



## Clinical trial results:

**A phase IV, open-label, multicentre, non-comparative study to assess reactogenicity and safety of co-administration of GlaxoSmithKline (GSK) Biologicals' inactivated poliomyelitis vaccine PoliorixTM and DTPa-vaccine InfanrixTM in frame of three-doses primary immunization course in healthy children of 3, 4.5 and 6 months on age in Russian Federation.**

### Summary

EudraCT number	2013-002804-15
Trial protocol	Outside EU/EEA
Global end of trial date	27 October 2012

### Results information

Result version number	v1
This version publication date	08 April 2016
First version publication date	11 July 2015

### Trial information

#### Trial identification

Sponsor protocol code	113586
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#### Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01094171
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:

## Results analysis stage

Analysis stage	Final
Date of interim/final analysis	26 October 2013
Is this the analysis of the primary completion data?	Yes
Primary completion date	27 October 2012
Global end of trial reached?	Yes
Global end of trial date	27 October 2012
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

Reactogenicity and safety assessment of co-administration of GlaxoSmithKline (GSK) Biologicals' inactivated poliomyelitis vaccine Poliorix<sup>TM</sup> and GlaxoSmithKline (GSK) Biologicals' DTPa-vaccine Infanrix<sup>TM</sup> in frame of three-doses primary im-munization course in healthy children of 3, 4.5 and 6 months on age in Russian Federation.

Protection of trial subjects:

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

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	03 December 2010
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	Russian Federation: 400
Worldwide total number of subjects	400
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)	400
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 period (overall period)
Is this the baseline period?	Yes
Allocation method	Not applicable
Blinding used	Not blinded

### Arms

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

Subjects received 3 primary doses of Poliorix™ and Infanrix™ vaccines at 3, 4.5 and 6 months of age. All vaccines were administered intramuscularly in the anterolateral side of the left thigh (Poliorix) and the right thigh (Infanrix).

Arm type	Experimental
Investigational medicinal product name	Poliorix™
Investigational medicinal product code	
Other name	IPV
Pharmaceutical forms	Solution for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Three doses administered intramuscularly in the anterolateral side of the left thigh.

Investigational medicinal product name	Infanrix™
Investigational medicinal product code	
Other name	DTPa
Pharmaceutical forms	Solution for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Three doses administered intramuscularly in the anterolateral side the right thigh.

Number of subjects in period 1	Poliorix Group
Started	400
Completed	390
Not completed	10
Consent withdrawn by subject	4
Unspecified	1
Lost to follow-up	2
Migration from the study area	3



## Baseline characteristics

### Reporting groups

Reporting group title	Poliorix Group
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Reporting group description:

Subjects received 3 primary doses of Poliorix™ and Infanrix™ vaccines at 3, 4.5 and 6 months of age. All vaccines were administered intramuscularly in the anterolateral side of the left thigh (Poliorix) and the right thigh (Infanrix).

Reporting group values	Poliorix Group	Total	
Number of subjects	400	400	
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: months			
arithmetic mean	3.4		
standard deviation	± 0.5	-	
Gender categorical Units: Subjects			
Female	178	178	
Male	222	222	

## End points

### End points reporting groups

Reporting group title	Poliorix Group
Reporting group description:	
Subjects received 3 primary doses of Poliorix™ and Infanrix™ vaccines at 3, 4.5 and 6 months of age. All vaccines were administered intramuscularly in the anterolateral side of the left thigh (Poliorix) and the right thigh (Infanrix).	

### Primary: Number of subjects reporting any and grade 3 solicited local symptoms

End point title	Number of subjects reporting any and grade 3 solicited local symptoms <sup>[1]</sup>
End point description:	
Solicited local symptoms assessed were pain, redness and swelling. Any was defined as occurrence of any specified solicited local symptoms reported irrespective of intensity grade. Grade 3 pain was defined as considerable pain that prevented normal everyday activities. Grade 3 redness and swelling were defined as redness and swelling greater than (>) 20 millimeters (mm)	
End point type	Primary
End point timeframe:	
During 4 days follow-up period (i.e. the day of vaccination and 3 following days) after administration of each vaccine dose.	

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	Poliorix Group			
Subject group type	Reporting group			
Number of subjects analysed	400			
Units: Subjects				
Any Pain; Dose 1	66			
Grade 3 Pain; Dose 1	6			
Any Redness; Dose 1	135			
Grade 3 Redness; Dose 1	3			
Any Swelling; Dose 1	44			
Grade 3 Swelling; Dose 1	3			
Any Pain; Dose 2	63			
Grade 3 Pain; Dose 2	3			
Any Redness; Dose 2	194			
Grade 3 Redness; Dose 2	4			
Any Swelling; Dose 2	101			
Grade 3 Swelling; Dose 2	3			
Any Pain; Dose 3	60			
Grade 3 Pain; Dose 3	0			
Any Redness; Dose 3	188			
Grade 3 Redness; Dose 3	6			
Any Swelling; Dose 3	103			
Grade 3 Swelling; Dose 3	4			
Any Pain; Across Doses	114			
Grade 3 Pain; Across Doses	7			

Any Redness; Across Doses	258			
Grade 3 Redness; Across Doses	12			
Any Swelling; Across Doses	152			
Grade 3 Swelling; Across Doses	8			

## Statistical analyses

No statistical analyses for this end point

### Primary: Number of subjects reporting any and grade 3 solicited general symptoms

End point title	Number of subjects reporting any and grade 3 solicited general symptoms <sup>[2]</sup>
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End point description:

Solicited general symptoms assessed were Drowsiness, Irritability, Loss of appetite and Fever [Axillary temperature greater than or equal to ( $\geq$ ) 37.5 degrees Celsius ( $^{\circ}$ C)]. Any = occurrence of any specified solicited general symptoms reported irrespective of intensity grade or relationship to vaccination. Any fever = oral temperature  $\geq$  37.5 degrees Celsius ( $^{\circ}$ C). Grade 3 symptoms = symptoms that prevented normal activities. Grade 3 fever = oral temperature  $>$  39.0 $^{\circ}$ C.

End point type	Primary
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End point timeframe:

During 31 days follow-up period (i.e. the day of vaccination and 30 following days) after administration of each vaccine dose.

Notes:

[2] - 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	Poliorix Group			
Subject group type	Reporting group			
Number of subjects analysed	400			
Units: Subjects				
Any Drowsiness; Dose 1	166			
Grade 3 Drowsiness; Dose 1	10			
Any Irritability; Dose 1	179			
Grade 3 Irritability; Dose 1	15			
Any Loss of appetite; Dose 1	80			
Grade 3 Loss of appetite; Dose 1	5			
Any Temperature; Dose 1	31			
Grade 3 Temperature; Dose 1	0			
Any Drowsiness; Dose 2	132			
Grade 3 Drowsiness; Dose 2	2			
Any Irritability; Dose 2	149			
Grade 3 Irritability; Dose 2	3			
Any Loss of appetite; Dose 2	50			
Grade 3 Loss of appetite; Dose 2	3			
Any Temperature; Dose 2	28			
Grade 3 Temperature; Dose 2	1			
Any Drowsiness; Dose 3	103			
Grade 3 Drowsiness; Dose 3	4			
Any Irritability; Dose 3	125			

Grade 3 Irritability; Dose 3	4			
Any Loss of appetite; Dose 3	58			
Grade 3 Loss of appetite; Dose 3	2			
Any Temperature; Dose 3	32			
Grade 3 Temperature; Dose 3	0			
Any Drowsiness; Across Doses	227			
Grade 3 Drowsiness; Across Doses	15			
Any Irritability; Across Doses	240			
Grade 3 Irritability; Across Doses	20			
Any Loss of appetite; Across Doses	133			
Grade 3 Loss of appetite; Across Doses	10			
Any Temperature; Across Doses	69			
Grade 3 Temperature; Across Doses	1			

## Statistical analyses

No statistical analyses for this end point

### Primary: Number of subjects reporting any unsolicited adverse events (AEs)

End point title	Number of subjects reporting any unsolicited adverse events (AEs) <sup>[3]</sup>
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End point description:

Unsolicited AE covers any AE 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. Any was defined as occurrence of any unsolicited symptom regardless of intensity grade or relation to vaccination.

End point type	Primary
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End point timeframe:

During 31 days follow-up period (i.e. the day of vaccination and 30 following days) after administration of each vaccine dose.

Notes:

[3] - 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	Poliorix Group			
Subject group type	Reporting group			
Number of subjects analysed	400			
Units: Subjects	91			

## Statistical analyses

No statistical analyses for this end point

### Primary: Number of subjects with Serious Adverse Events (SAEs).

End point title	Number of subjects with Serious Adverse Events (SAEs). <sup>[4]</sup>
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End point description:

SAEs assessed included medical occurrences that resulted in death, was life threatening, required



hospitalization or prolongation of hospitalization, resulted in disability/incapacity or was a congenital anomaly/birth defect in the offspring of a study subject. Any was defined as occurrence of any symptom regardless of intensity grade or relation to vaccination and related was an event assessed by the investigator as causally related to the study vaccination.

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End point type	Primary
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End point timeframe:

During the entire study period (Day 0-Month 4).

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Notes:

[4] - 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.

<b>End point values</b>	Poliorix Group			
Subject group type	Reporting group			
Number of subjects analysed	400			
Units: Subjects				
Any SAEs	4			

## Statistical analyses

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No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

Serious Adverse Events: From Day 0 to Month 4; Solicited local and general symptoms: During the 4-day (Days 0-3) post-vaccination period; Unsolicited symptoms: During the 31-day (Days 0-30) 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	16.0
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### Reporting groups

Reporting group title	Poliorix Group
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Reporting group description:

Subjects received 3 primary doses of Poliorix™ and Infanrix™ vaccines at 3, 4.5 and 6 months of age. All vaccines were administered intramuscularly in the anterolateral side of the left thigh (Poliorix) and the right thigh (Infanrix).

Serious adverse events	Poliorix Group		
Total subjects affected by serious adverse events			
subjects affected / exposed	4 / 400 (1.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events			
General disorders and administration site conditions			
Body temperature increased			
subjects affected / exposed	1 / 400 (0.25%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Gastrointestinal disorders			
Periproctitis			
subjects affected / exposed	1 / 400 (0.25%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Diarrhoea			
subjects affected / exposed	1 / 400 (0.25%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Respiratory, thoracic and mediastinal disorders			
Respiratory disorder			
subjects affected / exposed	1 / 400 (0.25%)		
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 %

<b>Non-serious adverse events</b>	Poliorix Group		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	258 / 400 (64.50%)		
General disorders and administration site conditions			
Pain; Across Doses			
alternative assessment type: Systematic			
subjects affected / exposed	114 / 400 (28.50%)		
occurrences (all)	114		
Redness; Across Doses			
alternative assessment type: Systematic			
subjects affected / exposed	258 / 400 (64.50%)		
occurrences (all)	258		
Swelling; Across Doses			
alternative assessment type: Systematic			
subjects affected / exposed	152 / 400 (38.00%)		
occurrences (all)	152		
Drowsiness; Across Doses			
alternative assessment type: Systematic			
subjects affected / exposed	227 / 400 (56.75%)		
occurrences (all)	227		
Irritability; Across Doses			
alternative assessment type: Systematic			
subjects affected / exposed	240 / 400 (60.00%)		
occurrences (all)	240		
Loss of appetite; Across Doses			
alternative assessment type: Systematic			

subjects affected / exposed	133 / 400 (33.25%)		
occurrences (all)	133		
Fever; Across Doses			
alternative assessment type: Systematic			
subjects affected / exposed	69 / 400 (17.25%)		
occurrences (all)	69		
Body temperature increased			
subjects affected / exposed	20 / 400 (5.00%)		
occurrences (all)	20		
Pain; Dose 1			
alternative assessment type: Systematic			
subjects affected / exposed	66 / 400 (16.50%)		
occurrences (all)	66		
Redness; Dose 1			
alternative assessment type: Systematic			
subjects affected / exposed	135 / 400 (33.75%)		
occurrences (all)	135		
Swelling; Dose 1			
alternative assessment type: Systematic			
subjects affected / exposed	44 / 400 (11.00%)		
occurrences (all)	44		
Pain; Dose 2			
alternative assessment type: Systematic			
subjects affected / exposed	63 / 400 (15.75%)		
occurrences (all)	63		
Redness; Dose 2			
alternative assessment type: Systematic			
subjects affected / exposed	194 / 400 (48.50%)		
occurrences (all)	194		
Swelling; Dose 2			
alternative assessment type: Systematic			
subjects affected / exposed	101 / 400 (25.25%)		
occurrences (all)	101		
Pain; Dose 3			
alternative assessment type:			

Systematic			
subjects affected / exposed	60 / 400 (15.00%)		
occurrences (all)	60		
Redness; Dose 3			
alternative assessment type: Systematic			
subjects affected / exposed	188 / 400 (47.00%)		
occurrences (all)	188		
Swelling; Dose 3			
alternative assessment type: Systematic			
subjects affected / exposed	103 / 400 (25.75%)		
occurrences (all)	103		
Drowsiness; Dose 1			
alternative assessment type: Systematic			
subjects affected / exposed	166 / 400 (41.50%)		
occurrences (all)	166		
Irritability; Dose 1			
alternative assessment type: Systematic			
subjects affected / exposed	179 / 400 (44.75%)		
occurrences (all)	179		
Loss of appetite; Dose 1			
alternative assessment type: Systematic			
subjects affected / exposed	80 / 400 (20.00%)		
occurrences (all)	80		
Temperature; Dose 1			
alternative assessment type: Systematic			
subjects affected / exposed	31 / 400 (7.75%)		
occurrences (all)	31		
Drowsiness; Dose 2			
alternative assessment type: Systematic			
subjects affected / exposed	132 / 400 (33.00%)		
occurrences (all)	132		
Irritability; Dose 2			
alternative assessment type: Systematic			

subjects affected / exposed	149 / 400 (37.25%)		
occurrences (all)	149		
Loss of appetite; Dose 2			
alternative assessment type: Systematic			
subjects affected / exposed	50 / 400 (12.50%)		
occurrences (all)	50		
Temperature; Dose 2			
alternative assessment type: Systematic			
subjects affected / exposed	28 / 400 (7.00%)		
occurrences (all)	28		
Drowsiness; Dose 3			
alternative assessment type: Systematic			
subjects affected / exposed	103 / 400 (25.75%)		
occurrences (all)	103		
Irritability; Dose 3			
alternative assessment type: Systematic			
subjects affected / exposed	125 / 400 (31.25%)		
occurrences (all)	125		
Loss of appetite; Dose 3			
alternative assessment type: Systematic			
subjects affected / exposed	58 / 400 (14.50%)		
occurrences (all)	58		
Temperature; Dose 3			
alternative assessment type: Systematic			
subjects affected / exposed	32 / 400 (8.00%)		
occurrences (all)	32		
Respiratory, thoracic and mediastinal disorders			
Rhinorrhoea			
subjects affected / exposed	27 / 400 (6.75%)		
occurrences (all)	27		
Cough			
subjects affected / exposed	23 / 400 (5.75%)		
occurrences (all)	23		



## **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