



## Clinical trial results:

### **A Multicentre, Randomized, Double-blind, Parallel Group, Placebo-controlled, Phase III Efficacy and Safety Study of Benralizumab (MEDI-563) Added to Medium-dose Inhaled Corticosteroid Plus Long-acting 2 Agonist in Patients with Uncontrolled Asthma (PAMPERO)**

#### **Summary**

EudraCT number	2013-002352-32
Trial protocol	DE PL SE BG
Global end of trial date	22 July 2014

#### **Results information**

Result version number	v1 (current)
This version publication date	01 February 2017
First version publication date	06 August 2015

#### **Trial information**

##### **Trial identification**

Sponsor protocol code	D3250C00016
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##### **Additional study identifiers**

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

Notes:

##### **Sponsors**

Sponsor organisation name	AZ-PPD
Sponsor organisation address	Granta Park, Great Ablington, Cambridge, United Kingdom, CB21 6GQ
Public contact	Peggy Snowden, Astrazeneca, 1 3013980466, Peggy.snoden@astrazeneca.com
Scientific contact	Steven Fox, AZ-PPD, 44 1480716682, steven.fox@ppdi.com
Sponsor organisation name	Astrazeneca
Sponsor organisation address	1 MedImmune Way, Gaithersburg, MD, United States, 20878
Public contact	Peggy Snowden, Astrazeneca, 1 3013980466, peggy.snowden@astrazeneca.com
Scientific contact	Curt Johnson, Astrazeneca, 1 3013980466, Curt.johnson@astrazeneca.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	12 June 2015
Is this the analysis of the primary completion data?	Yes
Primary completion date	22 July 2014
Global end of trial reached?	Yes
Global end of trial date	22 July 2014
Was the trial ended prematurely?	Yes

Notes:

## General information about the trial

Main objective of the trial:

To evaluate the effect of two dosing regimens of benralizumab on asthma exacerbations in adult patients with uncontrolled asthma.

Protection of trial subjects:

This study was performed in accordance with the ethical principles that have their origin in the Declaration of Helsinki and that are consistent with International Conference on Harmonisation/Good Clinical Practice (GCP) and applicable regulatory requirements and the AstraZeneca policy on Bioethics and Human Biological Samples. The investigator at each center ensured that the patient, parent, guardian, or legal representative (as appropriate) was given full and adequate oral and written information about the nature, purpose, possible risk, and benefit of the study. The patient, parent, guardian, or legal representative (as appropriate) were notified that they were free to discontinue from the study at any time and were given the opportunity to ask questions and allowed time to consider the information provided.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	20 November 2013
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	United States: 13
Worldwide total number of subjects	13
EEA total number of subjects	0

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	0

months)	
Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	11
From 65 to 84 years	2
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details:

The study was stopped with 13 patients randomised

### Pre-assignment

Screening details:

13 patients were enrolled and 13 were randomised

### Pre-assignment period milestones

Number of subjects started	130 <sup>[1]</sup>
Number of subjects completed	13

### Pre-assignment subject non-completion reasons

Reason: Number of subjects	Sponsor decision to terminate study: 117
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Notes:

[1] - The number of subjects reported to have started the pre-assignment period are not the same as the worldwide number enrolled in the trial. It is expected that these numbers will be the same.

Justification: The number of subjects enrolled is smaller because the study was terminated.

### Period 1

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

### Arms

Are arms mutually exclusive?	Yes
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<b>Arm title</b>	Benra 30 mg q.4 weeks
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Arm description:

Fixed 30 mg dose of benralizumab (every 4 weeks)

Arm type	Experimental
Investigational medicinal product name	Benralizumab
Investigational medicinal product code	MEDI-563
Other name	aa
Pharmaceutical forms	Concentrate and solvent for solution for injection/infusion
Routes of administration	Subcutaneous use

Dosage and administration details:

30 mg q.4

<b>Arm title</b>	Benra 30 mg-Placebo q.8 weeks
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Arm description:

Fixed 30 mg dose of belralizumab (every 4 weeks for the first 3 doses and then every 8 weeks thereafter)

Arm type	Experimental
Investigational medicinal product name	Benralizumab
Investigational medicinal product code	MEDI-563
Other name	aa
Pharmaceutical forms	Concentrate and solvent for solution for infusion
Routes of administration	Subcutaneous use

Dosage and administration details:

30 mg q.8

<b>Arm title</b>	Placebo
Arm description:	
A (Dummy) injection	
Arm type	Placebo
Investigational medicinal product name	placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Concentrate for solution for injection/infusion
Routes of administration	Subcutaneous use
Dosage and administration details:	
30 mg	

<b>Number of subjects in period 1</b>	Benra 30 mg q.4 weeks	Benra 30 mg-Placebo q.8 weeks	Placebo
Started	3	5	5
Completed	3	5	5

## Baseline characteristics

### Reporting groups

Reporting group title	Benra 30 mg q.4 weeks
Reporting group description: Fixed 30 mg dose of benralizumab (every 4 weeks)	
Reporting group title	Benra 30 mg-Placebo q.8 weeks
Reporting group description: Fixed 30 mg dose of belralizumab (every 4 weeks for the first 3 doses and then every 8 weeks thereafter)	
Reporting group title	Placebo
Reporting group description: A (Dummy) injection	

Reporting group values	Benra 30 mg q.4 weeks	Benra 30 mg-Placebo q.8 weeks	Placebo
Number of subjects	3	5	5
Age categorical Units: Subjects			
In utero	0	0	0
Preterm newborn infants (gestational age < 37 wks)	0	0	0
Newborns (0-27 days)	0	0	0
Infants and toddlers (28 days-23 months)	0	0	0
Children (2-11 years)	0	0	0
Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	2	4	5
From 65-84 years	1	1	0
85 years and over	0	0	0
Age Continuous   Units: years			
arithmetic mean	58.7	57.8	49.6
standard deviation	± 15.7	± 6.38	± 6.35
Gender, Male/Female Units: Male/Female			
Female	2	4	5
Male	1	1	0

Reporting group values	Total		
Number of subjects	13		
Age categorical Units: Subjects			
In utero	0		
Preterm newborn infants (gestational age < 37 wks)	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)	11		
From 65-84 years	2		
85 years and over	0		
Age Continuous   Units: years arithmetic mean standard deviation	-		
Gender, Male/Female Units: Male/Female			
Female	11		
Male	2		

## End points

### End points reporting groups

Reporting group title	Benra 30 mg q.4 weeks
Reporting group description: Fixed 30 mg dose of benralizumab (every 4 weeks)	
Reporting group title	Benra 30 mg-Placebo q.8 weeks
Reporting group description: Fixed 30 mg dose of belralizumab (every 4 weeks for the first 3 doses and then every 8 weeks thereafter)	
Reporting group title	Placebo
Reporting group description: A (Dummy) injection	

### Primary: Asthma exacerbations over 48 weeks treatment

End point title	Asthma exacerbations over 48 weeks treatment <sup>[1]</sup>
End point description:	
End point type	Primary
End point timeframe: 48 weeks treatment	
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: Owing to the insufficient sample size no statistical analyses were performed .	

End point values	Benra 30 mg q.4 weeks	Benra 30 mg-Placebo q.8 weeks	Placebo	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	3	5	5	
Units: Number of events	0	0	0	

### Statistical analyses

No statistical analyses for this end point



## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

57 days was the maximum duration experienced by a patient, since the study was stopped early.

Assessment type	Systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	17.0
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### Reporting groups

Reporting group title	Benra 30 mg q.4 weeks
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Reporting group description:

Fixed 30 mg dose of benralizumab (every 4 weeks)

Reporting group title	Placebo
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Reporting group description:

A (Dummy) injection

Reporting group title	Benra 30 mg-Placebo q.8 weeks
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Reporting group description:

Fixed 30 mg dose of belralizumab (every 4 weeks for the first 3 doses and then every 8 weeks thereafter)

Serious adverse events	Benra 30 mg q.4 weeks	Placebo	Benra 30 mg-Placebo q.8 weeks
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 3 (0.00%)	0 / 5 (0.00%)	0 / 5 (0.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0

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

Non-serious adverse events	Benra 30 mg q.4 weeks	Placebo	Benra 30 mg-Placebo q.8 weeks
Total subjects affected by non-serious adverse events			
subjects affected / exposed	0 / 3 (0.00%)	1 / 5 (20.00%)	0 / 5 (0.00%)
Respiratory, thoracic and mediastinal disorders			
Prolonged expiration			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 3 (0.00%)	1 / 5 (20.00%)	0 / 5 (0.00%)
occurrences (all)	0	1	0



## 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? Yes

Date	Interruption	Restart date
22 July 2014	Sponsor decision to terminate	-

Notes:

### Limitations and caveats

None reported