



## Clinical trial results:

### Safety of Abatacept in patients with interstitial lung disease and common variable immunodeficiency (CVID) and related disease

#### Summary

EudraCT number	2015-002491-24
Trial protocol	DE
Global end of trial date	26 September 2018

#### Results information

Result version number	v1 (current)
This version publication date	23 February 2020
First version publication date	23 February 2020

#### Trial information

##### Trial identification

Sponsor protocol code	BMS-IM101-563
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##### Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	-
WHO universal trial number (UTN)	-
Other trial identifiers	DRKS: DRKS00008783

Notes:

#### Sponsors

Sponsor organisation name	Medical Center - University of Freiburg
Sponsor organisation address	Hugstetter Str. 55, Freiburg, Germany, 79106
Public contact	Clinical Trials unit, Medical Center - University of Freiburg, +49 0761270-74040, sabine.schneider-fuchs@uniklinik-freiburg.de
Scientific contact	Clinical Trials unit, Medical Center - University of Freiburg, +49 0761270-74040, sabine.schneider-fuchs@uniklinik-freiburg.de

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:

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**Results analysis stage**

Analysis stage	Final
Date of interim/final analysis	26 September 2018
Is this the analysis of the primary completion data?	Yes
Primary completion date	26 September 2018
Global end of trial reached?	Yes
Global end of trial date	26 September 2018
Was the trial ended prematurely?	No

Notes:

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**General information about the trial**

Main objective of the trial:

To assess the safety of Abatacept for interstitial lung disease in patients with CVID and related disorders

Protection of trial subjects:

All AEs, no matter how intense, were followed up by the investigator in accordance with good clinical practice until resolved or judged no longer clinically relevant, or in case of a chronic condition, until it was fully characterized.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	01 May 2016
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

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**Population of trial subjects****Subjects enrolled per country**

Country: Number of subjects enrolled	Germany: 10
Worldwide total number of subjects	10
EEA total number of subjects	10

Notes:

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**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)	10
From 65 to 84 years	0
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details: -

### Pre-assignment

Screening details:

Between August 2016 and August 2017 10 patients were screened to take part in this study. All 10 patients were found eligible to take part and were enrolled in the trial.

### Period 1

Period 1 title	overall trial (overall period)
Is this the baseline period?	Yes
Allocation method	Not applicable
Blinding used	Not blinded

### Arms

Arm title	Abatacept
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Arm description:

All patients were treated with a weekly dose of 125mg Abatacept s.c. for a period of 12 months.

Arm type	Experimental
Investigational medicinal product name	Abatacept
Investigational medicinal product code	
Other name	ORENCIA®
Pharmaceutical forms	Solution for injection in pre-filled syringe
Routes of administration	Subcutaneous use

Dosage and administration details:

Abatacept solution for subcutaneous injection was supplied as a single-dose, ready-to-use, prefilled glass syringe with a passive needle safety guard. The prefilled syringe provided 125 mg of Abatacept in 1 ml. 125mg Abatacept was administered once weekly by subcutaneous injection.

Number of subjects in period 1	Abatacept
Started	10
Completed	8
Not completed	2
Consent withdrawn by subject	1
Adverse event, non-fatal	1

## Baseline characteristics

### Reporting groups

Reporting group title	overall trial
Reporting group description: -	

Reporting group values	overall trial	Total	
Number of subjects	10	10	
Age categorical			
Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	10	10	
From 65-84 years	0	0	
85 years and over	0	0	
Age continuous			
Units: years			
arithmetic mean	45		
standard deviation	± 13	-	
Gender categorical			
Units: Subjects			
Female	5	5	
Male	5	5	

### Subject analysis sets

Subject analysis set title	Per protocol population
Subject analysis set type	Per protocol

Subject analysis set description:

The 'per protocol population' includes data from the 8 patients who completed the full 12-month treatment period (excludes 2 patients who terminated the trial prematurely).

Subject analysis set title	Safety population
Subject analysis set type	Safety analysis

Subject analysis set description:

The safety population includes all enrolled patients.

Reporting group values	Per protocol population	Safety population	
Number of subjects	8	10	
Age categorical			
Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	

Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	8	10	
From 65-84 years	0	0	
85 years and over	0	0	
Age continuous			
Units: years			
arithmetic mean	42	45	
standard deviation	± 12	± 13	
Gender categorical			
Units: Subjects			
Female	4	5	
Male	4	5	

## End points

### End points reporting groups

Reporting group title	Abatacept
Reporting group description: All patients were treated with a weekly dose of 125mg Abatacept s.c. for a period of 12 months.	
Subject analysis set title	Per protocol population
Subject analysis set type	Per protocol
Subject analysis set description: The 'per protocol population' includes data from the 8 patients who completed the full 12-month treatment period (excludes 2 patients who terminated the trial prematurely).	
Subject analysis set title	Safety population
Subject analysis set type	Safety analysis
Subject analysis set description: The safety population includes all enrolled patients.	

### Primary: adverse events

End point title	adverse events <sup>[1]</sup>
End point description: Number and type of severe infections under treatment. And number, type and severity of all other (serious) adverse events ((S)AE) in relation to study drug.	
End point type	Primary
End point timeframe: From screening until end of follow-up.	

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: Due to the number of events and the design of the study, no statistical analyses of adverse events were performed.

End point values	Safety population			
Subject group type	Subject analysis set			
Number of subjects analysed	10			
Units: number				
SAEs	6			
SAEs - related to treatment	2			
total AEs	50			
total AEs - related to treatment	9			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Lung function - DLCOc/SB

End point title	Lung function - DLCOc/SB
End point description: Primary efficacy endpoint was the change in lung function parameter DLCOc/SB [% predicted]. The mean fold-change of DLCOc/SB from baseline to final visit (month 12) is reported here.	
End point type	Secondary

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End point timeframe:

12-month treatment period

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<b>End point values</b>	Per protocol population			
Subject group type	Subject analysis set			
Number of subjects analysed	8			
Units: fold-change				
arithmetic mean (standard deviation)	1.10 ( $\pm$ 0.12)			

### Statistical analyses

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No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

AEs were documented from screening until end of follow-up.

Assessment type	Systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	21
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### Reporting groups

Reporting group title	Abatacept
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Reporting group description:

All patients were treated with a weekly dose of 125mg Abatacept s.c. for a period of 12 months.

Serious adverse events	Abatacept		
Total subjects affected by serious adverse events			
subjects affected / exposed	4 / 10 (40.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Infections and infestations			
Bronchitis			
subjects affected / exposed	2 / 10 (20.00%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
Bronchopulmonary aspergillosis			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Gastroenteritis salmonella			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Pneumonia			
subjects affected / exposed	2 / 10 (20.00%)		
occurrences causally related to treatment / all	1 / 2		
deaths causally related to treatment / all	0 / 0		



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

<b>Non-serious adverse events</b>	Abatacept		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	10 / 10 (100.00%)		
Investigations			
Hepatic enzyme increased			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences (all)	1		
Interleukin-2 receptor increased			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences (all)	1		
Injury, poisoning and procedural complications			
Contusion			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences (all)	1		
Cardiac disorders			
Arrhythmia			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences (all)	1		
Nervous system disorders			
Headache			
subjects affected / exposed	2 / 10 (20.00%)		
occurrences (all)	2		
Sciatica			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences (all)	1		
Somnolence			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences (all)	1		
General disorders and administration site conditions			
Application site pain			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences (all)	1		
Impaired healing			

subjects affected / exposed occurrences (all)	1 / 10 (10.00%) 1		
Eye disorders Photophobia subjects affected / exposed occurrences (all)	1 / 10 (10.00%) 1		
Gastrointestinal disorders Diarrhoea subjects affected / exposed occurrences (all)  Toothache subjects affected / exposed occurrences (all)	2 / 10 (20.00%) 2  1 / 10 (10.00%) 1		
Respiratory, thoracic and mediastinal disorders Epistaxis subjects affected / exposed occurrences (all)	1 / 10 (10.00%) 1		
Hepatobiliary disorders Hepatitis subjects affected / exposed occurrences (all)	1 / 10 (10.00%) 1		
Skin and subcutaneous tissue disorders Acne subjects affected / exposed occurrences (all)  Eczema subjects affected / exposed occurrences (all)  Skin haemorrhage subjects affected / exposed occurrences (all)  Hyperhidrosis subjects affected / exposed occurrences (all)  Rash	1 / 10 (10.00%) 1  1 / 10 (10.00%) 1  1 / 10 (10.00%) 1  1 / 10 (10.00%) 1		

subjects affected / exposed occurrences (all)	1 / 10 (10.00%) 1		
Musculoskeletal and connective tissue disorders			
Bursitis			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences (all)	1		
Back pain			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences (all)	1		
Infections and infestations			
Abscess jaw			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences (all)	1		
Diarrhoea infectious			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences (all)	1		
Influenza			
subjects affected / exposed	2 / 10 (20.00%)		
occurrences (all)	2		
Oral herpes			
subjects affected / exposed	2 / 10 (20.00%)		
occurrences (all)	2		
Rhinitis			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences (all)	1		
Salmonellosis			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences (all)	1		
Upper respiratory tract infection			
subjects affected / exposed	6 / 10 (60.00%)		
occurrences (all)	12		
Urinary tract infection			
subjects affected / exposed	1 / 10 (10.00%)		
occurrences (all)	1		



## **More information**

### **Substantial protocol amendments (globally)**

Were there any global substantial amendments to the protocol? No

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### **Interruptions (globally)**

Were there any global interruptions to the trial? No

### **Limitations and caveats**

None reported