Clinical trial results:
Randomized, Double-Blind Trial of MP29-02 Nasal Spray Compared to Placebo, Astelin Nasal Spray, and Fluticasone Propionate Nasal Spray in the Treatment of Subjects with Seasonal Allergic Rhinitis

Summary

EudraCT number	2011-001314-34
Trial protocol	Outside EU/EEA
Global end of trial date	19 February 2008

Results information

Result version number	v1 (current)
This version publication date	29 July 2016
First version publication date	29 July 2016

Trial information

Trial identification

Sponsor protocol code	MP4001

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT00660517
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Meda Pharmaceutical
Sponsor organisation address	265 Davidson Avenue, Suite 300, Somerset, United States, NJ 08873-4120
Public contact	Group leader study manager, MEDA Pharma GmbH & Co. KG, +49 6172 88801, 42b@medapharma.de
Scientific contact	Head of Corporate Clinical Affairs, MEDA Pharma GmbH & Co. KG, +49 6172 88801, 42b@medapharma.de

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	Yes
EMA paediatric investigation plan number(s)	EMEA-000990-PIP02-10
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	Yes

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	27 April 2010
Is this the analysis of the primary completion data?	Yes
Primary completion date	19 February 2008
Global end of trial reached?	Yes
Global end of trial date	19 February 2008
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The objective of this clinical trial was to compare the efficacy and safety of the combination of azelastine hydrochloride nasal spray and fluticasone propionate nasal spray (MP29-02) to placebo and each product alone.

Protection of trial subjects:

Safety was assessed by incidence, type and severity of adverse events, and by clinical assessments including a focused nasal examination and vital signs measurements. For female subjects of child-bearing potential, a negative urine pregnancy test was required for study participation; the urine pregnancy test was repeated at the end of the study.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	20 December 2007
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: 610
Worldwide total number of subjects	610
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 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	43
Adults (18-64 years)	539
From 65 to 84 years	28
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

Male and female subjects 12 years of age and older with a minimum 2-year history of SAR with a positive skin test to Texas Mountain Cedar pollen during the previous year, who met all study inclusion/exclusion criteria were eligible for randomization.

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, Carer, Assessor

Arms

Are arms mutually exclusive?	Yes
Arm title	MP29-02

Arm description: -

Arm type	Experimental
Investigational medicinal product name	Azelastine hydrochloride and fluticasone propionate
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Nasal spray
Routes of administration	Nasal use

Dosage and administration details:

Total daily dose:548 mcg azelastine/ 200 mcg fluticasone;
1 spray per nostril twice daily, doses were separated by approximately 12 hours;
2-week study

Arm title	Azelastine

Arm description: -

Arm type	Active comparator
Investigational medicinal product name	Azelastine hydrochloride
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Nasal spray
Routes of administration	Nasal use

Dosage and administration details:

Total daily dose: 548 mcg azelastine;
1 spray per nostril twice daily;
2-week study

Arm title	Fluticasone

Arm description: -

Arm type	Active comparator
Investigational medicinal product name	Fluticasone propionate
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Nasal spray
Routes of administration	Nasal use

Dosage and administration details:

Total daily dose; 200 mcg fluticasone;
1 spray per nostril twice daily;
2-week study

Arm title	Placebo
Arm description: -	
Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Nasal spray
Routes of administration	Nasal use

Dosage and administration details:

Vehicle only (same formulation as MP29-02 used with the exception of the active ingredients);
1 spray per nostril twice daily;
2-week study;

Number of subjects in period 1	MP29-02	Azelastine	Fluticasone
Started	153	153	153
Completed	145	144	144
Not completed	8	9	9
Consent withdrawn by subject	1	1	2
Treatment failure	-	1	1
Adverse event, non-fatal	1	3	1
Other	3	2	-
Non-compliance	3	2	3
Lost to follow-up	-	-	2

Number of subjects in period 1	Placebo
Started	151
Completed	144
Not completed	7
Consent withdrawn by subject	2
Treatment failure	-
Adverse event, non-fatal	1
Other	3
Non-compliance	1
Lost to follow-up	-

Baseline characteristics

Reporting groups	
Reporting group title	MP29-02
Reporting group description: -	
Reporting group title	Azelastine
Reporting group description: -	
Reporting group title	Fluticasone
Reporting group description: -	
Reporting group title	Placebo
Reporting group description: -	

Reporting group values	MP29-02	Azelastine	Fluticasone
Number of subjects	153	153	153
Age categorical Units: Subjects			
Adolescents (12-17 years)	9	11	10
Adults (18-64 years)	136	132	137
65 or older	8	9	4
Not reported / not in ITT	0	1	2
Gender categorical Units: Subjects			
Female	97	97	100
Male	56	55	51
Not reported / not in ITT	0	1	2

Reporting group values	Placebo	Total	
Number of subjects	151	610	
Age categorical Units: Subjects			
Adolescents (12-17 years)	13	43	
Adults (18-64 years)	131	536	
65 or older	7	28	
Not reported / not in ITT	0	3	
Gender categorical Units: Subjects			
Female	102	396	
Male	49	211	
Not reported / not in ITT	0	3	

End points

End points reporting groups	
Reporting group title	MP29-02
Reporting group description: -	
Reporting group title	Azelastine
Reporting group description: -	
Reporting group title	Fluticasone
Reporting group description: -	
Reporting group title	Placebo
Reporting group description: -	

Primary: Overall change from Baseline in combined (AM + PM) reflective Total Nasal Symptom Score (TNSS) over study period of 14 days.	
End point title	Overall change from Baseline in combined (AM + PM) reflective Total Nasal Symptom Score (TNSS) over study period of 14 days.
End point description:	
End point type	Primary
End point timeframe:	
Scores from Day 1 PM to Day 14 AM.	

End point values	MP29-02	Azelastine	Fluticasone	Placebo
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	153	152[1]	151[2]	150[3]
Units: difference in scores				
least squares mean (standard deviation)	-5.31 (± 5.084)	-3.25 (± 4.155)	-3.84 (± 4.762)	-2.2 (± 4.163)

Notes:

[1] - 1 subject not included in the ITT population.

[2] - 2 subjects not included in the ITT population.

[3] - 1 subject from the ITT population without available data.

Statistical analyses

Statistical analysis title	Comparison MP29-02 vs Placebo
Comparison groups	MP29-02 v Placebo
Number of subjects included in analysis	303
Analysis specification	Pre-specified
Analysis type	other
P-value	< 0.001 [4]
Method	ANCOVA

Notes:

[4] - Pre-specified with multiplicity adjustement (gatekeeping).

Statistical analysis title	Comparison MP29-02 vs Azelastine
Comparison groups	MP29-02 v Azelastine
Number of subjects included in analysis	305
Analysis specification	Pre-specified
Analysis type	other
P-value	< 0.001 [5]
Method	ANCOVA

Notes:

[5] - Pre-specified with multiplicity adjustement (gatekeeping).

Statistical analysis title	Comparison MP29-02 vs Fluticasone
Comparison groups	MP29-02 v Fluticasone
Number of subjects included in analysis	304
Analysis specification	Pre-specified
Analysis type	other
P-value	= 0.003 [6]
Method	ANCOVA

Notes:

[6] - Pre-specified with multiplicity adjustement (gatekeeping).

Adverse events

Adverse events information

Timeframe for reporting adverse events:

The Treatment Period included three clinic visits: (1) Randomization at Day 1, (2) Day 7 interim visit, and (3) MP4001 MP29-02 Nasal Spray Final Clinical Study Report Meda Pharmaceuticals Day 14 Final Study Visit or Early Termination Visit.

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	11.0

Reporting groups

Reporting group title	MP29-02
Reporting group description: -	
Reporting group title	Azelastine
Reporting group description: -	
Reporting group title	Fluticasone
Reporting group description: -	
Reporting group title	Placebo
Reporting group description: -	

Serious adverse events	MP29-02	Azelastine	Fluticasone
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 153 (0.00%)	0 / 152 (0.00%)	0 / 153 (0.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0

Serious adverse events	Placebo		
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 151 (0.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		

Frequency threshold for reporting non-serious adverse events: 3 %

Non-serious adverse events	MP29-02	Azelastine	Fluticasone
Total subjects affected by non-serious adverse events			
subjects affected / exposed	29 / 153 (18.95%)	23 / 152 (15.13%)	22 / 153 (14.38%)

Nervous system disorders			
Dysgeusia			
subjects affected / exposed	11 / 153 (7.19%)	3 / 152 (1.97%)	0 / 153 (0.00%)
occurrences (all)	11	3	0
Headache			
subjects affected / exposed	4 / 153 (2.61%)	2 / 152 (1.32%)	6 / 153 (3.92%)
occurrences (all)	4	2	6
Respiratory, thoracic and mediastinal disorders			
Epistaxis			
subjects affected / exposed	6 / 153 (3.92%)	4 / 152 (2.63%)	6 / 153 (3.92%)
occurrences (all)	6	4	6

Non-serious adverse events	Placebo		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	18 / 151 (11.92%)		
Nervous system disorders			
Dysgeusia			
subjects affected / exposed	0 / 151 (0.00%)		
occurrences (all)	0		
Headache			
subjects affected / exposed	2 / 151 (1.32%)		
occurrences (all)	2		
Respiratory, thoracic and mediastinal disorders			
Epistaxis			
subjects affected / exposed	5 / 151 (3.31%)		
occurrences (all)	5		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
20 November 2007	prior to clinical start protocol was amended and submitted to the Independent Review Board to implement changes to the methodology, more specific details on procedures, and some administrative modifications.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported