Clinical trial results:
DUAL HOMING MECHANISMS OF EOSINOPHILS TO THE SPUTUM; ONLY ONE OF WHICH IS SENSITIVE FOR MEPOLIZUMAB

Summary

EudraCT number	2016-002014-52
Trial protocol	NL
Global end of trial date	10 January 2020

Results information

Result version number	v1 (current)
This version publication date	28 June 2021
First version publication date	28 June 2021
Summary attachment (see zip file)	abstract study FOOTSTEP (abstract FOOTSTEP.docx)

Trial information

Trial identification

Sponsor protocol code	FOOTSTEP

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	University Medical Center Utrecht
Sponsor organisation address	Heidelberglaan 100, Utrecht, Netherlands, 3584CX
Public contact	Clinical Trials information, University Medical Center Utrecht, l.koenderman@umcutrecht.nl
Scientific contact	Clinical Trials information, University Medical Center Utrecht, +31 887557255, l.koenderman@umcutrecht.nl

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	Interim
Date of interim/final analysis	23 April 2021
Is this the analysis of the primary completion data?	Yes
Primary completion date	10 January 2020
Global end of trial reached?	Yes
Global end of trial date	10 January 2020
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

Understanding of the mechanisms underlying eosinophilic inflammation in the lung

Protection of trial subjects:

There were no specific reasons for protection of trial subjects. It was a low-risk trial.

Background therapy:

The medication score (IQR) was 4 on the 5-point ordinal scale based on guidelines of the Britisch Thoracic Society.

Evidence for comparator:

Randomized placebo controlled trial with the placebo as a comparitor

Actual start date of recruitment	01 January 2017
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	Netherlands: 20
Worldwide total number of subjects	20
EEA total number of subjects	20

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)	19
From 65 to 84 years	1
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

The patients were recruited in the out-clinic of the University Medical Center Utrecht and the HAGA hospital in The Hague

Pre-assignment

Screening details:

Potential patients were screened for the inclusion criteria by treating physicians at the out clinic. No specific details were requested.

Pre-assignment period milestones

Number of subjects started	20
Number of subjects completed	20

Period 1

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

Blinding implementation details:

Blinding was done by hospital pharmacist.

Arms

Are arms mutually exclusive?	Yes
Arm title	Mepolizumab

Arm description:

treatment with Mepolizumab (100 mg) once every 4 weeks

Arm type	Experimental
Investigational medicinal product name	Mepolizumab
Investigational medicinal product code	
Other name	NUCALA
Pharmaceutical forms	Solution for injection in pre-filled injector
Routes of administration	Subcutaneous use

Dosage and administration details:

100 mg every 4 weeks by subcutaneous injection

Arm title	Placebo

Arm description:

Treatment with placebo

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

Dosage and administration details:

Placebo

Number of subjects in period 1	Mepolizumab	Placebo
Started	10	10
Completed	10	10

Baseline characteristics

Reporting groups	
Reporting group title	Mepolizumab
Reporting group description:	
treatment with Mepolizumab (100 mg) once every 4 weeks	
Reporting group title	Placebo
Reporting group description:	
Treatment with placebo	

Reporting group values	Mepolizumab	Placebo	Total
Number of subjects	10	10	20
Age categorical			
Population: 18-85 years			
Units: Subjects			
Adults (18-85years)	10	10	20
Age continuous			
Units: years			
median	57	51	
inter-quartile range (Q1-Q3)	46 to 62	33 to 65	-
Gender categorical			
Units: Subjects			
Female	5	6	11
Male	5	4	9

Subject analysis sets	
Subject analysis set title	Eosinophilic asthmatics
Subject analysis set type	Full analysis
Subject analysis set description:	
Patients suffering from T2-eosinophilic asthma	

Reporting group values	Eosinophilic asthmatics		
Number of subjects	20		
Age categorical			
Population: 18-85 years			
Units: Subjects			
Adults (18-85years)	20		
Age continuous			
Units: years			
median	53		
inter-quartile range (Q1-Q3)	44 to 63		
Gender categorical			
Units: Subjects			
Female	11		
Male	9		

End points

End points reporting groups

Reporting group title	Mepolizumab
Reporting group description:	
treatment with Mepolizumab (100 mg) once every 4 weeks	
Reporting group title	Placebo
Reporting group description:	
Treatment with placebo	
Subject analysis set title	Eosinophilic asthmatics
Subject analysis set type	Full analysis
Subject analysis set description:	
Patients suffering from T2-eosinophilic asthma	

Primary: change in eosinophil kinetics in blood and sputum

End point title	change in eosinophil kinetics in blood and sputum
End point description:	
The effect of mepolizumab on deuterium enrichment of DNA of eosinophils in blood and sputum was measured	
End point type	Primary
End point timeframe:	
84 days	

End point values	Mepolizumab	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	10	10		
Units: enrichment of deuterium in DNA				
number (not applicable)	10	10		

Statistical analyses

Statistical analysis title	Delay in blood and sputum retention time
Statistical analysis description:	
Linear regression	
Comparison groups	Mepolizumab v Placebo
Number of subjects included in analysis	20
Analysis specification	Post-hoc
Analysis type	equivalence
P-value	< 0.01
Method	Regression, Linear

Adverse events

Adverse events information	
Timeframe for reporting adverse events: 84 days between start and end of investigation	
Assessment type	Systematic

Dictionary used	
Dictionary name	UMCU.RvB.SF051_AE
Dictionary version	1

Reporting groups	
Reporting group title	patients in FOOTSTEP study

Reporting group description: -

Serious adverse events	patients in FOOTSTEP study		
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 20 (5.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Skin and subcutaneous tissue disorders			
Cellulitis	Additional description: Treated with antibiotics. After study it turns out that patient was in the placebo group		
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 20 (5.00%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 1 %

Non-serious adverse events	patients in FOOTSTEP study		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	1 / 20 (5.00%)		
General disorders and administration site conditions			
aspecific complaints	Additional description: Aspecific complaints after Mepolizumab/placebo administration		
subjects affected / exposed	1 / 20 (5.00%)		
occurrences (all)	2		
Eye disorders			

slight decrease in visual acuity	Additional description: A slight decrease of visual acuity 1 hour after administation of the drug		
subjects affected / exposed	1 / 20 (5.00%)		
occurrences (all)	1		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported