected / exposed	1 / 7 (14.29%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	1	0	0
Fall			
alternative assessment type: Systematic			
subjects affected / exposed	1 / 7 (14.29%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	1	0	0
Overdose			
alternative assessment type: Systematic			
subjects affected / exposed	1 / 7 (14.29%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	1	0	0
Traumatic Haematoma			
alternative assessment type: Systematic			
subjects affected / exposed	1 / 7 (14.29%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	1	0	0
Cardiac disorders			
Arrhythmia			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	0	0	0
Bradycardia			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	0	0	0
Cardiac Failure			
alternative assessment type: Systematic			
subjects affected / exposed	1 / 7 (14.29%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	1	0	0
Palpitations			
alternative assessment type: Systematic			

subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	0	0	0
Sinus Bradycardia			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	0	0	0
Tachycardia			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	0	0	0
Ventricular Extrasystoles			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences (all)	0	1	0
Nervous system disorders			
Aura			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences (all)	0	1	0
Dysgeusia			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences (all)	0	1	0
Dizziness			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	0	0	0
Paraesthesia			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	0 / 5 (0.00%)
occurrences (all)	0	1	0
Headache			
alternative assessment type: Systematic			

<p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Presyncope</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Sciatica</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Syncope</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 7 (14.29%)</p> <p>1</p> <p>0 / 7 (0.00%)</p> <p>0</p> <p>1 / 7 (14.29%)</p> <p>1</p> <p>1 / 7 (14.29%)</p> <p>3</p>	<p>1 / 11 (9.09%)</p> <p>1</p> <p>0 / 11 (0.00%)</p> <p>0</p> <p>1 / 11 (9.09%)</p> <p>2</p> <p>0 / 11 (0.00%)</p> <p>0</p>	<p>0 / 5 (0.00%)</p> <p>0</p> <p>1 / 5 (20.00%)</p> <p>1</p> <p>0 / 5 (0.00%)</p> <p>0</p> <p>0 / 5 (0.00%)</p> <p>0</p>
<p>Ear and labyrinth disorders</p> <p>Vertigo</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>	<p>1 / 11 (9.09%)</p> <p>1</p>	<p>0 / 5 (0.00%)</p> <p>0</p>
<p>Gastrointestinal disorders</p> <p>Abdominal Pain Lower</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Abdominal Pain Upper</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Anal Inflammation</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Diarrhoea</p> <p>alternative assessment type: Systematic</p>	<p>0 / 7 (0.00%)</p> <p>0</p> <p>1 / 7 (14.29%)</p> <p>1</p> <p>0 / 7 (0.00%)</p> <p>0</p>	<p>0 / 11 (0.00%)</p> <p>0</p> <p>0 / 11 (0.00%)</p> <p>0</p> <p>1 / 11 (9.09%)</p> <p>1</p>	<p>0 / 5 (0.00%)</p> <p>0</p> <p>0 / 5 (0.00%)</p> <p>0</p> <p>0 / 5 (0.00%)</p> <p>0</p>

<p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Nausea</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Toothache</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p> <p>1 / 7 (14.29%)</p> <p>1</p> <p>0 / 7 (0.00%)</p> <p>0</p>	<p>2 / 11 (18.18%)</p> <p>2</p> <p>1 / 11 (9.09%)</p> <p>2</p> <p>0 / 11 (0.00%)</p> <p>0</p>	<p>0 / 5 (0.00%)</p> <p>0</p> <p>0 / 5 (0.00%)</p> <p>0</p> <p>1 / 5 (20.00%)</p> <p>1</p>
<p>Hepatobiliary disorders</p> <p>Hepatomegaly</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>	<p>1 / 11 (9.09%)</p> <p>1</p>	<p>0 / 5 (0.00%)</p> <p>0</p>
<p>Skin and subcutaneous tissue disorders</p> <p>Erythema</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>	<p>0 / 11 (0.00%)</p> <p>0</p>	<p>0 / 5 (0.00%)</p> <p>0</p>
<p>Renal and urinary disorders</p> <p>Renal Impairment</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 7 (14.29%)</p> <p>1</p>	<p>0 / 11 (0.00%)</p> <p>0</p>	<p>1 / 5 (20.00%)</p> <p>1</p>
<p>Musculoskeletal and connective tissue disorders</p> <p>Arthralgia</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Back Pain</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Joint Swelling</p>	<p>1 / 7 (14.29%)</p> <p>2</p> <p>1 / 7 (14.29%)</p> <p>1</p>	<p>1 / 11 (9.09%)</p> <p>1</p> <p>0 / 11 (0.00%)</p> <p>0</p>	<p>0 / 5 (0.00%)</p> <p>0</p> <p>0 / 5 (0.00%)</p> <p>0</p>

<p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>	<p>0 / 11 (0.00%)</p> <p>0</p>	<p>0 / 5 (0.00%)</p> <p>0</p>
<p>Musculoskeletal Pain</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 7 (14.29%)</p> <p>1</p>	<p>0 / 11 (0.00%)</p> <p>0</p>	<p>0 / 5 (0.00%)</p> <p>0</p>
<p>Pain in Extremity</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 7 (14.29%)</p> <p>1</p>	<p>0 / 11 (0.00%)</p> <p>0</p>	<p>1 / 5 (20.00%)</p> <p>1</p>
<p>Infections and infestations</p> <p>Acute Tonsillitis</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Cystitis</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Influenza</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Nasopharyngitis</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Oral Herpes</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Respiratory Tract Infection</p> <p>alternative assessment type: Systematic</p>	<p>1 / 7 (14.29%)</p> <p>1</p> <p>1 / 7 (14.29%)</p> <p>2</p> <p>0 / 7 (0.00%)</p> <p>0</p> <p>0 / 7 (0.00%)</p> <p>0</p> <p>0 / 7 (0.00%)</p> <p>0</p>	<p>0 / 11 (0.00%)</p> <p>0</p> <p>0 / 11 (0.00%)</p> <p>0</p> <p>1 / 11 (9.09%)</p> <p>1</p> <p>1 / 11 (9.09%)</p> <p>2</p> <p>0 / 11 (0.00%)</p> <p>0</p>	<p>0 / 5 (0.00%)</p> <p>0</p> <p>0 / 5 (0.00%)</p> <p>0</p> <p>0 / 5 (0.00%)</p> <p>2 / 5 (40.00%)</p> <p>2</p> <p>0 / 5 (0.00%)</p> <p>0</p>

subjects affected / exposed	1 / 7 (14.29%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	1	0	0
Rhinitis			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	0	0	0
Sinusitis			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	1 / 11 (9.09%)	1 / 5 (20.00%)
occurrences (all)	0	1	1
Staphylococcal Infection			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	1 / 5 (20.00%)
occurrences (all)	0	0	3
Metabolism and nutrition disorders			
Decreased Appetite			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	0 / 5 (0.00%)
occurrences (all)	0	0	0
Gout			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	1 / 5 (20.00%)
occurrences (all)	0	0	1
Hyponatraemia			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 7 (0.00%)	0 / 11 (0.00%)	1 / 5 (20.00%)
occurrences (all)	0	0	1

<b>Non-serious adverse events</b>	20 mg COR-1		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	7 / 7 (100.00%)		
Vascular disorders			
Venous Insufficiency			
alternative assessment type: Systematic			



subjects affected / exposed occurrences (all)	0 / 7 (0.00%) 0		
Surgical and medical procedures Wisdom Teeth Removal alternative assessment type: Systematic subjects affected / exposed occurrences (all)	0 / 7 (0.00%) 0		
General disorders and administration site conditions Asthenia alternative assessment type: Systematic subjects affected / exposed occurrences (all)  Chest Pain alternative assessment type: Systematic subjects affected / exposed occurrences (all)  Fatigue alternative assessment type: Systematic subjects affected / exposed occurrences (all)  Injection Site Haematoma alternative assessment type: Systematic subjects affected / exposed occurrences (all)  General Physical Health Deterioration alternative assessment type: Systematic subjects affected / exposed occurrences (all)  Oedema Peripheral alternative assessment type: Systematic subjects affected / exposed occurrences (all)  Pyrexia alternative assessment type: Systematic	0 / 7 (0.00%) 0  0 / 7 (0.00%) 0  0 / 7 (0.00%) 0  0 / 7 (0.00%) 0  0 / 7 (0.00%) 0  0 / 7 (0.00%) 0  0 / 7 (0.00%) 0  0 / 7 (0.00%) 0		

<p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>		
<p>Reproductive system and breast disorders</p> <p>Gynaecomastia</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>		
<p>Respiratory, thoracic and mediastinal disorders</p> <p>Cough</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Rhonchi</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 7 (14.29%)</p> <p>1</p> <p>0 / 7 (0.00%)</p> <p>0</p>		
<p>Psychiatric disorders</p> <p>Hallucination</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Mental Disorder</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p> <p>0 / 7 (0.00%)</p> <p>0</p>		
<p>Investigations</p> <p>Blood Creatine Increased</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Blood Potassium Increased</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Blood Pressure Decreased</p>	<p>1 / 7 (14.29%)</p> <p>1</p> <p>1 / 7 (14.29%)</p> <p>1</p>		

<p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 7 (14.29%)</p> <p>1</p>		
<p>Carotid Bruit</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>		
<p>Glomerular Filtration Rate Abnormal</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>		
<p>Heart Rate Increased</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 7 (14.29%)</p> <p>1</p>		
<p>Hepatic Enzyme Increased</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>		
<p>Prostatic Specific Antigen Increased</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>		
<p>Weight Increased</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>		
<p>Injury, poisoning and procedural complications</p> <p>Excoriation</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Face Injury</p> <p>alternative assessment type: Systematic</p>	<p>0 / 7 (0.00%)</p> <p>0</p>		

<p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p> <p>Fall</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p> <p>Overdose</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p> <p>Traumatic Haematoma</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p>			
<p>Cardiac disorders</p> <p>Arrhythmia</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>1 / 7 (14.29%)</p> <p>occurrences (all)</p> <p>1</p> <p>Bradycardia</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>1 / 7 (14.29%)</p> <p>occurrences (all)</p> <p>1</p> <p>Cardiac Failure</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>1 / 7 (14.29%)</p> <p>occurrences (all)</p> <p>2</p> <p>Palpitations</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>1 / 7 (14.29%)</p> <p>occurrences (all)</p> <p>1</p> <p>Sinus Bradycardia</p> <p>alternative assessment type: Systematic</p>			

<p>subjects affected / exposed</p> <p>1 / 7 (14.29%)</p> <p>occurrences (all)</p> <p>1</p>			
<p>Tachycardia</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>1 / 7 (14.29%)</p> <p>occurrences (all)</p> <p>1</p>			
<p>Ventricular Extrasystoles</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p>			
<p>Nervous system disorders</p> <p>Aura</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p> <p>Dysgeusia</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p> <p>Dizziness</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>1 / 7 (14.29%)</p> <p>occurrences (all)</p> <p>1</p> <p>Paraesthesia</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p> <p>Headache</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p> <p>Presyncope</p> <p>alternative assessment type: Systematic</p>			

<p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p> <p>Sciatica</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p> <p>Syncope</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p>			
<p>Ear and labyrinth disorders</p> <p>Vertigo</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p>			
<p>Gastrointestinal disorders</p> <p>Abdominal Pain Lower</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>1 / 7 (14.29%)</p> <p>occurrences (all)</p> <p>1</p> <p>Abdominal Pain Upper</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p> <p>Anal Inflammation</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p> <p>Diarrhoea</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p> <p>Nausea</p> <p>alternative assessment type: Systematic</p>			

<p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Toothache</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 7 (14.29%)</p> <p>2</p> <p>0 / 7 (0.00%)</p> <p>0</p>		
<p>Hepatobiliary disorders</p> <p>Hepatomegaly</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>		
<p>Skin and subcutaneous tissue disorders</p> <p>Erythema</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>1 / 7 (14.29%)</p> <p>2</p>		
<p>Renal and urinary disorders</p> <p>Renal Impairment</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>		
<p>Musculoskeletal and connective tissue disorders</p> <p>Arthralgia</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Back Pain</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Joint Swelling</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Musculoskeletal Pain</p>	<p>0 / 7 (0.00%)</p> <p>0</p> <p>0 / 7 (0.00%)</p> <p>0</p> <p>1 / 7 (14.29%)</p> <p>2</p>		

<p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>		
<p>Pain in Extremity</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p>	<p>0 / 7 (0.00%)</p> <p>0</p>		
<p>Infections and infestations</p> <p>Acute Tonsillitis</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Cystitis</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Influenza</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Nasopharyngitis</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Oral Herpes</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Respiratory Tract Infection</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>occurrences (all)</p> <p>Rhinitis</p> <p>alternative assessment type: Systematic</p>	<p>0 / 7 (0.00%)</p> <p>0</p> <p>0 / 7 (0.00%)</p> <p>0</p> <p>0 / 7 (0.00%)</p> <p>0</p> <p>1 / 7 (14.29%)</p> <p>1</p> <p>1 / 7 (14.29%)</p> <p>1</p> <p>0 / 7 (0.00%)</p> <p>0</p>		



<p>subjects affected / exposed</p> <p>1 / 7 (14.29%)</p> <p>occurrences (all)</p> <p>1</p> <p>Sinusitis</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>1 / 7 (14.29%)</p> <p>occurrences (all)</p> <p>1</p> <p>Staphylococcal Infection</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p>			
<p>Metabolism and nutrition disorders</p> <p>Decreased Appetite</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>1 / 7 (14.29%)</p> <p>occurrences (all)</p> <p>1</p> <p>Gout</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p> <p>Hyponatraemia</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>0 / 7 (0.00%)</p> <p>occurrences (all)</p> <p>0</p>			

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
17 May 2011	Amendment Version 2.0 addressed and/or corrected procedural issues only. It was written by CorImmun and finalized before any subjects were enrolled in the study.
28 July 2011	Amendment Version 3.0 was finalized by CorImmun before any subjects were randomized in the study and it addressed concerns raised by the Federal Institute for Drugs and Medical Devices (Bundesinstitut für Arzneimittel und Medizinprodukte, BfArM). At the request of BfArM, the protocol was amended to edit the exclusion criteria and to add cytokine analysis, additional laboratory analysis at 2 visits, and additional safety measures, including the management of allergic reactions.
28 June 2012	Amendment Version 4.0 was written by JRD to document the acquisition of CorImmun by Janssen-Cilag GmbH as of 27 June 2012. In addition to editorial changes for clarity, major changes to the protocol included the modification of the study design to a pilot study as well as a decrease in the sample size to up to 60 randomized subjects. These changes were implemented as the original study was unable to meet the study objectives even if enrollment were to have continued to the planned sample size of 160 evaluable subjects.
15 October 2012	Major changes in Amendment Version 5.0 included the unblinding of the sponsor (CorImmun delegated this responsibility to JRD) as well as the discontinuation of further enrollment. These changes were introduced to give Janssen Research & Development LLC the opportunity to facilitate the planning of future studies by allowing for the proactive incorporation of any information obtained from this study. In addition, the follow-up visit 12-months after the treatment period was deleted and a requirement for cardiac monitoring (eg, telemetry) beginning a minimum of 15 minutes before the start of dosing to a minimum of 1 hour after dosing was added.

Notes:

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### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported