Clinical trial results:
A Six-week Evaluator-Blind, Randomized, Active-Controlled Evaluation of the Effects of Three Doses of Mometasone Furoate/Formoterol Fumarate (MF/F) Metered Dose Inhaler (MDI), Montelukast, and Beclomethasone Dipropionate (BDP HFA) on the HPA Axis in Asthmatic Children 5 to 11 Years of Age (Protocol No. P05574/PN158)

Summary

EudraCT number	2009-010108-27
Trial protocol	DE DK
Global end of trial date	13 September 2013

Results information

Result version number	v1 (current)
This version publication date	09 September 2020
First version publication date	09 September 2020
Summary attachment (see zip file)	Cancelled/ Withdrawn Memo (MK-0887A-158_P05574_2020-08-20_EudraCT_Cancelled_Withdrawn Memo for EU CTR.docx)

Trial information

Trial identification

Sponsor protocol code	P05574

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01615874
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Merck Sharp & Dohme Corp.
Sponsor organisation address	2000 Galloping Hill Road, Kenilworth, NJ, United States,
Public contact	Clinical Trials Disclosure, Merck Sharp & Dohme Corp., ClinicalTrialsDisclosure@merck.com
Scientific contact	Clinical Trials Disclosure, Merck Sharp & Dohme Corp., ClinicalTrialsDisclosure@merck.com

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	Yes
EMA paediatric investigation plan number(s)	EMEA-999999-PIP99-99
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	13 September 2013
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	13 September 2013
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

The purpose of this study is to assess the effect of one of five possible study medications used in the treatment of asthma on blood plasma cortisol levels in children aged 5-11 years with persistent asthma.

Protection of trial subjects:

N/A

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	10 January 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	Argentina: 99999
Country: Number of subjects enrolled	Brazil: 99999
Country: Number of subjects enrolled	Bulgaria: 99999
Country: Number of subjects enrolled	Canada: 99999
Country: Number of subjects enrolled	Chile: 99999
Worldwide total number of subjects	499995
EEA total number of subjects	99999

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)	499995
Adolescents (12-17 years)	0

Adults (18-64 years)	0
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Note: This trial was withdrawn. No participants were ever enrolled in it.

Pre-assignment

Screening details:

N/A

Period 1

Period 1 title	Overall study (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Single blind
Roles blinded	Investigator[1]

Arms

Are arms mutually exclusive?	Yes
Arm title	MF/F MDI 50/10 mcg BID

Arm description: -

Arm type	Experimental
Investigational medicinal product name	MF/F Metered Dose Inhaler (MDI) 25/5 mcg
Investigational medicinal product code	
Other name	SCH 418131 MK-0887A DULERA®
Pharmaceutical forms	Inhalation vapour
Routes of administration	Inhalation use

Dosage and administration details:

MF/F MDI 25/5 mcg, 2 inhalations twice a day (BID)

Investigational medicinal product name	Rescue medication: short-acting beta-2 agonist (SABA) MDI
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Inhalation vapour
Routes of administration	Inhalation use

Dosage and administration details:

albuterol MDI 90 mcg OR or salbutamol HFA MDI 100 mcg for rescue medication, taken as directed

Investigational medicinal product name	Rescue medication: Prednisone/Prednisolone
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet, Oral solution, Oral drops, emulsion, Syrup
Routes of administration	Oral use

Dosage and administration details:

Prednisone/Prednisolone for rescue medication, taken as directed

Arm title	MF/F MDI 100/10 mcg BID

Arm description: -

Arm type	Experimental

Investigational medicinal product name	MF/F MDI 50/5 mcg
Investigational medicinal product code	
Other name	SCH 418131 MK-0887A DULERA®
Pharmaceutical forms	Inhalation vapour
Routes of administration	Inhalation use
Dosage and administration details: MF/F MDI 50/5 mcg, 2 inhalations BID	
Investigational medicinal product name	Rescue medication: short-acting beta-2 agonist (SABA) MDI
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Inhalation vapour
Routes of administration	Inhalation use
Dosage and administration details: albuterol MDI 90 mcg OR or salbutamol HFA MDI 100 mcg for rescue medication, taken as directed	
Investigational medicinal product name	Rescue medication: Prednisone/Prednisolone
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet, Oral solution, Oral drops, emulsion, Syrup
Routes of administration	Oral use
Dosage and administration details: Prednisone/Prednisolone for rescue medication, taken as directed	
Arm title	MF/F MDI 200/10 mcg BID
Arm description: -	
Arm type	Experimental
Investigational medicinal product name	MF/F MDI 100/5 mcg
Investigational medicinal product code	
Other name	SCH 418131 MK-0887A DULERA®
Pharmaceutical forms	Inhalation vapour
Routes of administration	Inhalation use
Dosage and administration details: MF/F MDI 100/5 mcg, 2 inhalations BID	
Investigational medicinal product name	Rescue medication: Prednisone/Prednisolone
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet, Oral solution, Oral drops, emulsion, Syrup
Routes of administration	Oral use
Dosage and administration details: Prednisone/Prednisolone for rescue medication, taken as directed	
Investigational medicinal product name	Rescue medication: short-acting beta-2 agonist (SABA) MDI
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Inhalation vapour
Routes of administration	Inhalation use
Dosage and administration details: albuterol MDI 90 mcg OR or salbutamol HFA MDI 100 mcg for rescue medication, taken as directed	
Arm title	BDP HFA 160 mcg BID
Arm description: -	
Arm type	Active comparator

Investigational medicinal product name	BDP hydrofluoroalkane (HFA) 80 mcg
Investigational medicinal product code	
Other name	BECONASE AQ® QVAR®
Pharmaceutical forms	Inhalation vapour
Routes of administration	Inhalation use

Dosage and administration details:

BDP HFA 80 mcg, 2 inhalations BID

Investigational medicinal product name	Rescue medication: Prednisone/Prednisolone
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet, Oral solution, Oral drops, emulsion, Syrup
Routes of administration	Oral use

Dosage and administration details:

Prednisone/Prednisolone for rescue medication, taken as directed

Investigational medicinal product name	Rescue medication: short-acting beta-2 agonist (SABA) MDI
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Inhalation vapour
Routes of administration	Inhalation use

Dosage and administration details:

albuterol MDI 90 mcg OR or salbutamol HFA MDI 100 mcg for rescue medication, taken as directed

Arm title	Montelukast 5 mg QD (4 mg QD for 5-year-olds)

Arm description: -

Arm type	Active comparator
Investigational medicinal product name	Montelukast tablets 5 mg (4 mg for children 5 years of age)
Investigational medicinal product code	
Other name	MK-0476 SINGULAIR®
Pharmaceutical forms	Chewable tablet
Routes of administration	Oral use

Dosage and administration details:

Montelukast chewable tablets 5 mg once daily (QD) for children 6-11 years of age

OR

Montelukast chewable tablets 4 mg QD for children 5 years of age

Investigational medicinal product name	Rescue medication: short-acting beta-2 agonist (SABA) MDI
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Inhalation vapour
Routes of administration	Inhalation use

Dosage and administration details:

albuterol MDI 90 mcg OR or salbutamol HFA MDI 100 mcg for rescue medication, taken as directed

Investigational medicinal product name	Rescue medication: Prednisone/Prednisolone
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet, Oral solution, Oral drops, emulsion, Syrup
Routes of administration	Oral use

Dosage and administration details:

Prednisone/Prednisolone for rescue medication, taken as directed

Notes:

[1] - The roles blinded appear inconsistent with a simple blinded trial.

Justification: Note: This was to be an investigator-blinded study. But this trial was withdrawn. No

participants were ever enrolled in it.

Number of subjects in period 1	MF/F MDI 50/10 mcg BID	MF/F MDI 100/10 mcg BID	MF/F MDI 200/10 mcg BID
Started	99999	99999	99999
Completed	99999	99999	99999

Number of subjects in period 1	BDP HFA 160 mcg BID	Montelukast 5 mg QD (4 mg QD for 5-year-olds)
Started	99999	99999
Completed	99999	99999

Baseline characteristics

Reporting groups	
Reporting group title	MF/F MDI 50/10 mcg BID
Reporting group description: -	
Reporting group title	MF/F MDI 100/10 mcg BID
Reporting group description: -	
Reporting group title	MF/F MDI 200/10 mcg BID
Reporting group description: -	
Reporting group title	BDP HFA 160 mcg BID
Reporting group description: -	
Reporting group title	Montelukast 5 mg QD (4 mg QD for 5-year-olds)
Reporting group description: -	

Reporting group values	MF/F MDI 50/10 mcg BID	MF/F MDI 100/10 mcg BID	MF/F MDI 200/10 mcg BID
Number of subjects	99999	99999	99999
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)	99999	99999	99999
Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	0	0	0
From 65-84 years	0	0	0
85 years and over	0	0	0
Age Continuous Units: years			
arithmetic mean	0	0	0
standard deviation	± 0	± 0	± 0
Gender Categorical Units: Subjects			
Female	99999	99999	99999
Male	0	0	0

Reporting group values	BDP HFA 160 mcg BID	Montelukast 5 mg QD (4 mg QD for 5-year-olds)	Total
Number of subjects	99999	99999	499995
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)	99999	99999	499995

Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	0	0	0
From 65-84 years	0	0	0
85 years and over	0	0	0
Age Continuous			
Units: years			
arithmetic mean	0	0	
standard deviation	± 0	± 0	-
Gender Categorical			
Units: Subjects			
Female	99999	99999	499995
Male	0	0	0

End points

End points reporting groups

Reporting group title	MF/F MDI 50/10 mcg BID
Reporting group description: -	
Reporting group title	MF/F MDI 100/10 mcg BID
Reporting group description: -	
Reporting group title	MF/F MDI 200/10 mcg BID
Reporting group description: -	
Reporting group title	BDP HFA 160 mcg BID
Reporting group description: -	
Reporting group title	Montelukast 5 mg QD (4 mg QD for 5-year-olds)
Reporting group description: -	

Primary: Change from Baseline in Plasma Cortisol Area Under the Curve (AUC) 0-24 hrs

End point title	Change from Baseline in Plasma Cortisol Area Under the Curve (AUC) 0-24 hrs[1]
End point description:	
End point type	Primary
End point timeframe:	
Baseline (Day 1) and Day 42	

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: Note: This trial was withdrawn. No participants were ever enrolled in it.

End point values	MF/F MDI 50/10 mcg BID	MF/F MDI 100/10 mcg BID	MF/F MDI 200/10 mcg BID	BDP HFA 160 mcg BID
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	0[2]	0[3]	0[4]	0[5]
Units: nM*hr				
geometric mean (geometric coefficient of variation)	()	()	()	()

Notes:

[2] - Note: This trial was withdrawn. No participants were ever enrolled in it.

[3] - Note: This trial was withdrawn. No participants were ever enrolled in it.

[4] - Note: This trial was withdrawn. No participants were ever enrolled in it.

[5] - Note: This trial was withdrawn. No participants were ever enrolled in it.

End point values	Montelukast 5 mg QD (4 mg QD for 5-year-olds)			
Subject group type	Reporting group			
Number of subjects analysed	0[6]			
Units: nM*hr				
geometric mean (geometric coefficient of variation)	()			

Notes:

[6] - Note: This trial was withdrawn. No participants were ever enrolled in it.

Statistical analyses

No statistical analyses for this end point

Secondary: Change from Baseline in Plasma Cortisol Trough Concentration (Ctrough)

End point title	Change from Baseline in Plasma Cortisol Trough Concentration (Ctrough)

End point description:

End point type	Secondary

End point timeframe:

Baseline (Day 1) and Day 42

End point values	MF/F MDI 50/10 mcg BID	MF/F MDI 100/10 mcg BID	MF/F MDI 200/10 mcg BID	BDP HFA 160 mcg BID
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	0[7]	0[8]	0[9]	0[10]
Units: ug/mL				
geometric mean (geometric coefficient of variation)	()	()	()	()

Notes:

[7] - Note: This trial was withdrawn. No participants were ever enrolled in it.

[8] - Note: This trial was withdrawn. No participants were ever enrolled in it.

[9] - Note: This trial was withdrawn. No participants were ever enrolled in it.

[10] - Note: This trial was withdrawn. No participants were ever enrolled in it.

End point values	Montelukast 5 mg QD (4 mg QD for 5-year-olds)			
Subject group type	Reporting group			
Number of subjects analysed	0[11]			
Units: ug/mL				
geometric mean (geometric coefficient of variation)	()			

Notes:

[11] - Note: This trial was withdrawn. No participants were ever enrolled in it.

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information[1]	
Timeframe for reporting adverse events: N/A	
Assessment type	Systematic

Dictionary used	
Dictionary name	MedDRA
Dictionary version	N/A

Reporting groups	
Reporting group title	MF/F MDI 50/10 mcg BID
Reporting group description: -	
Reporting group title	MF/F MDI 100/10 mcg BID
Reporting group description: -	
Reporting group title	MF/F MDI 200/10 mcg BID
Reporting group description: -	
Reporting group title	BDP HFA 160 mcg BID
Reporting group description: -	
Reporting group title	Montelukast 5 mg QD (4 mg QD for 5-year-olds)
Reporting group description: -	

Serious adverse events	MF/F MDI 50/10 mcg BID	MF/F MDI 100/10 mcg BID	MF/F MDI 200/10 mcg BID
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 99999 (0.00%)	0 / 99999 (0.00%)	0 / 99999 (0.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0

Serious adverse events	BDP HFA 160 mcg BID	Montelukast 5 mg QD (4 mg QD for 5-year-olds)	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 99999 (0.00%)	0 / 99999 (0.00%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events	0	0	

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

Non-serious adverse events	MF/F MDI 50/10 mcg BID	MF/F MDI 100/10 mcg BID	MF/F MDI 200/10 mcg BID
Total subjects affected by non-serious adverse events			
subjects affected / exposed	0 / 99999 (0.00%)	0 / 99999 (0.00%)	0 / 99999 (0.00%)

Non-serious adverse events	BDP HFA 160 mcg BID	Montelukast 5 mg QD (4 mg QD for 5-year-olds)	
Total subjects affected by non-serious adverse events subjects affected / exposed	0 / 99999 (0.00%)	0 / 99999 (0.00%)	

Notes:

[1] - There are no non-serious adverse events recorded for these results. It is expected that there will be at least one non-serious adverse event reported.
Justification: Note: This trial was withdrawn. No participants were ever enrolled in it.

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

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

Note: This trial was withdrawn. No participants were ever enrolled in it.

Notes: