Clinical trial results:
A multicentre, randomised, double-blind, two arm, parallel group, pilot study to assess the effect of Gaviscon® Double Action Mint as add-on therapy in GORD patients with inadequate response to once daily proton pump inhibitor treatment.

Summary

EudraCT number	2012-004470-25
Trial protocol	GB
Global end of trial date	23 August 2013

Results information

Result version number	v1 (current)
This version publication date	11 June 2017
First version publication date	11 June 2017

Trial information

Trial identification

Sponsor protocol code	GA1214

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Reckitt Benckiser Healthcare (UK) Ltd
Sponsor organisation address	Dansom Lane, Hull, United Kingdom, HU8 7DS
Public contact	Medical Director, Gastroenterology, Reckitt Benckiser, +44 1482 326151,
Scientific contact	Medical Director, Gastroenterology, Reckitt Benckiser, +44 1482 326151,

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	16 May 2014
Is this the analysis of the primary completion data?	Yes
Primary completion date	23 August 2013
Global end of trial reached?	Yes
Global end of trial date	23 August 2013
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The primary objective of this pilot study is to assess the efficacy of Gaviscon® Double Action Mint compared with Matched Placebo Liquid in the suppression of GORD symptoms in patients whose symptoms are inadequately controlled by once daily PPI therapy alone.

Protection of trial subjects:

This study was conducted in accordance with the International Conference on Harmonisation (ICH) Good Clinical Practice (GCP) and the ethical principles contained within the Declaration of Helsinki, as referenced in EU Directive 2001/20/EC.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	14 March 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 Kingdom: 52
Worldwide total number of subjects	52
EEA total number of subjects	52

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)	51
From 65 to 84 years	1
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

The trial was conducted in 1 centre in the United Kingdom.

Pre-assignment

Screening details:

A total of 83 participants were screened of which 31 subjects were screen failures and 52 were randomised.

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

Arms

Are arms mutually exclusive?	Yes
Arm title	Placebo

Arm description:

Placebo 20 ml by mouth 4 times a day for 7 days.

Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Oral suspension
Routes of administration	Oral use

Dosage and administration details:

20 ml taken 4 times a day for 7 days.

Arm title	Gaviscon Double Action Mint

Arm description:

Gaviscon Double Action Mint 20 ml by mouth 4 times a day for 7 days.

Arm type	Experimental
Investigational medicinal product name	Gaviscon Double Action Mint
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Oral suspension
Routes of administration	Oral use

Dosage and administration details:

20 ml taken 4 times a day for 7 days.

Number of subjects in period 1	Placebo	Gaviscon Double Action Mint
Started	26	26
Completed	26	26

Baseline characteristics

Reporting groups	
Reporting group title	Placebo
Reporting group description:	
Placebo 20 ml by mouth 4 times a day for 7 days.	
Reporting group title	Gaviscon Double Action Mint
Reporting group description:	
Gaviscon Double Action Mint 20 ml by mouth 4 times a day for 7 days.	

Reporting group values	Placebo	Gaviscon Double Action Mint	Total
Number of subjects	26	26	52
Age categorical			
ITT population			
Units: Subjects			
Adults (18-64 years)	25	26	51
From 65-84 years	1	0	1
Age continuous			
Intent-to-treat(ITT) population: All patients who were recruited to the study and had at least one day of complete heartburn and dyspepsia data post-baseline. This population was used for summaries of efficacy and baseline data.			
Units: years			
arithmetic mean	45.3	45.4	
standard deviation	± 12.32	± 10.7	-
Gender categorical			
ITT population			
Units: Subjects			
Female	14	8	22
Male	12	18	30
Race			
ITT population			
Units: Subjects			
Caucasian	26	26	52
Smoking habits (last 3 months)			
ITT population			
Units: Subjects			
Non-smoker	14	20	34
Smoker	12	6	18
Alcohol use			
ITT population			
Units: Subjects			
Non-drinker	26	26	52
Drinker	0	0	0
Drugs of abuse (last 3 months)			
IIT population			
Units: Subjects			
No	26	26	52
Yes	0	0	0

Body Mass Index (BMI)			
ITT population			
Units: kg/m2			
arithmetic mean	30.41	30.09	
standard deviation	± 6.214	± 6.074	-

End points

End points reporting groups

Reporting group title	Placebo
Reporting group description:	
Placebo 20 ml by mouth 4 times a day for 7 days.	
Reporting group title	Gaviscon Double Action Mint
Reporting group description:	
Gaviscon Double Action Mint 20 ml by mouth 4 times a day for 7 days.	

Primary: Change in mean HRDQ Score - Heartburn and Regurgitation Combined from baseline

End point title	Change in mean HRDQ Score - Heartburn and Regurgitation Combined from baseline

End point description:

ITT Population

Heartburn Regurgitation and Dyspepsia Questionnaire (HRDQ): HRDQ is a self-assessed patient questionnaire designed to measure and evaluate specific GORD symptoms of heartburn, regurgitation and dyspepsia. Night time events and duration of symptoms were also assessed. The daily score is calculated as intensity x frequency, where intensity is scored as 0 = none, 1 = mild, 2 = moderate and 3 = severe and frequency was scored as 0 = none, 1 = once, 2 = twice, 3 = thrice, 4 = 4 or 5 times, 5 = 6 – 10 times and 6 = more than 10 times per day or constant.

A HRDQ score of 0 represents no symptoms and a HRDQ score of 36 represents the highest frequency/severity of symptoms of heartburn and regurgitation combined.

End point type	Primary

End point timeframe:

From Visit 2 (Day 0-Baseline) to Visit 3 (Day 8, 9 or 10)

End point values	Placebo	Gaviscon Double Action Mint		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	26	26		
Units: units on a scale				
arithmetic mean (standard deviation)				
Visit 2, Baseline	9.09 (± 5.74)	8.91 (± 5.34)		
Visit 3, Post-baseline	5.38 (± 4.81)	3.19 (± 3.23)		
Change from baseline to post-baseline	-3.7 (± 4.22)	-5.72 (± 3.52)		

Statistical analyses

Statistical analysis title	Change in HRDQ Score - Heartburn and Regurgitation
Comparison groups	Placebo v Gaviscon Double Action Mint

Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.012
Method	ANCOVA

Secondary: Change From Baseline in HRDQ Score – Heartburn

End point title	Change From Baseline in HRDQ Score – Heartburn
End point description: ITT Population	
End point type	Secondary
End point timeframe: From Visit 2 (Day 0-Baseline) to Visit 3 (Day 8, 9 or 10)	

End point values	Placebo	Gaviscon Double Action Mint		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	26	26		
Units: units on a scale				
arithmetic mean (standard deviation)				
Visit 2, Baseline	5.5 (± 3.39)	5.23 (± 3.51)		
Visit 3, Post-baseline	3.2 (± 2.78)	1.88 (± 1.99)		
Change from baseline to post-baseline	-2.3 (± 2.56)	-3.35 (± 2.52)		

Statistical analyses

Statistical analysis title	Change in HRDQ Score - Heartburn
Comparison groups	Placebo v Gaviscon Double Action Mint
Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.0208
Method	ANCOVA

Secondary: Change From Baseline in HRDQ Score – Regurgitation

End point title	Change From Baseline in HRDQ Score – Regurgitation
End point description: ITT population	
End point type	Secondary
End point timeframe: From Visit 2 (Day 0-Baseline) to Visit 3 (Day 8, 9 or 10)	

End point values	Placebo	Gaviscon Double Action Mint		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	26	26		
Units: units on a scale				
arithmetic mean (standard deviation)				
Visit 2, Baseline	3.59 (± 2.64)	3.68 (± 2.88)		
Visit 3, Post-baseline	2.19 (± 2.18)	1.31 (± 1.41)		
Change from baseline to post-baseline	-1.4 (± 2.02)	-2.37 (± 2.02)		

Statistical analyses

Statistical analysis title	Change in HRDQ Score - Regurgitation
Comparison groups	Gaviscon Double Action Mint v Placebo
Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.0181
Method	ANCOVA

Secondary: Change From Baseline in HRDQ Score – Dyspepsia	
End point title	Change From Baseline in HRDQ Score – Dyspepsia
End point description: ITT population	
End point type	Secondary
End point timeframe: From Visit 2 (Day 0-Baseline) to Visit 3 (Day 8, 9 or 10)	

End point values	Placebo	Gaviscon Double Action Mint		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	26	26		
Units: units on a scale				
arithmetic mean (standard deviation)				
Visit 2, Baseline	3.98 (± 3.41)	3.32 (± 3.78)		
Visit 3, Post-baseline	2.02 (± 2.36)	1.5 (± 2.24)		
Change from baseline to post-baseline	-1.96 (± 2.7)	-1.82 (± 2.09)		

Statistical analyses

Statistical analysis title	Change in HRDQ Score - Dyspepsia
Comparison groups	Placebo v Gaviscon Double Action Mint
Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.6357
Method	ANCOVA

Secondary: Change From Baseline in Frequency of Heartburn (HRDQ Score)

End point title	Change From Baseline in Frequency of Heartburn (HRDQ Score)
End point description: ITT population	
End point type	Secondary
End point timeframe: From Visit 2 (Day 0-Baseline) to Visit 3 (Day 8, 9 or 10)	

End point values	Placebo	Gaviscon Double Action Mint		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	26	26		
Units: Number of Events				
arithmetic mean (standard deviation)				
Visit 2, Baseline	2.97 (± 1.41)	2.86 (± 1.53)		
Visit 3, Post-baseline	2.07 (± 1.45)	1.38 (± 1.19)		
Change from baseline to post-baseline	-0.9 (± 1.03)	-1.47 (± 1.1)		

Statistical analyses

Statistical analysis title	Change in HRDQ Score - Frequency of Heartburn
Comparison groups	Placebo v Gaviscon Double Action Mint

Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.0229
Method	ANCOVA

Secondary: Change From Baseline in Frequency of Regurgitation (HRDQ Score)

End point title	Change From Baseline in Frequency of Regurgitation (HRDQ Score)
End point description: ITT population	
End point type	Secondary
End point timeframe: From Visit 2 (Day 0-Baseline) to Visit 3 (Day 8, 9 or 10)	

End point values	Placebo	Gaviscon Double Action Mint		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	26	26		
Units: Number of Events				
arithmetic mean (standard deviation)				
Visit 2, Baseline	1.97 (± 1.27)	2.04 (± 1.18)		
Visit 3, Post-baseline	1.47 (± 1.28)	0.97 (± 0.91)		
Change from baseline to post-baseline	-0.5 (± 0.88)	-1.06 (± 0.82)		

Statistical analyses

Statistical analysis title	Change in HRDQ Score - Frequency of Regurgitation
Comparison groups	Placebo v Gaviscon Double Action Mint
Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.0125
Method	ANCOVA

Secondary: Change From Baseline in Frequency of Dyspepsia (HRDQ Score)

End point title	Change From Baseline in Frequency of Dyspepsia (HRDQ Score)
End point description: ITT population	
End point type	Secondary

End point timeframe:

From Visit 2 (Day 0-Baseline) to Visit 3 (Day 8, 9 or 10)

End point values	Placebo	Gaviscon Double Action Mint		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	26	26		
Units: Number of Events				
arithmetic mean (standard deviation)				
Visit 2, Baseline	2.26 (± 1.66)	1.82 (± 1.59)		
Visit 3, Post-baseline	1.32 (± 1.53)	1.01 (± 1.22)		
Change from baseline to post-baseline	-0.93 (± 1.06)	-0.81 (± 0.89)		

Statistical analyses

Statistical analysis title	Change in HRDQ Score - Frequency of Dyspepsia
Comparison groups	Placebo v Gaviscon Double Action Mint
Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.9515
Method	ANCOVA

Secondary: Change From Baseline in Number of Symptom-Free Days (HRDQ)

End point title	Change From Baseline in Number of Symptom-Free Days (HRDQ)

End point description:

ITT population

A symptom-free day is defined as a day where the respective symptoms: heartburn, regurgitation and dyspepsia (all derived from the HRDQ) had a value for frequency of 0.

End point type	Secondary

End point timeframe:

From Visit 2 (Day 0-Baseline) to Visit 3 (Day 8, 9 or 10)

End point values	Placebo	Gaviscon Double Action Mint		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	26	26		
Units: Days				
arithmetic mean (standard deviation)				
Visit 2, Baseline	0.38 (± 1.02)	0.23 (± 0.71)		
Visit 3, Post-baseline	1.31 (± 1.85)	1.73 (± 2.28)		
Change from baseline to post-baseline	0.92 (± 1.5)	1.5 (± 1.87)		

Statistical analyses

Statistical analysis title	Change in Number of Symptom - Free Days (HRDQ)
Comparison groups	Placebo v Gaviscon Double Action Mint
Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.1717
Method	ANCOVA

Secondary: Change in number of symptom-free days (ReQuest)

End point title	Change in number of symptom-free days (ReQuest)

End point description:

ITT population

ReQuest GI is a self-assessed, dimension-orientated scale designed to evaluate treatment response on a daily basis in patients suffering from GORD. The scale assesses 4 dimensions of GORD. Intensity is measured on a 100-mm VAS and frequency on a 7-point Likert scale (0 to 10 times/constant per day).

The range of the ReQuest™ GI score is from 0 reflecting no symptoms to 30.77 reflecting the highest severity/frequency of symptoms.

A symptom-free day is defined as a day where the respective symptoms: acid complaints, upper abdominal/stomach complaints, lower abdominal/digestive complaints and nausea (all derived from ReQuest™) had a value for frequency of 0.

End point type	Secondary

End point timeframe:

From Visit 2 (Day 0-Baseline) to Visit 3 (Day 8, 9 or 10)

End point values	Placebo	Gaviscon Double Action Mint		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	26	26		
Units: Days				
arithmetic mean (standard deviation)				

Visit 2, Baseline	0.73 (± 1.46)	0.23 (± 0.65)		
Visit 3, Post-baseline	1.81 (± 2.33)	1.85 (± 2.4)		
Change from baseline to post-baseline	1.08 (± 1.83)	1.62 (± 2.16)		

Statistical analyses

Statistical analysis title	Change in Number of Symptom - Free Days (ReQuest)
Comparison groups	Placebo v Gaviscon Double Action Mint
Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.3002
Method	ANCOVA

Secondary: Change From Baseline in Number of Days With Night Time Symptoms

End point title	Change From Baseline in Number of Days With Night Time Symptoms
End point description: ITT population	
End point type	Secondary
End point timeframe: From Visit 2 (Day 0-Baseline) to Visit 3 (Day 8, 9 or 10)	

End point values	Placebo	Gaviscon Double Action Mint		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	26	26		
Units: Days				
arithmetic mean (standard deviation)				
Visit 2, Baseline	4.31 (± 2.51)	3.94 (± 2.15)		
Visit 3, Post-baseline	2.92 (± 2.83)	2 (± 2.47)		
Change from baseline to post-baseline	-1.38 (± 1.94)	-1.94 (± 2.07)		

Statistical analyses

Statistical analysis title	Change in Number of Days With Night Time Symptoms
Comparison groups	Placebo v Gaviscon Double Action Mint

Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.2458
Method	ANCOVA

Secondary: Change From Baseline in Duration of Symptoms

End point title	Change From Baseline in Duration of Symptoms
End point description: ITT population	
End point type	Secondary
End point timeframe: From Visit 2 (Day 0-Baseline) to Visit 3 (Day 8, 9 or 10)	

End point values	Placebo	Gaviscon Double Action Mint		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	26	26		
Units: minutes				
arithmetic mean (standard deviation)				
Visit 2, Baseline	188.23 (± 202.47)	142.85 (± 151.3)		
Visit 3, Post-baseline	111.52 (± 174.05)	56.82 (± 87.51)		
Change from baseline to post-baseline	-76.71 (± 105.19)	-86.02 (± 85.73)		

Statistical analyses

Statistical analysis title	Change in Duration of Symptoms
Comparison groups	Placebo v Gaviscon Double Action Mint
Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.2314
Method	ANCOVA

Secondary: Change From Baseline in ReQuest GI Scores

End point title	Change From Baseline in ReQuest GI Scores
End point description: ITT population	
End point type	Secondary

End point timeframe:

From Visit 2 (Day 0-Baseline) to Visit 3 (Day 8, 9 or 10)

End point values	Placebo	Gaviscon Double Action Mint		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	26	26		
Units: units on a scale				
arithmetic mean (standard deviation)				
Visit 2, Baseline	5.94 (± 5.46)	6.88 (± 5.91)		
Visit 3, Post-baseline	3.25 (± 4.21)	2.49 (± 2.8)		
Change from baseline to post-baseline	-2.69 (± 3.59)	-4.4 (± 3.89)		

Statistical analyses

Statistical analysis title	Change in ReQuest GI Scores
Comparison groups	Placebo v Gaviscon Double Action Mint
Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.0656
Method	ANCOVA

Secondary: Change in the Patient Satisfaction Score

End point title	Change in the Patient Satisfaction Score

End point description:

ITT population

Patient satisfaction with medication in controlling their symptoms was assessed in response to the question: Thinking back over the past 7 days and the medication you received, how satisfied are you with the control of your symptoms? The patient was to draw a perpendicular line on a 10-cm VAS, with anchors at 0 = Very Dissatisfied and 10 = Very Satisfied. To assure compliance with the protocol requirements, quality checks on the VAS score measurements were performed by the monitor.

End point type	Secondary

End point timeframe:

From Visit 2 (Day 0-Baseline) to Visit 3 (Day 8, 9 or 10)

End point values	Placebo	Gaviscon Double Action Mint		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	26	26		
Units: units on a scale				
arithmetic mean (standard deviation)				
Visit 2, Baseline	2.57 (± 1.66)	3.11 (± 1.8)		
Visit 3, Post-baseline	5.26 (± 3.52)	7.42 (± 2.34)		
Change from baseline to post-baseline	2.8 (± 4.16)	4.36 (± 3.14)		

Statistical analyses

Statistical analysis title	Change in Patient Satisfaction Score
Comparison groups	Placebo v Gaviscon Double Action Mint
Number of subjects included in analysis	52
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.0101
Method	ANCOVA

Adverse events

Adverse events information	
Timeframe for reporting adverse events: Up to Visit 3	
Assessment type	Systematic
Dictionary used	
Dictionary name	MedDRA
Dictionary version	15.1
Reporting groups	
Reporting group title	Placebo
Reporting group description: Placebo 20 ml by mouth 4 times a day for 7 days.	
Reporting group title	Gaviscon Double Action Mint
Reporting group description: Gaviscon Double Action Mint 20 ml by mouth 4 times a day for 7 days.	

Serious adverse events	Placebo	Gaviscon Double Action Mint	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 26 (0.00%)	0 / 26 (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	Placebo	Gaviscon Double Action Mint	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	5 / 26 (19.23%)	7 / 26 (26.92%)	
Injury, poisoning and procedural complications			
Accidental overdose			
subjects affected / exposed	4 / 26 (15.38%)	2 / 26 (7.69%)	
occurrences (all)	4	2	
Nervous system disorders			
Headache			
subjects affected / exposed	0 / 26 (0.00%)	1 / 26 (3.85%)	
occurrences (all)	0	1	
Gastrointestinal disorders			

Diarrhoea			
subjects affected / exposed	1 / 26 (3.85%)	0 / 26 (0.00%)	
occurrences (all)	1	0	
Flatulence			
subjects affected / exposed	1 / 26 (3.85%)	1 / 26 (3.85%)	
occurrences (all)	1	1	
Nausea			
subjects affected / exposed	0 / 26 (0.00%)	1 / 26 (3.85%)	
occurrences (all)	0	1	
Retching			
subjects affected / exposed	0 / 26 (0.00%)	1 / 26 (3.85%)	
occurrences (all)	0	2	
Vomiting			
subjects affected / exposed	0 / 26 (0.00%)	1 / 26 (3.85%)	
occurrences (all)	0	3	
Musculoskeletal and connective tissue disorders			
Pain in extremity			
subjects affected / exposed	0 / 26 (0.00%)	1 / 26 (3.85%)	
occurrences (all)	0	1	
Infections and infestations			
Abscess			
subjects affected / exposed	1 / 26 (3.85%)	0 / 26 (0.00%)	
occurrences (all)	1	0	

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