Clinical trial results:
A phase III, open-label study to assess the immunogenicity and reactogenicity of GSK Biologicals' combined diphtheria-tetanus-acellular pertussis-inactivated poliovirus and Haemophilus influenzae type b (DTPa-IPV/Hib) vaccine administered as a three-dose primary vaccination course at 3, 4.5 and 6 months of age and a booster dose at 18 months of age in healthy infants in Russia

Summary

EudraCT number	2013-005577-43
Trial protocol	Outside EU/EEA
Global end of trial date	

Results information

Result version number	v1
This version publication date	27 October 2018
First version publication date	27 October 2018

Trial information

Trial identification

Sponsor protocol code	116194

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT02858440
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 Disclosure Advisor, GlaxoSmithKline Biologicals, (44) 2089904466, GSKClinicalSupportHD@gsk.com
Scientific contact	Clinical Disclosure Advisor, GlaxoSmithKline Biologicals, (44) 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	Interim
Date of interim/final analysis	24 October 2017
Is this the analysis of the primary completion data?	Yes
Primary completion date	24 October 2017
Global end of trial reached?	No

Notes:

General information about the trial

Main objective of the trial:

To assess the immune response to the study vaccine in terms of seroprotection status for diphtheria, tetanus, Hib and poliovirus types 1, 2 and 3 antigens, and in terms of seropositivity to the pertussis antigens, one month after the third dose of primary vaccination.

Protection of trial subjects:

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

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	13 September 2016
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: 235
Worldwide total number of subjects	235
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)	235
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:

Results for Booster Epoch are not yet available

Pre-assignment

Screening details: -

Pre-assignment period milestones

Number of subjects started	235
Number of subjects completed	235

Period 1

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

Arms

Arm title	DTPa-IPV/Hib Group

Arm description:

All subjects received three doses of primary vaccination of the study vaccine, Infanrix-IPV/Hib (DTPa-IPV/Hib), at 3, 4.5 and 6 months of age and a single dose of booster vaccination at 18 months of age. The vaccine was administered intramuscularly into the upper side of the thigh on the right/left side.

Arm type	Experimental
Investigational medicinal product name	Infanrix-IPV/Hib
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Powder and suspension for suspension for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Subjects received Infanrix-IPV/Hib three-dose primary vaccination course at 3, 4.5 and 6 months of age and a booster dose at 18 months of age. The vaccine was administered intramuscularly into the upper side of the thigh on the right/left side.

Number of subjects in period 1	DTPa-IPV/Hib Group
Started	235
Completed	229
Not completed	6
The child left for another region	1
Consent withdrawal	3
Lost to follow-up	2

Baseline characteristics

Reporting groups	
Reporting group title	DTPa-IPV/Hib Group

Reporting group description:

All subjects received three doses of primary vaccination of the study vaccine, Infanrix-IPV/Hib (DTPa-IPV/Hib), at 3, 4.5 and 6 months of age and a single dose of booster vaccination at 18 months of age. The vaccine was administered intramuscularly into the upper side of the thigh on the right/left side.

Reporting group values	DTPa-IPV/Hib Group	Total	
Number of subjects	235	235	
Age categorical Units: Subjects			
Age continuous			
Baseline characteristics are reported only for the Primary Epoch; results for Booster Epoch are not yet available.			
Units: weeks			
arithmetic mean	14.1		
standard deviation	± 1.2	-	
Gender categorical			
Baseline characteristics are reported only for the Primary Epoch; results for Booster Epoch are not yet available.			
Units: Subjects			
Male	124	124	
Female	111	111	
Race/Ethnicity, Customized			
Baseline characteristics are reported only for the Primary Epoch; results for Booster Epoch are not yet available.			
Units: Subjects			
White - Caucasian / European Heritage	235	235	

End points

End points reporting groups

Reporting group title	DTPa-IPV/Hib Group

Reporting group description:

All subjects received three doses of primary vaccination of the study vaccine, Infanrix-IPV/Hib (DTPa-IPV/Hib), at 3, 4.5 and 6 months of age and a single dose of booster vaccination at 18 months of age. The vaccine was administered intramuscularly into the upper side of the thigh on the right/left side.

Primary: Percentage of seroprotected subjects for anti-diphtheria (anti-D) and anti-tetanus (anti-T), post primary vaccination

End point title	Percentage of seroprotected subjects for anti-diphtheria (anti-D) and anti-tetanus (anti-T), post primary vaccination[1]

End point description:

A seroprotected subject is a subject whose anti-D and anti-T antibody concentration was greater than or equal to (≥) 0.1 IU/mL.

End point type	Primary

End point timeframe:

At Visit 4 (i.e. one month after 3rd dose of primary vaccination)

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 scope of this end point was descriptive, no statistical hypothesis test was performed.

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	176			
Units: Percentage of subjects				
number (confidence interval 95%)				
Anti-D antibody ≥ 0.1 IU/mL	100 (97.9 to 100)			
Anti-T antibody ≥ 0.1 IU/mL	100 (97.9 to 100)			

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of seroprotected subjects for anti-poliovirus types 1, 2 and 3, post primary vaccination

End point title	Percentage of seroprotected subjects for anti-poliovirus types 1, 2 and 3, post primary vaccination[2]

End point description:

A seroprotected subject is a subject whose anti-poliovirus types 1, 2 and 3 antibody titer was ≥ 8 ED50.

End point type	Primary

End point timeframe:

At Visit 4 (i.e. one month after 3rd dose of primary vaccination)

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 scope of this end point was descriptive, no statistical hypothesis test was performed.

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	151			
Units: Percentage of subjects				
number (confidence interval 95%)				
Anti-Polio 1 antibody ≥ 8 ED50	100 (97.6 to 100)			
Anti-Polio 2 antibody ≥ 8 ED50	100 (97.6 to 100)			
Anti-Polio 3 antibody ≥ 8 ED50	99.3 (96.4 to 100)			

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of seroprotected subjects for anti-polyribosyl ribitol phosphate (anti-PRP), post primary vaccination

End point title	Percentage of seroprotected subjects for anti-polyribosyl ribitol phosphate (anti-PRP), post primary vaccination[3]

End point description:

A seroprotected subject is a subject whose anti-PRP antibody concentration was ≥ 0.15 µg/mL.

End point type	Primary

End point timeframe:

At Visit 4 (i.e. one month after 3rd dose of primary vaccination)

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 scope of this end point was descriptive, no statistical hypothesis test was performed.

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	182			
Units: Percentage of subjects				
number (confidence interval 95%)				
Anti-PRP antibody ≥ 0.15 µg/mL	98.4 (95.3 to 99.7)			

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of seropositive subjects for anti-pertussis (anti- PT), anti-

filamentous haemagglutinin (anti-FHA) and anti-pertactin (anti-PRN), post primary vaccination

End point title	Percentage of seropositive subjects for anti-pertussis (anti-PT), anti-filamentous haemagglutinin (anti-FHA) and anti-pertactin (anti-PRN), post primary vaccination[4]

End point description:

A seropositive subject is a subject whose antibody concentration was ≥ 2.046 IU/mL for anti-FHA, ≥ 2.187 IU/mL for anti-PRN and ≥ 2.693 IU/mL for anti-PT.

End point type	Primary

End point timeframe:

At Visit 4 (i.e. one month after 3rd dose of primary vaccination)

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 scope of this end point was descriptive, no statistical hypothesis test was performed.

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	176			
Units: Percentage of subjects				
number (confidence interval 95%)				
Anti-FHA antibody ≥ 2.046 IU/mL	99.4 (96.9 to 100)			
Anti-PRN antibody ≥ 2.187 IU/mL	99.4 (96.9 to 100)			
Anti-PT antibody ≥ 2.693 IU/mL	98.9 (96.0 to 99.9)			

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of seroprotected subjects for anti-D and anti-T, post booster vaccination

End point title	Percentage of seroprotected subjects for anti-D and anti-T, post booster vaccination

End point description:

A seroprotected subject is a subject whose anti-D and anti-T antibody concentration is ≥ 0.1 IU/mL. Results for Booster Epoch are not yet available.

End point type	Secondary

End point timeframe:

At Visit 6 (i.e. one month after booster vaccination)

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	0[5]			
Units: Percentage of subjects				

Notes:

[5] - Results for Booster Epoch are not yet available.

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of seroprotected subjects for anti-poliovirus types 1, 2 and 3, post booster vaccination

End point title	Percentage of seroprotected subjects for anti-poliovirus types 1, 2 and 3, post booster vaccination

End point description:

A seroprotected subject is a subject whose anti-poliovirus types 1, 2 and 3 antibody titer is ≥ 8 ED50. Results for Booster Epoch are not yet available.

End point type	Secondary

End point timeframe:

At Visit 6 (i.e. one month after booster vaccination)

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	0[6]			
Units: Percentage of subjects				

Notes:

[6] - Results for Booster Epoch are not yet available.

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of seroprotected subjects for anti-PRP, post booster vaccination

End point title	Percentage of seroprotected subjects for anti-PRP, post booster vaccination

End point description:

A seroprotected subject is a subject whose anti-PRP antibody concentration is ≥ 0.15 µg/mL. Results for Booster Epoch are not yet available.

End point type	Secondary

End point timeframe:

At Visit 6 (i.e. one month after booster vaccination)

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	0[7]			
Units: Percentage of subjects				

Notes:

[7] - Results for Booster Epoch are not yet available.

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of seropositive subjects for anti- PT, anti-FHA and anti-PRN, post booster vaccination

End point title	Percentage of seropositive subjects for anti- PT, anti-FHA and anti-PRN, post booster vaccination

End point description:

A seropositive subject is a subject whose antibody concentration is ≥ 2.046 IU/mL for anti-FHA, ≥ 2.187 IU/mL for anti-PRN and ≥ 2.693 IU/mL for anti-PT. Results for Booster Epoch are not yet available.

End point type	Secondary

End point timeframe:

At Visit 6 (i.e. one month after booster vaccination)

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	0[8]			
Units: Percentage of subjects				

Notes:

[8] - Results for Booster Epoch are not yet available.

Statistical analyses

No statistical analyses for this end point

Secondary: Antibody concentrations for anti-D and anti-T, post primary vaccination

End point title	Antibody concentrations for anti-D and anti-T, post primary vaccination

End point description:

Concentrations were expressed as geometric mean concentrations (GMCs). GMCs were expressed as International Units per milliliter (IU/mL).

End point type	Secondary

End point timeframe:

At Visit 4 (i.e. one month after 3rd dose of primary vaccination)

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	176			
Units: IU/mL				
geometric mean (confidence interval 95%)				
Anti-D antibody	3.24 (2.84 to 3.68)			
Anti-T antibody	3.14 (2.81 to 3.51)			

Statistical analyses

No statistical analyses for this end point

Secondary: Antibody concentrations for anti-D and anti-T, post booster vaccination

End point title	Antibody concentrations for anti-D and anti-T, post booster vaccination

End point description:

Concentrations are expressed as GMCs. Results for Booster Epoch are not yet available.

End point type	Secondary

End point timeframe:

At Visit 6 (i.e. one month after booster vaccination)

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	0[9]			
Units: IU/mL				
geometric mean (confidence interval 95%)	(to)			

Notes:

[9] - Results for Booster Epoch are not yet available.

Statistical analyses

No statistical analyses for this end point

Secondary: Antibody titers for anti-polio types 1, 2 and 3, post primary vaccination

End point title	Antibody titers for anti-polio types 1, 2 and 3, post primary vaccination

End point description:

Titers were expressed as geometric mean titres (GMTs).

End point type	Secondary

End point timeframe:

At Visit 4 (i.e. one month after 3rd dose of primary vaccination)

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	151			
Units: Titers				
geometric mean (confidence interval 95%)				
Anti-Polio 1 antibody	613.9 (505.5 to 745.5)			
Anti-Polio 2 antibody	591.6 (487.3 to 718.3)			
Anti-Polio 3 antibody	827.4 (674.7 to 1014.6)			

Statistical analyses

No statistical analyses for this end point

Secondary: Antibody titers for anti-polio types 1, 2 and 3, post booster vaccination

End point title	Antibody titers for anti-polio types 1, 2 and 3, post booster vaccination

End point description:

Titers are expressed as GMTs. Results for Booster Epoch are not yet available.

End point type	Secondary

End point timeframe:

At Visit 6 (i.e. one month after booster vaccination)

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	0[10]			
Units: Titers				
geometric mean (confidence interval 99%)	(to)			

Notes:

[10] - Results for Booster Epoch are not yet available.

Statistical analyses

No statistical analyses for this end point

Secondary: Antibody concentration for anti-PRP, post primary vaccination

End point title	Antibody concentration for anti-PRP, post primary vaccination

End point description:

Concentration was expressed as GMC. GMC was expressed as micrograms per milliliter (µg/mL).

End point type	Secondary

End point timeframe:

At Visit 4 (i.e. one month after 3rd dose of primary vaccination)

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	182			
Units: µg/mL				
geometric mean (confidence interval 95%)				
µg/mL	2.97 (2.48 to 3.54)			

Statistical analyses

No statistical analyses for this end point

Secondary: Antibody concentration for anti-PRP, post booster vaccination

End point title	Antibody concentration for anti-PRP, post booster vaccination

End point description:

Concentration is expressed as GMC. Results for Booster Epoch are not yet available.

End point type	Secondary

End point timeframe:

At Visit 6 (i.e. one month after booster vaccination)

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	0[11]			
Units: µg/mL				
geometric mean (confidence interval 95%)	(to)			

Notes:

[11] - Results for Booster Epoch are not yet available.

Statistical analyses

No statistical analyses for this end point

Secondary: Antibody concentrations for anti-PT, anti-FHA and anti-PRN, post primary vaccination

End point title	Antibody concentrations for anti-PT, anti-FHA and anti-PRN, post primary vaccination

End point description:

Concentrations were expressed as GMCs.

End point type	Secondary

End point timeframe:

At Visit 4 (i.e. one month after 3rd dose of primary vaccination)

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	176			
Units: IU/mL				
geometric mean (confidence interval 95%)				
Anti-FHA antibody	120.2 (107.0 to 135.1)			
Anti-PRN antibody	166.1 (146.8 to 187.8)			
Anti-PT antibody	65.0 (57.7 to 73.2)			

Statistical analyses

No statistical analyses for this end point

Secondary: Antibody concentrations for anti-PT, anti-FHA and anti-PRN, post booster vaccination

End point title	Antibody concentrations for anti-PT, anti-FHA and anti-PRN, post booster vaccination

End point description:

Concentrations are expressed as GMCs. Results for Booster Epoch are not yet available.

End point type	Secondary

End point timeframe:

At Visit 6 (i.e. one month after booster vaccination)

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	0[12]			
Units: IU/mL				
geometric mean (confidence interval 95%)	(to)			

Notes:

[12] - Results for Booster Epoch are not yet available.

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with any solicited local adverse events (AEs) following each dose of primary vaccination

End point title	Number of subjects with any solicited local adverse events (AEs) following each dose of primary vaccination

End point description:

Assessed solicited local AEs were pain, redness and swelling at injection site. Any = Occurrence of the AE regardless of the intensity grade.

End point type	Secondary

End point timeframe:

During the 4-day follow-up period after each primary vaccination dose

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	232			
Units: Participants				
Any Pain, Dose 1	58			
Any Redness, Dose 1	83			
Any Swelling, Dose 1	45			
Any Pain, Dose 2 (N=229)	47			
Any Redness, Dose 2 (N=229)	89			
Any Swelling, Dose 2 (N=229)	58			
Any Pain, Dose 3 (N=226)	50			
Any Redness, Dose 3 (N=226)	96			
Any Swelling, Dose 3 (N=226)	63			

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with any solicited local AEs following booster vaccination

End point title	Number of subjects with any solicited local AEs following booster vaccination

End point description:

Assessed solicited local AEs are pain, redness and swelling at injection site. Any = Occurrence of the AE regardless of the intensity grade. Results for Booster Epoch are not yet available.

End point type	Secondary

End point timeframe:

During the 4-day follow-up period after booster vaccination dose

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	0[13]			
Units: Participants				

Notes:

[13] - Results for Booster Epoch are not yet available.

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with any solicited general AEs following each dose of primary vaccination

End point title	Number of subjects with any solicited general AEs following each dose of primary vaccination

End point description:

Assessed solicited general AEs were drowsiness, irritability/fussiness, loss of appetite and fever. Any = Occurrence of the AE regardless of the intensity grade. Any fever = Fever (axillary) ≥ 37.5°C.

End point type	Secondary

End point timeframe:

During the 4-day follow-up period after each primary vaccination dose

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	232			
Units: Participants				
Any Drowsiness, Dose 1	82			
Any Irritability / Fussiness, Dose 1	100			
Any Loss Of Appetite, Dose 1	33			
Any Temperature/(Axillary) (°C), Dose 1	14			
Any Drowsiness, Dose 2 (N=230)	69			
Any Irritability / Fussiness, Dose 2 (N=230)	104			
Any Loss Of Appetite, Dose 2 (N=230)	34			
Any Temperature/(Axillary) (°C), Dose 2 (N=230)	32			
Any Drowsiness, Dose 3 (N=225)	65			
Any Irritability / Fussiness, Dose 3 (N=225)	106			
Any Loss Of Appetite, Dose 3 (N=225)	43			
Any Temperature/(Axillary) (°C), Dose 3 (N=225)	28			

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with any solicited general AEs following booster vaccination

End point title	Number of subjects with any solicited general AEs following booster vaccination

End point description:

Assessed solicited general AEs are drowsiness, irritability/fussiness, loss of appetite and fever. Any = Occurrence of the AE regardless of the intensity grade. Any fever = Fever (axillary) ≥ 37.5°C. Results for Booster Epoch are not yet available.

End point type	Secondary

End point timeframe:

During the 4-day follow-up period after booster vaccination dose

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	0[14]			
Units: Participants				

Notes:

[14] - Results for Booster Epoch are not yet available.

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with unsolicited AEs following each dose of primary vaccination

End point title	Number of subjects with unsolicited AEs following each dose of primary vaccination

End point description:

Unsolicited AE was defined as any AE reported in addition to those solicited during the clinical study and any solicited AE with onset outside the specified period of follow-up for solicited AEs. Any = Occurrence of the AE regardless of the intensity grade.

End point type	Secondary

End point timeframe:

During the 31-day follow-up period after each primary vaccination dose

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	235			
Units: Participants				
Participants	41			

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with unsolicited AEs following booster vaccination

End point title	Number of subjects with unsolicited AEs following booster vaccination

End point description:

Unsolicited AE is defined as any AE reported in addition to those solicited during the clinical study and any solicited AE with onset outside the specified period of follow-up for solicited AEs. Any = Occurrence of the AE regardless of the intensity grade. Results for Booster Epoch are not yet available.

End point type	Secondary

End point timeframe:

During the 31-day follow-up period after booster vaccination dose

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	0[15]			
Units: Participants				

Notes:

[15] - Results for Booster Epoch are not yet available.

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with serious adverse events (SAEs)

End point title	Number of subjects with serious adverse events (SAEs)

End point description:

SAEs assessed include any untoward medical occurrences that resulted in death, were life threatening, required hospitalisation or prolongation of existing hospitalisation or resulted in disability/incapacity. Any = Occurrence of the AE regardless of the intensity grade. SAEs are reported only for the Primary Epoch; results for Booster Epoch are not yet available.

End point type	Secondary

End point timeframe:

From Day 0 up to Visit 4 (i.e. one month after 3rd dose of primary vaccination)

End point values	DTPa-IPV/Hib Group			
Subject group type	Reporting group			
Number of subjects analysed	235			
Units: Participants				
Participants	1			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Solicited local & general AEs: during the 4-day follow-up period after each primary & booster vaccination. Unsolicited AEs: during the 31-day follow-up period after each primary & booster vaccination. SAEs: from Day 0 up to Visit 4.

Adverse event reporting additional description:

Solicited local and general AEs, unsolicited AEs and SAEs are reported only for the Primary Epoch; results for Booster Epoch are not yet available.

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	21.0

Reporting groups

Reporting group title	DTPa-IPV/Hib Group

Reporting group description:

All subjects received three doses of primary vaccination of the study vaccine, DTPa-IPV/Hib, at 3, 4.5 and 6 months of age and a single dose of booster vaccination at 18 months of age. The vaccine was administered intramuscularly into the upper side of the thigh on the right/left side.

Serious adverse events	DTPa-IPV/Hib Group		
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 235 (0.43%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Gastrointestinal disorders			
Proctitis			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Anal fistula			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		

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

Non-serious adverse events	DTPa-IPV/Hib Group		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	190 / 235 (80.85%)		
Congenital, familial and genetic disorders			
Developmental hip dysplasia			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Cardiac disorders			
Cardiovascular disorder			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Nervous system disorders			
Autonomic nervous system imbalance			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Dystonia			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Hydrocephalus			
subjects affected / exposed	2 / 235 (0.85%)		
occurrences (all)	2		
Idiopathic intracranial hypertension			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Motor dysfunction			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Poor quality sleep			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Somnolence			
subjects affected / exposed	122 / 235 (51.91%)		
occurrences (all)	216		
Tremor			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		

Blood and lymphatic system disorders			
Anaemia			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
General disorders and administration site conditions			
Injection site erythema			
subjects affected / exposed	122 / 235 (51.91%)		
occurrences (all)	268		
Injection site pain			
subjects affected / exposed	77 / 235 (32.77%)		
occurrences (all)	155		
Injection site swelling			
subjects affected / exposed	83 / 235 (35.32%)		
occurrences (all)	166		
Pyrexia			
subjects affected / exposed	55 / 235 (23.40%)		
occurrences (all)	78		
Immune system disorders			
Food allergy			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Hypersensitivity			
subjects affected / exposed	2 / 235 (0.85%)		
occurrences (all)	2		
Gastrointestinal disorders			
Constipation			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	2		
Flatulence			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Infantile colic			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	2		
Regurgitation			

subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Vomiting			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Respiratory, thoracic and mediastinal disorders			
Cough			
subjects affected / exposed	2 / 235 (0.85%)		
occurrences (all)	2		
Skin and subcutaneous tissue disorders			
Dermatitis allergic			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Dermatitis atopic			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	2		
Rash			
subjects affected / exposed	4 / 235 (1.70%)		
occurrences (all)	4		
Rash papular			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Urticaria			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Psychiatric disorders			
Agitation			
subjects affected / exposed	1 / 235 (0.43%)		
occurrences (all)	1		
Irritability			
subjects affected / exposed	150 / 235 (63.83%)		
occurrences (all)	310		
Infections and infestations			
Bronchitis			
subjects affected / exposed	2 / 235 (0.85%)		
occurrences (all)	2		

Ear infection				
subjects affected / exposed	1 / 235 (0.43%)			
occurrences (all)	1			
Nasopharyngitis				
subjects affected / exposed	2 / 235 (0.85%)			
occurrences (all)	2			
Pharyngitis				
subjects affected / exposed	1 / 235 (0.43%)			
occurrences (all)	1			
Respiratory tract infection				
subjects affected / exposed	1 / 235 (0.43%)			
occurrences (all)	1			
Respiratory tract infection viral				
subjects affected / exposed	3 / 235 (1.28%)			
occurrences (all)	4			
Rhinitis				
subjects affected / exposed	9 / 235 (3.83%)			
occurrences (all)	10			
Tracheitis				
subjects affected / exposed	2 / 235 (0.85%)			
occurrences (all)	2			
Tracheobronchitis				
subjects affected / exposed	1 / 235 (0.43%)			
occurrences (all)	1			
Upper respiratory tract infection				
subjects affected / exposed	3 / 235 (1.28%)			
occurrences (all)	4			
Urinary tract infection				
subjects affected / exposed	1 / 235 (0.43%)			
occurrences (all)	1			
Varicella				
subjects affected / exposed	1 / 235 (0.43%)			
occurrences (all)	1			
Viral infection				
subjects affected / exposed	3 / 235 (1.28%)			
occurrences (all)	3			

Metabolism and nutrition disorders Decreased appetite subjects affected / exposed occurrences (all)	 74 / 235 (31.49%) 110		

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