



## Clinical trial results:

**A phase IV, open, multi-centre study to assess the immunogenicity, reactogenicity and safety of two doses of GSK Biologicals' oral live attenuated human rotavirus (HRV) vaccine in healthy Taiwanese infants who received hepatitis B immunoglobulin after birth.**

### Summary

EudraCT number	2011-003731-63
Trial protocol	Outside EU/EEA
Global end of trial date	18 April 2011

### Results information

Result version number	v1
This version publication date	22 April 2016
First version publication date	12 June 2015

### Trial information

#### Trial identification

Sponsor protocol code	114351
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#### Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01198769
WHO universal trial number (UTN)	-

Notes:

### Sponsors

Sponsor organisation name	GlaxoSmithKline Biologicals
Sponsor organisation address	Rue de l'Institut 89, Rixensart, Belgium, B-1330
Public contact	Clinical Trials Call Center, GlaxoSmithKline Biologicals, 044 2089904466, GSKClinicalSupportHD@gsk.com
Scientific contact	Clinical Trials Call Center, GlaxoSmithKline Biologicals, 044 2089904466, GSKClinicalSupportHD@gsk.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?	Yes

Notes:

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**Results analysis stage**

Analysis stage	Final
Date of interim/final analysis	18 April 2011
Is this the analysis of the primary completion data?	Yes
Primary completion date	18 April 2011
Global end of trial reached?	Yes
Global end of trial date	18 April 2011
Was the trial ended prematurely?	No

Notes:

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**General information about the trial**

Main objective of the trial:

To assess the immunogenicity of GSK Biologicals' HRV vaccine in terms of serum anti-rotavirus (anti-RV) immunoglobulin A (IgA) antibody seroconversion rate (SCR), 2 months post-Dose 2 (i.e. at study Month 4) of the HRV vaccine

Protection of trial subjects:

All the subjects were observed closely for at least 30 minutes, with appropriate medical treatment readily available in case of anaphylaxis following the administration of vaccine.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	11 November 2010
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

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**Population of trial subjects**

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**Subjects enrolled per country**

Country: Number of subjects enrolled	Taiwan: 15
Worldwide total number of subjects	15
EEA total number of subjects	0

Notes:

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**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)	15
Children (2-11 years)	0
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: -

### Pre-assignment

Screening details:

During the screening the following steps occurred: check for inclusion/exclusion criteria, contraindications/precautions, medical history of the subjects and signing informed consent forms.

### Period 1

Period 1 title	Overall Trial (overall period)
Is this the baseline period?	Yes
Allocation method	Not applicable
Blinding used	Not blinded

### Arms

<b>Arm title</b>	Rotarix Group
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Arm description:

Subjects received 2 oral doses of Rotarix™ (HRV) vaccine at 2 and 4 months of age

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

Dosage and administration details:

Subjects received 2 oral doses of HRV vaccine at 2 and 4 months of age.

<b>Number of subjects in period 1</b>	Rotarix Group
Started	15
Completed	15

## Baseline characteristics

### Reporting groups

Reporting group title	Rotarix Group
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Reporting group description:

Subjects received 2 oral doses of Rotarix™ (HRV) vaccine at 2 and 4 months of age

Reporting group values	Rotarix Group	Total	
Number of subjects	15	15	
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)		0	
From 65-84 years		0	
85 years and over		0	
Age continuous			
Units: weeks			
arithmetic mean	8.9		
standard deviation	± 0.8	-	
Gender categorical			
Units: Subjects			
Female	8	8	
Male	7	7	

## End points

### End points reporting groups

Reporting group title	Rotarix Group
Reporting group description:	
Subjects received 2 oral doses of Rotarix™ (HRV) vaccine at 2 and 4 months of age	

### Primary: Number of seroconverted subjects for serum anti-rotavirus immunoglobulin A

End point title	Number of seroconverted subjects for serum anti-rotavirus immunoglobulin A <sup>[1]</sup>
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End point description:

Seroconversion is defined as the appearance of IgA antibody concentration equal to or above ( $\geq$ ) 20 Units per millilitre (U/mL) in the serum of subjects who were seronegative before vaccination. A seronegative subject is a subject with anti-rotavirus IgA antibody concentration below ( $<$ ) 20 U/mL.

End point type	Primary
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End point timeframe:

2 months post-Dose 2 (at study Month 4)

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: The analysis of the primary endpoint was descriptive i.e. no statistical hypothesis test was performed.

End point values	Rotarix Group			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: Subjects				
$\geq 20$ U/mL	15			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Serum anti-rotavirus IgA antibody concentrations

End point title	Serum anti-rotavirus IgA antibody concentrations
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End point description:

Concentrations were expressed as geometric mean antibody concentration in units per millilitre (U/mL), calculated on all subjects.

End point type	Secondary
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End point timeframe:

2 months post-Dose 2 (at study Month 4)

End point values	Rotarix Group			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: U/mL				
geometric mean (confidence interval 95%)				
GMC (U/mL)	254.7 (145 to 447.7)			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Number of subjects reporting solicited general symptoms.

End point title	Number of subjects reporting solicited general symptoms.
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End point description:

Solicited general symptoms assessed were cough, diarrhoea, irritability, loss of appetite, temperature (any temperature was defined as a tympanic or rectal setting temperature  $\geq 38.0$  degrees Celsius) and vomiting.

End point type	Secondary
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End point timeframe:

During the 8-day (Days 0-7) post-vaccination period

End point values	Rotarix Group			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: Subjects				
Cough	6			
Diarrhoea	1			
Irritability	11			
Loss of appetite	10			
Temperature (Tympanic or rectal setting $\geq 38.0^{\circ}\text{C}$ )	5			
Vomiting	2			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Number of subjects with rotavirus (RV) present in the gastroenteritis (GE)

End point title	Number of subjects with rotavirus (RV) present in the gastroenteritis (GE)
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End point description:

RV was not identified in the one GE stool sample collected in the study. Two subjects reported GE episode between vaccination Dose 1 and before vaccination Dose 2. For one of them, GE stool sample was not collected and for the other subject no RV was identified in the GE stool sample. GE symptoms were defined as diarrhoea with or without vomiting. A GE stool sample was collected as soon as possible after the illness began by the parent/guardian of the subject. Presence of RV antigen was detected by Enzyme-linked immunosorbent assay (ELISA).

End point type	Secondary
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End point timeframe:

From Day 0 (first vaccine dose) to study Month 4 (2 months post-Dose 2)

End point values	Rotarix Group			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: Subjects				
RV present in the GE stool samples	0			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Number of subjects reporting unsolicited adverse events (AEs).

End point title	Number of subjects reporting unsolicited adverse events (AEs).
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End point description:

An unsolicited adverse event is any adverse event (i.e. any untoward medical occurrence in a patient or clinical investigation subject, temporally associated with use of a medicinal product, whether or not considered related to the medicinal product) reported in addition to those solicited during the clinical study and any solicited symptom with onset outside the specified period of follow-up for solicited symptoms.

End point type	Secondary
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End point timeframe:

Within the 31-day (Days 0-30) follow-up period after vaccination

End point values	Rotarix Group			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: Subjects				
Unsolicited AEs	4			

## Statistical analyses

No statistical analyses for this end point

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**Secondary: Number of subjects reporting serious adverse events (SAEs).**

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End point title	Number of subjects reporting serious adverse events (SAEs).
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End point description:

SAEs assessed include medical occurrences that results in death, are life threatening, require hospitalization or prolongation of hospitalization, results in disability/incapacity or are a congenital anomaly/birth defect in the offspring of a study subjects.

End point type	Secondary
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End point timeframe:

During the entire study period (from Dose 1 at Day 0 up to Month 4)

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End point values	Rotarix Group			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: Subjects				
SAEs	1			

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**Statistical analyses**

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No statistical analyses for this end point



## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

SAEs: During the entire study period (from Dose 1 at Day 0 up to Month 4). Unsolicited AEs: Within the 31-day (Days 0-30) follow-up period after vaccination. Solicited general symptoms: During the 8-day (Days 0-7) post vaccination period

Adverse event reporting additional description:

The number of occurrences reported for solicited symptoms, adverse events, and serious adverse events were not available for posting. The number of subjects affected by each specific event was indicated as the number of occurrences.

Assessment type	Non-systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	14.0
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### Reporting groups

Reporting group title	Rotarix Group
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Reporting group description:

Subjects received 2 oral doses of Rotarix™ (HRV) vaccine at 2 and 4 months of age

Serious adverse events	Rotarix Group		
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 15 (6.67%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events			
Infections and infestations			
Bronchiolitis			
subjects affected / exposed	1 / 15 (6.67%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 5 %

Non-serious adverse events	Rotarix Group		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	11 / 15 (73.33%)		
General disorders and administration site conditions			
Cough			
alternative assessment type: Systematic			

<p>subjects affected / exposed</p> <p>6 / 15 (40.00%)</p> <p>occurrences (all)</p> <p>6</p>			
<p>Diarrhoea</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>1 / 15 (6.67%)</p> <p>occurrences (all)</p> <p>1</p>			
<p>Irritability</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>11 / 15 (73.33%)</p> <p>occurrences (all)</p> <p>11</p>			
<p>Loss of appetite</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>10 / 15 (66.67%)</p> <p>occurrences (all)</p> <p>10</p>			
<p>Temperature</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>5 / 15 (33.33%)</p> <p>occurrences (all)</p> <p>5</p>			
<p>Vomiting</p> <p>alternative assessment type: Systematic</p> <p>subjects affected / exposed</p> <p>2 / 15 (13.33%)</p> <p>occurrences (all)</p> <p>2</p>			
<p>Skin and subcutaneous tissue disorders</p> <p>Eczema</p> <p>subjects affected / exposed</p> <p>2 / 15 (13.33%)</p> <p>occurrences (all)</p> <p>2</p>			
<p>Rash</p> <p>subjects affected / exposed</p> <p>1 / 15 (6.67%)</p> <p>occurrences (all)</p> <p>1</p>			
<p>Infections and infestations</p> <p>Bronchiolitis</p> <p>subjects affected / exposed</p> <p>1 / 15 (6.67%)</p> <p>occurrences (all)</p> <p>1</p>			
<p>Nasopharyngitis</p>			

subjects affected / exposed	1 / 15 (6.67%)		
occurrences (all)	1		
Pharyngitis			
subjects affected / exposed	1 / 15 (6.67%)		
occurrences (all)	1		
Upper respiratory tract infection			
subjects affected / exposed	1 / 15 (6.67%)		
occurrences (all)	1		

## **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? No

### **Limitations and caveats**

None reported