Clinical trial results:
A phase IIIb randomized, double-blind, controlled study to assess the safety, reactogenicity and immunogenicity of GlaxoSmithKline (GSK) Biologicals' 10-valent pneumococcal conjugate vaccine compared to Prevenar, when co-administered with DTPw-HBV/Hib and OPV or IPV vaccines as a 3-dose primary immunization course during the first 6 months of age

Summary

EudraCT number	2006-000557-21
Trial protocol	Outside EU/EEA
Global end of trial date	17 October 2007

Results information

Result version number	v2 (current)
This version publication date	15 December 2022
First version publication date	26 July 2015
Version creation reason	• Correction of full data set Correction of full data set and alignment between registries.

Trial information

Trial identification

Sponsor protocol code	107007

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT00344318
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, 44 2089904466, GSKClinicalSupportHD@gsk.com
Scientific contact	Clinical Trials Call Center, 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	Final
Date of interim/final analysis	22 November 2007
Is this the analysis of the primary completion data?	Yes
Primary completion date	27 April 2007
Global end of trial reached?	Yes
Global end of trial date	17 October 2007
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To demonstrate that the GSK Biologicals' 10-valent pneumococcal conjugate (10Pn-PD-DiT) vaccine administered as a 3-dose primary vaccination course (either at 6-10-14 weeks or at 2-4-6 months of age), was non-inferior to Prevenar (7Pn) vaccine in terms of the incidence of post-immunization rectal fever greater than (>) 39.0°C, when co-administered with DTPw-HBV/Hib and OPV or IPV vaccines.

Protection of trial subjects:

All subjects were supervised closely for at least 30 minutes following vaccination with appropriate medical treatment readily available. Vaccines were administered by qualified and trained personnel. Vaccines were administered only to eligible subjects that had no contraindications to any components of the vaccines. Subjects were followed-up from the time the subject consents to participate in the study until she/he is discharged.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	07 August 2006
Long term follow-up planned	Yes
Long term follow-up rationale	Safety
Long term follow-up duration	6 Months
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Philippines: 400
Country: Number of subjects enrolled	Poland: 406
Worldwide total number of subjects	806
EEA total number of subjects	406

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)	806
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 (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator, Monitor, Carer, Assessor

Blinding implementation details:

The study was conducted in a double-blind fashion. Due to the different appearance of the 10Pn-PD-DiT and Prevenar vaccines, an observer blind procedure (i.e. a different person than the one who performed safety assessments administered the vaccines) was followed in order to keep the study double-blind.

Arms

Are arms mutually exclusive?	Yes
Arm title	Synflorix 1 Group

Arm description:

Subjects aged 6-12 weeks from the Philippines receiving Synflorix vaccine, co-administered with Tritanrix-HepB/Hiberix and Polio Sabin vaccines at 6, 10, 14 weeks of age.

Arm type	Experimental
Investigational medicinal product name	Pneumococcal conjugate vaccine GSK1024850A
Investigational medicinal product code	
Other name	10Pn-PD-DiT vaccine
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

3 doses administered in the right thigh at 6, 10, 14 weeks of age.

Investigational medicinal product name	Tritanrix-HepB
Investigational medicinal product code	
Other name	DTPw-HBV
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

3 doses administered in the left thigh at 6, 10, 14 weeks of age, recombined with Hiberix.

Investigational medicinal product name	Hiberix
Investigational medicinal product code	
Other name	Hib vaccine
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Reconstituted with Tritanrix-HepB before injection, 3 doses administered in the left thigh at 6, 10, 14 weeks of age.

Investigational medicinal product name	Polio Sabin
Investigational medicinal product code	
Other name	OPV vaccine

Pharmaceutical forms	Oral suspension
Routes of administration	Oral use

Dosage and administration details:

3 oral doses at 6, 10, 14 weeks of age.

Arm title	Synflorix 2 Group

Arm description:

Subjects aged 6-12 weeks from Poland receiving Synflorix vaccine co-administered with Tritanrix-HepB/Hiberix and Poliorix vaccines at 2, 4, 6 months of age.

Arm type	Experimental
Investigational medicinal product name	Pneumococcal conjugate vaccine GSK1024850A
Investigational medicinal product code	
Other name	10Pn-PD-DiT vaccine
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

3 doses administered in the right thigh at 2, 4, 6 months of age.

Investigational medicinal product name	Tritanrix-HepB
Investigational medicinal product code	
Other name	DTPw-HBV
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

3 doses administered in the left thigh at 2, 4, 6 months of age, recombined with Hiberix.

Investigational medicinal product name	Hiberix
Investigational medicinal product code	
Other name	Hib vaccine
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Reconstituted with Tritanrix-HepB before injection, 3 doses administered in the left thigh at 2, 4, 6 months of age.

Investigational medicinal product name	Poliorix
Investigational medicinal product code	
Other name	IPV vaccine
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

3 doses administered in the lower left thigh at 2, 4, 6 months of age.

Arm title	Prevenar 1 Group

Arm description:

Subjects aged 6-12 weeks from the Philippines receiving the Prevenar vaccine, co-administered with Tritanrix-HepB/Hiberix and Polio Sabin at 6, 10, 14 weeks of age.

Arm type	Experimental
Investigational medicinal product name	Prevenar
Investigational medicinal product code	
Other name	7Pn vaccine
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

3 doses administered in the right thigh at 6, 10, 14 weeks of age.

Investigational medicinal product name	Tritanrix-HepB
Investigational medicinal product code	
Other name	DTPw-HBV vaccine
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

3 doses administered in the left thigh at 6, 10, 14 weeks of age, recombined with Hiberix.

Investigational medicinal product name	Hiberix
Investigational medicinal product code	
Other name	Hib vaccine
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Reconstituted with Tritanrix-HepB before injection, 3 doses administered in the left thigh at 6, 10, 14 weeks of age.

Investigational medicinal product name	Polio Sabin
Investigational medicinal product code	
Other name	OPV vaccine
Pharmaceutical forms	Oral suspension
Routes of administration	Oral use

Dosage and administration details:

3 doses at 6, 10, 14 weeks of age.

Arm title	Prevenar 2 Group

Arm description:

Subjects aged 6-12 weeks from Poland receiving the Prevenar vaccine, co-administered with Tritanrix-HepB/Hiberix and Poliorix at 2, 4, 6 months of age.

Arm type	Experimental
Investigational medicinal product name	Prevenar
Investigational medicinal product code	
Other name	7Pn vaccine
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

3 doses administered in the right thigh at 2, 4, 6 months of age.

Investigational medicinal product name	Tritanrix-HepB
Investigational medicinal product code	
Other name	DTPw-HBV vaccine
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

3 doses administered in the left thigh at 2, 4, 6 months of age, recombined with Hiberix.

Investigational medicinal product name	Hiberix
Investigational medicinal product code	
Other name	Hib vaccine
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Reconstituted with Tritanrix-HepB before injection, 3 doses administered in the left thigh at 2, 4, 6 months of age.

Investigational medicinal product name	Poliorix
Investigational medicinal product code	
Other name	IPV vaccines

Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

3 doses administered in the lower left thigh at 2, 4, 6 months of age.

Number of subjects in period 1	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group
Started	300	303	100
Completed	296	298	99
Not completed	4	5	1
Consent withdrawn by subject	2	2	-
Adverse event, non-fatal	-	3	-
Lost to follow-up	2	-	1

Number of subjects in period 1	Prevenar 2 Group
Started	103
Completed	100
Not completed	3
Consent withdrawn by subject	2
Adverse event, non-fatal	1
Lost to follow-up	-

Baseline characteristics

Reporting groups	
Reporting group title	Synflorix 1 Group
Reporting group description:	
Subjects aged 6-12 weeks from the Philippines receiving Synflorix vaccine, co-administered with Tritanrix-HepB/Hiberix and Polio Sabin vaccines at 6, 10, 14 weeks of age.	
Reporting group title	Synflorix 2 Group
Reporting group description:	
Subjects aged 6-12 weeks from Poland receiving Synflorix vaccine co-administered with Tritanrix-HepB/Hiberix and Poliorix vaccines at 2, 4, 6 months of age.	
Reporting group title	Prevenar 1 Group
Reporting group description:	
Subjects aged 6-12 weeks from the Philippines receiving the Prevenar vaccine, co-administered with Tritanrix-HepB/Hiberix and Polio Sabin at 6, 10, 14 weeks of age.	
Reporting group title	Prevenar 2 Group
Reporting group description:	
Subjects aged 6-12 weeks from Poland receiving the Prevenar vaccine, co-administered with Tritanrix-HepB/Hiberix and Poliorix at 2, 4, 6 months of age.	

Reporting group values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group
Number of subjects	300	303	100
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)	300	303	100
Children (2-11 years)	0	0	0
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: weeks			
arithmetic mean	7.5	7.4	7.4
standard deviation	± 1.64	± 1.5	± 1.53
Gender categorical Units: Subjects			
Female	146	141	48
Male	154	162	52

Reporting group values	Prevenar 2 Group	Total	
Number of subjects	103	806	
Age categorical Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	

Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	103	806	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	0	0	
From 65-84 years	0	0	
85 years and over	0	0	
Age continuous			
Units: weeks			
arithmetic mean	7.5		
standard deviation	± 1.55	-	
Gender categorical			
Units: Subjects			
Female	46	381	
Male	57	425	

End points

End points reporting groups

Reporting group title	Synflorix 1 Group
Reporting group description:	
Subjects aged 6-12 weeks from the Philippines receiving Synflorix vaccine, co-administered with Tritanrix-HepB/Hiberix and Polio Sabin vaccines at 6, 10, 14 weeks of age.	
Reporting group title	Synflorix 2 Group
Reporting group description:	
Subjects aged 6-12 weeks from Poland receiving Synflorix vaccine co-administered with Tritanrix-HepB/Hiberix and Poliorix vaccines at 2, 4, 6 months of age.	
Reporting group title	Prevenar 1 Group
Reporting group description:	
Subjects aged 6-12 weeks from the Philippines receiving the Prevenar vaccine, co-administered with Tritanrix-HepB/Hiberix and Polio Sabin at 6, 10, 14 weeks of age.	
Reporting group title	Prevenar 2 Group
Reporting group description:	
Subjects aged 6-12 weeks from Poland receiving the Prevenar vaccine, co-administered with Tritanrix-HepB/Hiberix and Poliorix at 2, 4, 6 months of age.	
Subject analysis set title	Synflorix Pooled Group
Subject analysis set type	Sub-group analysis
Subject analysis set description:	
Synflorix 1 Group and Synflorix 2 Group pooled together.	
Subject analysis set title	Prevenar Pooled Group
Subject analysis set type	Sub-group analysis
Subject analysis set description:	
Prevenar 1 Group and Prevenar 2 Group pooled together.	

Primary: Number of subjects reporting rectal temperature above (>) 39.0 degrees Celsius (°C)

End point title	Number of subjects reporting rectal temperature above (>) 39.0 degrees Celsius (°C)
End point description:	
Fever was measured as rectal temperature. Assessment of occurrences of fever > 39.0 °C was performed post doses 1, 2 and 3 and across doses of Synflorix or Prevenar vaccine.	
End point type	Primary
End point timeframe:	
Within 4 days (Days 0-3) after each dose and across doses	

End point values	Synflorix Pooled Group	Prevenar Pooled Group		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	599	199		
Units: Subjects				
Fever > 39.0°C, post Dose 1 [N=598;199]	31	6		
Fever > 39.0°C, post Dose 2 [N=594;199]	30	13		
Fever > 39.0°C, post Dose 3 [N=594;199]	42	8		

Fever > 39.0°C, across doses [N=599;199]	88	23		

Statistical analyses

Statistical analysis title	Rectal fever- Synflorix vs Prevenar- after Dose 1

Statistical analysis description:

Analysis aimed to demonstrate that Synflorix administered as 3-dose primary vaccination course (either at 6-10-14 weeks or at 2-4-6 months of age), is non-inferior to Prevenar in terms of incidence of post-immunization rectal fever >39.0°C, when co-administered with Tritanrix-HepB/Hiberix and Polio Sabin or Poliorix vaccines. Standardized asymptotic 95% confidence interval (CI) for the difference in terms of percentages of subjects reporting rectal fever >39.0°C after Dose 1 was computed.

Comparison groups	Synflorix Pooled Group v Prevenar Pooled Group
Number of subjects included in analysis	798
Analysis specification	Pre-specified
Analysis type	non-inferiority[1]
Parameter estimate	Difference in percentage
Point estimate	2.17
Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.51
upper limit	4.88

Notes:

[1] - Non-inferiority was demonstrated if the upper limit of the 95% CI of the difference (Synflorix minus Prevenar) in terms of percentage of subjects with rectal fever > 39.0°C is lower than 10%.

Statistical analysis title	Rectal fever- Synflorix vs Prevenar - after Dose 2

Statistical analysis description:

Analysis aimed to demonstrate that Synflorix administered as 3-dose primary vaccination course (either at 6-10-14 weeks or at 2-4-6 months of age), is non-inferior to Prevenar in terms of incidence of post-immunization rectal fever >39.0°C, when co-administered with Tritanrix-HepB/Hiberix and Polio Sabin or Poliorix vaccines. Standardized asymptotic 95% CI for the difference (Synflorix minus Prevenar) in terms of percentages of subjects reporting rectal fever >39.0°C after Dose 2 was computed.

Comparison groups	Synflorix Pooled Group v Prevenar Pooled Group
Number of subjects included in analysis	798
Analysis specification	Pre-specified
Analysis type	non-inferiority[2]
Parameter estimate	Difference in percentage
Point estimate	-1.48
Confidence interval	
level	95 %
sides	2-sided
lower limit	-6.05
upper limit	1.92

Notes:

[2] - Non-inferiority was demonstrated if the upper limit of the 95% CI of the difference (Synflorix minus Prevenar) in terms of percentage of subjects with rectal fever > 39.0°C is lower than 10%.

Statistical analysis title	Rectal fever- Synflorix vs Prevenar - after Dose 3

Statistical analysis description:

Analysis aimed to demonstrate that Synflorix administered as 3-dose primary vaccination course (either at 6-10-14 weeks or at 2-4-6 months of age), is non-inferior to Prevenar in terms of incidence of post-immunization rectal fever >39.0°C, when co-administered with Tritanrix-HepB/Hiberix and Polio Sabin or Poliorix vaccines. Standardized asymptotic 95% CI for the difference (Synflorix minus Prevenar) in terms of percentages of subjects reporting rectal fever >39.0°C after Dose 3 was computed.

Comparison groups	Synflorix Pooled Group v Prevenar Pooled Group
Number of subjects included in analysis	798
Analysis specification	Pre-specified
Analysis type	non-inferiority[3]
Parameter estimate	Difference in percentage
Point estimate	3.05
Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.02
upper limit	6.19

Notes:

[3] - Non-inferiority was demonstrated if the upper limit of the 95% CI of the difference (Synflorix minus Prevenar) in terms of percentage of subjects with rectal fever > 39.0°C is lower than 10%.

Statistical analysis title	Rectal fever- Synflorix vs Prevenar - across doses

Statistical analysis description:

Analysis aimed to demonstrate that Synflorix administered as 3-dose primary vaccination course (either at 6-10-14 weeks or at 2-4-6 months of age), is non-inferior to Prevenar in terms of incidence of post-immunization rectal fever >39.0°C, when co-administered with Tritanrix-HepB/Hiberix and Polio Sabin or Poliorix vaccines. Standardized asymptotic 95% CI for the difference (Synflorix minus Prevenar) in terms of percentages of subjects reporting rectal fever >39.0°C across doses was computed.

Comparison groups	Synflorix Pooled Group v Prevenar Pooled Group
Number of subjects included in analysis	798
Analysis specification	Pre-specified
Analysis type	non-inferiority[4]
Parameter estimate	Difference in percentage
Point estimate	3.13
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.65
upper limit	8.01

Notes:

[4] - Non-inferiority was demonstrated if the upper limit of the 95% CI of the difference (Synflorix minus Prevenar) in terms of percentage of subjects with rectal fever > 39.0°C is lower than 10%.

Secondary: Number of subjects with any and any Grade 3 solicited local symptoms

End point title	Number of subjects with any and any Grade 3 solicited local symptoms

End point description:

Solicited local symptoms assessed include pain, redness and swelling. Grade 3 pain was defined as crying when limb was moved/spontaneously painful. Grade 3 swelling/redness was defined as swelling/redness larger than (>) 30 millimeters (mm). “Any” is defined as incidence of the specified symptom regardless of intensity.

End point type	Secondary

End point timeframe:

Within 4 days (Days 0-3) after each dose and across doses

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	299	300	99	100
Units: Subjects				
Any Pain, Post Dose 1 [N=299;299;99;100]	240	206	76	65
Grade 3 Pain, Post Dose 1 [N=299;299;99;100]	52	59	19	17
Any Redness, Post Dose 1 [N=299;299;99;100]	126	199	35	65
Grade 3 Redness, Post Dose 1 [N=299;299;99;100]	10	30	6	8
Any Swelling, Post Dose 1 [N=299;299;99;100]	142	153	39	56
Grade 3 Swelling, Post Dose 1 [N=299;299;99;100]	41	43	15	9
Any Pain, Post Dose 2 [N=296;299;99;100]	191	186	55	61
Grade 3 Pain, Post Dose 2 [N=296;299;99;100]	18	31	8	12
Any Redness, Post Dose 2 [N=296;299;99;100]	135	204	44	59
Grade 3 Redness, Post Dose 2 [N=296;299;99;100]	8	9	1	2
Any Swelling, Post Dose 2 [N=296;299;99;100]	98	163	29	51
Grade 3 Swelling, Post Dose 2 [N=296;299;99;100]	27	19	5	5
Any Pain, Post Dose 3 [N=296;298;99;100]	168	173	44	56
Grade 3 Pain, Post Dose 3 [N=296;298;99;100]	14	23	1	8
Any Redness, Post Dose 3 [N=296;298;99;100]	158	209	45	70
Grade 3 Redness, Post Dose 3 [N=296;298;99;100]	3	8	0	4
Any Swelling, Post Dose 3 [N=296;298;99;100]	84	151	25	53
Grade 3 Swelling, Post Dose 3 [N=296;298;99;100]	15	19	4	10
Any Pain, Across Doses [N=299;300;99;100]	258	255	82	89
Grade 3 Pain, Across Doses [N=299;300;99;100]	64	83	22	25
Any Redness, Across Doses [N=299;300;99;100]	221	265	67	90
Grade 3 Redness, Across Doses [N=299;300;99;100]	18	42	6	12
Any Swelling, Across Doses [N=299;300;99;100]	174	226	42	75
Grade 3 Swelling, Across Doses [N=299;300;99;100]	57	65	16	16

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with any, Grade 3 and related solicited general symptoms

End point title	Number of subjects with any, Grade 3 and related solicited general symptoms

End point description:

Solicited general symptoms assessed include drowsiness, fever (defined as rectal temperature >= 38.0°C), irritability, and loss of appetite. Grade 3 (G3) drowsiness was defined as drowsiness which prevented normal everyday activities. Grade 3 (G3) fever was defined as fever (rectal temperature) above (>) 40.0 degree Celsius (°C). Grade 3 (G3) irritability was defined as crying that could not be comforted/preventing normal activity. Grade 3 (G3) loss of appetite was defined as the subject not eating at all. "Any" is defined as incidence of the specified symptom regardless of intensity or relationship to study vaccination. Related (REL) = Symptom assessed by the investigator as causally related to vaccination.

End point type	Secondary

End point timeframe:

Within 4-days (Days 0-3) after each dose and across doses

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	299	300	99	100
Units: Subjects				
Any Drowsiness, Dose 1 [N=299;299;99;100]	154	223	45	75
G3 Drowsiness, Dose 1 [N=299;299;99;100]	6	10	3	1
REL Drowsiness Dose 1 [N=299;299;99;100]	154	222	45	75
Any Fever, Dose 1 [N=299;299;99;100]	214	190	74	54
G3 Fever, Dose 1 [N=299;299;99;100]	0	0	0	0
REL Fever, Dose 1 [N=299;299;99;100]	214	190	74	54
Any Irritability, Dose 1 [N=299;299;99;100]	236	269	78	83
G3 Irritability, Dose 1 [N=299;299;99;100]	11	60	3	17
REL Irritability, Dose 1 [N=299;299;99;100]	236	266	78	83
Any Loss of appetite, Dose 1 [N=299;299;99;100]	104	166	26	52
G3 Loss of appetite, Dose 1 [N=299;299;99;100]	1	1	1	1
REL Loss of appetite, Dose 1 [N=299;299;99;100]	104	165	26	51
Any Drowsiness, Dose 2 [N=296;298;99;100]	102	172	25	57
G3 Drowsiness, Dose 2 [N=296;298;99;100]	1	9	1	2
REL Drowsiness, Dose 2 [N=296;298;99;100]	102	172	24	56
Any Fever, Dose 2 [N=296;298;99;100]	182	184	63	51
G3 Fever, Dose 2 [N=296;298;99;100]	0	0	0	0
REL Fever, Dose 2 [N=296;298;99;100]	182	184	63	50

Any Irritability, Dose 2 [N=296;298;99;100]	185	238	49	73
G3 Irritability, Dose 2 [N=296;298;99;100]	8	37	3	9
REL Irritability, Dose 2 [N=296;298;99;100]	185	237	48	72
Any Loss of appetite, Dose 2 [N=296;298;99;100]	66	117	20	28
G3 Loss of appetite, Dose 2 [N=296;298;99;100]	0	0	0	0
REL Loss of appetite, Dose 2 [N=296;298;99;100]	66	116	19	27
Any Drowsiness, Dose 3 [N=296;298;99;100]	90	152	25	41
G3 Drowsiness, Dose 3 [N=296;298;99;100]	2	5	0	0
REL Drowsiness, Dose 3 [N=296;298;99;100]	90	151	25	40
Any Fever, Dose 3 [N=296;298;99;100]	147	163	50	49
G3 Fever, Dose 3 [N=296;298;99;100]	0	0	0	1
REL Fever, Dose 3 [N=296;298;99;100]	147	162	50	49
Any Irritability, Dose 3 [N=296;298;99;100]	169	225	43	64
G3 Irritability, Dose 3 [N=296;298;99;100]	7	22	1	2
REL Irritability, Dose 3 [N=296;298;99;100]	169	223	43	64
Any Loss of appetite, Dose 3 [N=296;298;99;100]	61	113	19	19
G3 Loss of appetite, Dose 3 [N=296;298;99;100]	1	1	0	0
REL Loss of appetite, Dose 3 [N=296;298;99;100]	61	113	19	19
Any Drowsiness, Across Doses [N=299;300;99;100]	184	256	56	85
G3 Drowsiness, Across Doses [N=299;300;99;100]	9	17	3	3
REL Drowsiness, Across Doses [N=299;300;99;100]	184	256	56	85
Any Fever, Across Doses [N=299;300;99;100]	255	261	88	77
G3 Fever, Across Doses [N=299;300;99;100]	0	0	0	1
REL Fever, Across Doses [N=299;300;99;100]	255	261	88	77
Any Irritability, Across Doses [N=299;300;99;100]	258	289	82	93
G3 Irritability, Across Doses [N=299;300;99;100]	22	89	6	24
REL Irritability, Across Doses [N=299;300;99;100]	258	289	82	93
Any Loss of appetite, Across [N=299;300;99;100]	140	221	39	64
G3 Loss of appetite, Across [N=299;300;99;100]	1	2	1	1
REL Loss of appetite, Across [N=299;300;99;100]	140	220	39	63

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with unsolicited adverse events (AEs)

End point title	Number of subjects with unsolicited adverse events (AEs)

End point description:

An AE is any untoward medical occurrence in a clinical investigation subject, temporally associated with the use of a medicinal product, whether or not considered related to the medicinal product. "Any" is defined an incidence of an unsolicited AE regardless of intensity or relationship to study vaccination.

End point type	Secondary

End point timeframe:

Within 31 days (Days 0-30) after each vaccination

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	300	303	100	103
Units: Subjects				
Any unsolicited AE(s)	168	166	46	61

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:

Serious adverse events (SAEs) assessed include medical occurrences that result in death, are life threatening, require hospitalization or prolongation of hospitalization or result in disability/incapacity.

End point type	Secondary

End point timeframe:

During the Active Phase: From Month 0 to Month 3 for Synflorix 1 Group and Prevenar 1 Group and from Month 0 to Month 5 for the Synflorix 2 Group and Prevenar 2 Group

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	300	303	100	103
Units: Subjects				
Any SAEs	6	34	1	9

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:

Serious adverse events (SAEs) assessed include medical occurrences that result in death, are life threatening, require hospitalization or prolongation of hospitalization or result in disability/incapacity.

End point type	Secondary

End point timeframe:

During the Extended Safety Follow-Up Phase: At Month 8 for Synflorix 1 Group and Prevenar 1 Group and at Month 10 for the Synflorix 2 Group and Prevenar 2 Group

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	300	303	100	103
Units: Subjects				
Any SAEs	16	52	4	19

Statistical analyses

No statistical analyses for this end point

Secondary: Concentrations of antibodies against pneumococcal serotypes 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F and 23F

End point title	Concentrations of antibodies against pneumococcal serotypes 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F and 23F

End point description:

Seropositivity status, defined as Anti-pneumococcal serotypes 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F and 23F antibody concentrations ≥ 0.05 microgram per milliliter (µg/mL).

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Synflorix or Prevenar

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	285	285	95	96
Units: µg/mL				
geometric mean (confidence interval 95%)				
Anti-1 POST [N=285;285;94;96]	3.23 (2.94 to 3.54)	1.04 (0.94 to 1.15)	0.03 (0.03 to 0.04)	0.03 (0.03 to 0.03)
Anti-4 POST [N=285;285;95;96]	4.96 (4.46 to 5.51)	1.64 (1.49 to 1.8)	5.68 (4.94 to 6.53)	2.14 (1.88 to 2.44)

Anti-5 POST [N=285;285;95;96]	4.87 (4.5 to 5.26)	1.62 (1.48 to 1.78)	0.03 (0.03 to 0.04)	0.03 (0.03 to 0.03)
Anti-6B POST [N=285;285;95;96]	1.19 (1.02 to 1.38)	0.73 (0.64 to 0.84)	1.06 (0.8 to 1.4)	1.23 (0.96 to 1.58)
Anti-7F POST [N=285;285;95;96]	4.84 (4.45 to 5.27)	2.25 (2.07 to 2.45)	0.05 (0.04 to 0.06)	0.04 (0.03 to 0.04)
Anti-9V POST [N=285;285;95;96]	4.04 (3.66 to 4.46)	1.51 (1.37 to 1.66)	5.07 (4.32 to 5.96)	2.7 (2.32 to 3.14)
Anti-14 POST [N=285;285;95;96]	6.45 (5.65 to 7.38)	3.31 (2.98 to 3.68)	5.88 (4.71 to 7.34)	5.23 (4.39 to 6.24)
Anti-18C POST [N=285;285;95;96]	11.56 (10.22 to 13.08)	3.74 (3.28 to 4.28)	3.71 (3.14 to 4.38)	2.64 (2.25 to 3.11)
Anti-19F POST [N=285;285;95;96]	10.46 (9.32 to 11.74)	5.3 (4.77 to 5.89)	4.68 (4.02 to 5.45)	2.38 (2.04 to 2.78)
Anti-23F POST [N=285;285;95;96]	2.23 (1.98 to 2.5)	1.11 (0.98 to 1.26)	2.28 (1.7 to 3.06)	2.2 (1.83 to 2.65)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-pneumococcal serotypes 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F and 23F antibody concentrations equal to or above (>=) 0.2 microgram per milliliter (µg/mL)

End point title	Number of subjects with anti-pneumococcal serotypes 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F and 23F antibody concentrations equal to or above (>=) 0.2 microgram per milliliter (µg/mL)

End point description:

Cut-off values assessed were greater than or equal to 0.2 microgram per milliliter (µg/mL) in the sera of subjects.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Synflorix or Prevenar

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	285	285	95	96
Units: Subjects				
Anti-1 POST [N=285;285;94;96]	285	280	3	3
Anti-4 POST [N=285;285;95;96]	283	282	95	96
Anti-5 POST [N=285;285;95;96]	285	282	3	2
Anti-6B POST [N=285;285;95;96]	260	244	82	91
Anti-7F POST [N=285;285;95;96]	284	285	9	5
Anti-9V POST [N=285;285;95;96]	284	285	95	96
Anti-14 POST [N=285;285;95;96]	285	285	95	96
Anti-18C POST [N=285;285;95;96]	284	281	95	95
Anti-19F POST [N=285;285;95;96]	285	282	94	95
Anti-23F POST [N=285;285;95;96]	277	269	90	95

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-pneumococcal serotypes 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F and 23F antibody concentrations equal to or above (>=) 0.05 microgram per liter (µg/mL)

End point title	Number of subjects with anti-pneumococcal serotypes 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F and 23F antibody concentrations equal to or above (>=) 0.05 microgram per liter (µg/mL)

End point description:

Cut-off values assessed were greater than or equal to 0.05 microgram per liter (µg/mL) in the sera of subjects.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Synflorix or Prevenar

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	285	285	95	96
Units: Subjects				
Anti-1 POST [N=285;285;94;96]	285	285	20	13
Anti-4 POST [N=285;285;95;96]	285	285	95	96
Anti-5 POST [N=285;285;95;96]	285	285	19	13
Anti-6B POST [N=285;285;95;96]	279	274	92	91
Anti-7F POST [N=285;285;95;96]	285	285	37	22
Anti-9V POST [N=285;285;95;96]	285	285	95	96
Anti-14 POST [N=285;285;95;96]	285	285	95	96
Anti-18C POST [N=285;285;95;96]	284	285	95	95
Anti-19F POST [N=285;285;95;96]	285	285	95	95
Anti-23F POST [N=285;285;95;96]	285	279	91	96

Statistical analyses

No statistical analyses for this end point

Secondary: Opsonophagocytic activity (OPA) against vaccine pneumococcal serotypes 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F and 23F

End point title	Opsonophagocytic activity (OPA) against vaccine pneumococcal serotypes 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F and 23F

End point description:

Seropositivity status, defined as Opsonophagocytic activity against pneumococcal serotypes 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F and 23F >= 8.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Synflorix or Prevenar

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	142	145	46	49
Units: Titers				
geometric mean (confidence interval 95%)				
OPA Anti-1 [N=142;144;46;49]	93.7 (68.2 to 128.7)	14.8 (11.2 to 19.6)	4.2 (3.8 to 4.5)	4 (4 to 4)
OPA Anti-4 [N=138;145;43;49]	1008.7 (849.1 to 1198.4)	602.9 (494.8 to 734.6)	1229.9 (975.5 to 1550.7)	513 (388.2 to 677.9)
OPA Anti-5 [N=140;144;46;49]	209.3 (176.6 to 248)	67.2 (52.2 to 86.6)	4 (4 to 4)	4 (4 to 4)
OPA Anti-6B [N=142;145;43;49]	963.5 (714.7 to 1299)	361.9 (255 to 513.7)	1762.2 (975.3 to 3184)	805 (436.9 to 1483.4)
OPA Anti-7F [N=137;144;44;49]	5196.4 (4349.2 to 6208.6)	2002.2 (1543.1 to 2597.9)	14.2 (6.9 to 29.4)	6.9 (4.3 to 11.1)
OPA Anti-9V [N=130;144;43;49]	1631.9 (1343.8 to 1981.9)	1171.7 (966.1 to 1421.1)	1713.3 (1294.6 to 2267.5)	1166 (782.6 to 1737.2)
OPA Anti-14 [N=142;145;46;49]	1669.1 (1267.7 to 2197.6)	640 (520.2 to 787.5)	2117.4 (1210.9 to 3702.6)	947.6 (658.6 to 1363.4)
OPA Anti-18C [N=139;144;45;49]	673.3 (569.7 to 795.8)	174.9 (137.1 to 223.1)	283.7 (209.6 to 384.1)	127 (86.4 to 186.5)
OPA Anti-19F [N=139;143;46;49]	1121.7 (931.5 to 1350.6)	337.8 (262.9 to 434.1)	81.6 (53 to 125.5)	35.9 (25.7 to 50.1)
OPA Anti-23F [N=141;143;43;49]	2186.6 (1845.4 to 2590.9)	920.6 (678 to 1249.9)	4126.6 (2609 to 6526.8)	3895.4 (2842.8 to 5337.8)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with opsonophagocytic activity (OPA) against vaccine pneumococcal serotypes 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F and 23F equal to or above (>=) 8

End point title	Number of subjects with opsonophagocytic activity (OPA) against vaccine pneumococcal serotypes 1, 4, 5, 6B, 7F, 9V, 14, 18C, 19F and 23F equal to or above (>=) 8

End point description:

Seropositivity status, defined as Opsonophagocytic activity against pneumococcal serotypes 1, 4, 5, 6B, 7F, 9V, 14, 18C , 19F and 23F >= 8.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Synflorix or Prevenar

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	142	145	46	49
Units: Subjects				
OPA Anti-1 [N=142;144;46;49]	117	62	1	0
OPA Anti-4 [N=138;145;43;49]	137	143	43	49
OPA Anti-5 [N=140;144;46;49]	139	127	0	0
OPA Anti-6B [N=142;145;43;49]	132	122	40	44
OPA Anti-7F [N=137;144;44;49]	137	141	10	5
OPA Anti-9V [N=130;144;43;49]	130	144	43	49
OPA Anti-14 [N=142;145;46;49]	138	142	43	48
OPA Anti-18C [N=139;144;45;49]	138	137	45	48
OPA Anti-19F [N=139;143;46;49]	137	142	42	45
OPA Anti-23F [N=141;143;43;49]	141	132	42	49

Statistical analyses

No statistical analyses for this end point

Secondary: Concentrations of antibodies against cross-reactive pneumococcal serotypes 6A and 19A

End point title	Concentrations of antibodies against cross-reactive pneumococcal serotypes 6A and 19A

End point description:

Seropositivity status, defined as Anti-pneumococcal cross-reactive serotypes 6A and 19A antibody concentrations >= 0.05 microgram per milliliter (µg/mL).

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Synflorix or Prevenar

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	285	285	95	96
Units: µg/mL				
geometric mean (confidence interval 95%)				
Anti-6A [N=285;285;95;96]	0.3 (0.26 to 0.35)	0.17 (0.15 to 0.2)	0.23 (0.18 to 0.3)	0.26 (0.2 to 0.33)
Anti-19A [N=285;284;95;96]	0.36 (0.31 to 0.41)	0.29 (0.25 to 0.34)	0.18 (0.15 to 0.22)	0.12 (0.1 to 0.15)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with concentrations of antibodies against cross-reactive pneumococcal serotypes 6A and 19A equal to or above (>=) 0.05 microgram per milliliter (µg/mL)

End point title	Number of subjects with concentrations of antibodies against cross-reactive pneumococcal serotypes 6A and 19A equal to or above (>=) 0.05 microgram per milliliter (µg/mL)

End point description:

Cut-off values assessed were greater than or equal to 0.05 microgram per milliliter (µg/mL) in the sera of subjects seronegative before vaccination.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Synflorix or Prevenar

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	285	285	95	96
Units: Subjects				
Anti-6A [N=285;285;95;96]	261	230	84	84
Anti-19A [N=285;284;95;96]	269	264	90	83

Statistical analyses

No statistical analyses for this end point

Secondary: Opsonophagocytic activity (OPA) against cross-reactive pneumococcal serotypes 6A and 19A

End point title	Opsonophagocytic activity (OPA) against cross-reactive pneumococcal serotypes 6A and 19A

End point description:

Seropositivity status, defined as Opsonophagocytic activity against pneumococcal cross-reactive serotypes 6A and 19A >= 8.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Synflorix or Prevenar

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	137	143	44	49
Units: Titers				
geometric mean (confidence interval 95%)				
OPA Anti-6A [N=127;137;43;48]	93.1 (64.1 to 135.2)	60.5 (40.7 to 89.9)	137.3 (69.7 to 270.3)	175.1 (87.2 to 351.6)
OPA Anti-19A [N=137;143;44;49]	10.6 (7.9 to 14.2)	10.1 (7.8 to 13.1)	4.2 (3.8 to 4.7)	4 (4 to 4)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with opsonophagocytic activity (OPA) against cross-reactive pneumococcal serotypes 6A and 19A equal to or above (>=) 8

End point title	Number of subjects with opsonophagocytic activity (OPA) against cross-reactive pneumococcal serotypes 6A and 19A equal to or above (>=) 8

End point description:

Seropositivity status, defined as Opsonophagocytic activity against pneumococcal cross-reactive serotypes 6A and 19A >= 8.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Synflorix or Prevenar

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	137	143	44	49
Units: Subjects				
OPA Anti-6A [N=127;137;43;48]	91	83	34	36
OPA Anti-19A [N=137;143;44;49]	35	41	1	0

Statistical analyses

No statistical analyses for this end point

Secondary: Concentrations of antibodies against protein D (Anti-PD)

End point title	Concentrations of antibodies against protein D (Anti-PD)

End point description:

Seropositivity status, defined as Anti-PD antibody concentrations >= 100 ELISA units per milliliter (EL.U/mL).

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Synflorix or Prevenar

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	284	285	95	96
Units: EL.U/mL				
geometric mean (confidence interval 95%)				
Anti-PD	3800 (3481.2 to 4148)	2002 (1780 to 2251.6)	105.2 (85.3 to 129.6)	66.6 (58.5 to 75.8)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with concentrations of antibodies against protein D (Anti-PD) equal to or above (>=) 100 ELISA units per milliliter (EL.U/mL)

End point title	Number of subjects with concentrations of antibodies against protein D (Anti-PD) equal to or above (>=) 100 ELISA units per milliliter (EL.U/mL)

End point description:

Cut-off values assessed were greater than or equal to 100 ELISA units per milliliter (EL.U/mL) in the sera of subjects.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Synflorix or Prevenar

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	284	285	95	96
Units: Subjects				
Anti-PD	284	285	39	18

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-polyribosyl-ribitol phosphate (anti-PRP) antibody concentration equal to or above 0.15 microgram per milliliter (µg/ mL)

End point title	Number of subjects with anti-polyribosyl-ribitol phosphate (anti-PRP) antibody concentration equal to or above 0.15 microgram per milliliter (µg/ mL)

End point description:

Cut-off values assessed were greater than or equal to 0.15 microgram per milliliter (µg/ mL) in the sera of subjects.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Tritanrix-HepB/Hiberix + Polio Sabin or Poliorix

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	140	140	49	47
Units: Subjects				
Anti-PRP	140	140	49	47

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-polyribosyl-ribitol phosphate (anti-PRP) antibody concentration equal to or above 1.0 microgram per milliliter (µg/mL)

End point title	Number of subjects with anti-polyribosyl-ribitol phosphate (anti-PRP) antibody concentration equal to or above 1.0 microgram per milliliter (µg/mL)

End point description:

Cut-off values assessed were greater than or equal to 1.0 microgram per milliliter (µg/mL) in the sera of subjects.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Tritanrix-HepB/Hiberix + Polio Sabin or Poliorix

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	140	140	49	47
Units: Subjects				
Anti-PRP	139	137	48	45

Statistical analyses

No statistical analyses for this end point

Secondary: Anti-polyribosyl-ribitol-phosphate (Anti-PRP) antibody concentrations

End point title	Anti-polyribosyl-ribitol-phosphate (Anti-PRP) antibody concentrations

End point description:

Seroprotection status, defined as Anti-PRP antibody concentrations >= 0.15 µg/mL and >= 1.0 µg/mL.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Tritanrix-HepB/Hiberix + Polio Sabin or Poliorix

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	140	140	49	47
Units: µg/mL				
geometric mean (confidence interval 95%)				
Anti-PRP	26.001 (21.196 to 31.894)	9.376 (7.941 to 11.071)	25.758 (17.669 to 37.548)	8.86 (6.87 to 11.427)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-diphtheria (Anti D) and anti-tetanus toxoids (Anti TT) antibody concentrations equal to or above 0.1 International Units per milliliter (IU/mL)

End point title	Number of subjects with anti-diphtheria (Anti D) and anti-tetanus toxoids (Anti TT) antibody concentrations equal to or above 0.1 International Units per milliliter (IU/mL)

End point description:

Cut-off values assessed were greater than or equal to 0.1 International Units per milliliter (IU/mL) in the sera of subjects.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Tritanrix-HepB/Hiberix + Polio Sabin or Poliorix

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	140	140	49	47
Units: Subjects				
Anti-diphtheria [N=140;140;49;47]	137	140	49	46
Anti-tetanus [N=139;140;48;47]	139	140	48	47

Statistical analyses

No statistical analyses for this end point

Secondary: Anti-diphtheria (Anti-D) and anti-tetanus toxoids (Anti-TT) antibody concentrations

End point title	Anti-diphtheria (Anti-D) and anti-tetanus toxoids (Anti-TT) antibody concentrations

End point description:

Seroprotection status, defined as Anti-diphtheria toxoid or anti-tetanus toxoid antibody concentrations >= 0.1 IU/mL.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Tritanrix-HepB/Hiberix + Polio Sabin or Poliorix

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	140	140	49	47
Units: IU/mL				
geometric mean (confidence interval 95%)				
Anti-diphtheria [N=140;140;49;47]	1.735 (1.468 to 2.052)	1.549 (1.356 to 1.771)	1.252 (0.97 to 1.616)	1.039 (0.786 to 1.375)
Anti-tetanus [N=139;140;48;47]	5.195 (4.508 to 5.985)	3.505 (3.148 to 3.904)	3.476 (2.637 to 4.583)	2.659 (2.091 to 3.381)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-Hepatitis B surface antigen (HBs) antibody concentrations equal to or above 10 milli-International Units per milliliter (mIU/mL)

End point title	Number of subjects with anti-Hepatitis B surface antigen (HBs) antibody concentrations equal to or above 10 milli-International Units per milliliter (mIU/mL)

End point description:

Cut-off values assessed were greater than or equal to 10 milli-International Units per milliliter (mIU/mL)

in the sera of subjects.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Tritanrix-HepB/Hiberix + Polio Sabin or Poliorix

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	140	133	49	44
Units: Subjects				
Anti-HBs	127	132	44	44

Statistical analyses

No statistical analyses for this end point

Secondary: Anti-hepatitis B surface antigen (HBs) antibody concentrations

End point title	Anti-hepatitis B surface antigen (HBs) antibody concentrations

End point description:

Seroprotection status, defined as Anti-HBs antibody concentrations >= 10 mIU/mL.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Tritanrix-HepB/Hiberix + Polio Sabin or Poliorix

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	140	133	49	44
Units: mIU/mL				
geometric mean (confidence interval 95%)				
Anti-HBs	101.6 (79.7 to 129.5)	756.7 (640.4 to 894.3)	129.8 (83.3 to 202.1)	792.2 (585.2 to 1072.2)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-polio type 1, 2 and 3 antibody titers equal to or above (>=) 8

End point title	Number of subjects with anti-polio type 1, 2 and 3 antibody

	titers equal to or above (>=) 8

End point description:

Titers were expressed as geometric mean titres (GMTs).

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Tritanrix-HepB/Hiberix + Polio Sabin or Poliorix

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	124	120	44	41
Units: Subjects				
Anti-polio 1 [N=123;120;44;40]	120	120	40	40
Anti-polio 2 [N=124;116;43;41]	124	115	43	41
Anti-polio 3 [N=120;108;38;39]	116	107	32	39

Statistical analyses

No statistical analyses for this end point

Secondary: Anti-polio type 1, 2 and 3 (Anti-Polio 1, 2 and 3) antibody titers

End point title	Anti-polio type 1, 2 and 3 (Anti-Polio 1, 2 and 3) antibody titers

End point description:

Seroprotection status, defined as Anti-polio type 1, Anti-polio type 2 and Anti-polio type 3 antibody titers >= 8.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Tritanrix-HepB/Hiberix + Polio Sabin or Poliorix

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	124	120	44	41
Units: Titers				
geometric mean (confidence interval 95%)				
Anti-polio 1 [N=123;120;44;40]	641.5 (485.7 to 847.3)	331.1 (269.5 to 406.8)	373.7 (207.4 to 673.4)	267.6 (187.5 to 381.8)
Anti-polio 2 [N=124;116;43;41]	523.6 (436.9 to 627.5)	276.8 (223 to 343.5)	546.2 (370.5 to 805.2)	303.5 (207.1 to 444.8)
Anti-polio 3 [N=120;108;38;39]	204.5 (164.3 to 254.5)	540.8 (433.7 to 674.3)	101.9 (59.5 to 174.5)	611.5 (449.4 to 832.2)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-Bordetella pertussis (anti-BPT) antibody concentrations equal to or above 15 ELISA unit per milli-liter (EL.U/mL) (seropositivity)

End point title	Number of subjects with anti-Bordetella pertussis (anti-BPT) antibody concentrations equal to or above 15 ELISA unit per milli-liter (EL.U/mL) (seropositivity)

End point description:

Cut-off values assessed were greater than or equal to 15 ELISA unit per milli-liter (EL.U/mL) in the sera of subjects seronegative before vaccination.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Tritanrix-HepB/Hiberix + Polio Sabin or Poliorix

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	138	133	48	45
Units: Subjects				
Anti-BPT	137	126	47	42

Statistical analyses

No statistical analyses for this end point

Secondary: Anti-Bordetella pertussis (anti-BPT) antibody concentrations

End point title	Anti-Bordetella pertussis (anti-BPT) antibody concentrations

End point description:

Seropositivity status, defined as Anti-BPT antibody concentrations >= 15 EL.U/mL.

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Tritanrix-HepB/Hiberix + Polio Sabin or Poliorix

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	138	133	48	45
Units: EL.U/mL				
geometric mean (confidence interval 95%)				
Anti-BPT	72.465 (65.787 to 79.82)	53.481 (47.215 to 60.579)	77.175 (64.433 to 92.435)	60.003 (46.394 to 77.604)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with vaccine response to Bordetella pertussis

End point title	Number of subjects with vaccine response to Bordetella pertussis

End point description:

Vaccine response to B. pertussis; defined as appearance of antibodies in subjects initially seronegative (S-) (i.e., concentrations < 15 EL.U/mL) or at least maintenance of pre-vaccination antibody concentrations in subjects who were initially seropositive (S+) (i.e., with concentrations >= 15 EL.U/mL).

End point type	Secondary

End point timeframe:

One month after the administration of the 3rd vaccine dose of Tritanrix-HepB/Hiberix + Polio Sabin or Poliorix

End point values	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group	Prevenar 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	128	119	46	41
Units: Subjects				
S- (N=128;119;46;41)	127	112	46	38
S+ (N=9;14;2;4)	9	12	1	2

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Solicited local and general symptoms: During the 4 days post vaccination Unsolicited AEs: During the 31 days post vaccination; SAEs: From study Day 0 until the 6-month extended safety follow-up.

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	13.0

Reporting groups

Reporting group title	Synflorix 1 Group

Reporting group description:

Subjects aged 6-12 weeks from the Philippines receiving Synflorix vaccine, co-administered with Tritanrix-HepB/Hiberix and Polio Sabin vaccines at 6, 10, 14 weeks of age.

Reporting group title	Synflorix 2 Group

Reporting group description:

Subjects aged 6-12 weeks from Poland receiving Synflorix vaccine co-administered with Tritanrix-HepB/Hiberix and Poliorix vaccines at 2, 4, 6 months of age.

Reporting group title	Prevenar 1 Group

Reporting group description:

Subjects aged 6-12 weeks from the Philippines receiving the Prevenar vaccine, co-administered with Tritanrix-HepB/Hiberix and Polio Sabin at 6, 10, 14 weeks of age.

Reporting group title	Prevenar 2 Group

Reporting group description:

Subjects aged 6-12 weeks from Poland receiving the Prevenar vaccine, co-administered with Tritanrix-HepB/Hiberix and Poliorix at 2, 4, 6 months of age.

Serious adverse events	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group
Total subjects affected by serious adverse events			
subjects affected / exposed	16 / 300 (5.33%)	52 / 303 (17.16%)	4 / 100 (4.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events			
General disorders and administration site conditions			
Pyrexia			
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 300 (0.33%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Ill-defined disorder			
alternative assessment type: Non-systematic			

subjects affected / exposed	0 / 300 (0.00%)	0 / 303 (0.00%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Immune system disorders			
Milk allergy			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Respiratory, thoracic and mediastinal disorders			
Bronchial hyperreactivity			
alternative assessment type: Non-systematic			
subjects affected / exposed	2 / 300 (0.67%)	0 / 303 (0.00%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 2	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumonitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	2 / 303 (0.66%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Bronchitis chronic			
subjects affected / exposed	0 / 300 (0.00%)	3 / 303 (0.99%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 3	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Investigations			
Hepatic enzyme increased			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	0 / 303 (0.00%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Injury, poisoning and procedural complications			
Contusion			
alternative assessment type: Non-systematic			

subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Head injury			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Congenital, familial and genetic disorders			
Atrial septal defect			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Double ureter			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Nervous system disorders			
Febrile convulsion			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	2 / 303 (0.66%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Blood and lymphatic system disorders			
Microcytic anaemia			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Thrombocytopenic purpura			
alternative assessment type: Non-systematic			

subjects affected / exposed	0 / 300 (0.00%)	0 / 303 (0.00%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastrointestinal disorders			
Diarrhoea			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	2 / 303 (0.66%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Enterocolitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	4 / 303 (1.32%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 4	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastrooesophageal reflux disease			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	3 / 303 (0.99%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 3	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Aphthous stomatitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Dyspepsia			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Enteritis			
alternative assessment type: Non-systematic			

subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastritis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Skin and subcutaneous tissue disorders			
Dermatitis atopic			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	0 / 303 (0.00%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Rash			
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 300 (0.33%)	0 / 303 (0.00%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Renal and urinary disorders			
Nephrotic syndrome			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infections and infestations			
Bronchitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	14 / 303 (4.62%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 16	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumonia			
alternative assessment type: Non-systematic			

subjects affected / exposed	7 / 300 (2.33%)	8 / 303 (2.64%)	1 / 100 (1.00%)
occurrences causally related to treatment / all	0 / 7	0 / 8	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastroenteritis			
alternative assessment type: Non-systematic			
subjects affected / exposed	5 / 300 (1.67%)	9 / 303 (2.97%)	2 / 100 (2.00%)
occurrences causally related to treatment / all	0 / 5	0 / 9	0 / 2
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastroenteritis rotavirus			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	3 / 303 (0.99%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 3	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Urinary tract infection			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	4 / 303 (1.32%)	1 / 100 (1.00%)
occurrences causally related to treatment / all	0 / 0	0 / 4	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Otitis media			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	3 / 303 (0.99%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 3	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Bronchopneumonia			
alternative assessment type: Non-systematic			
subjects affected / exposed	2 / 300 (0.67%)	0 / 303 (0.00%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 2	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Nasopharyngitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	3 / 303 (0.99%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 4	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Bacterial infection alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pharyngitis alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pyelonephritis acute alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	2 / 303 (0.66%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Respiratory tract infection alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	2 / 303 (0.66%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Rhinitis alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	2 / 303 (0.66%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Dengue fever alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 300 (0.33%)	0 / 303 (0.00%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastrointestinal infection alternative assessment type: Non-systematic			

subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Laryngitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Paronychia			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumonia mycoplasmal			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Upper respiratory tract infection			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Urosepsis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	0 / 303 (0.00%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Metabolism and nutrition disorders			
Dehydration			
alternative assessment type: Non-systematic			

subjects affected / exposed	2 / 300 (0.67%)	0 / 303 (0.00%)	2 / 100 (2.00%)
occurrences causally related to treatment / all	0 / 2	0 / 0	0 / 2
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Iron deficiency			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	1 / 303 (0.33%)	0 / 100 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Serious adverse events	Prevenar 2 Group		
Total subjects affected by serious adverse events			
subjects affected / exposed	19 / 103 (18.45%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events			
General disorders and administration site conditions			
Pyrexia			
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 103 (0.97%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Ill-defined disorder			
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 103 (0.97%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Immune system disorders			
Milk allergy			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Respiratory, thoracic and mediastinal disorders			
Bronchial hyperreactivity			
alternative assessment type: Non-systematic			

subjects affected / exposed	0 / 103 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Pneumonitis				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 103 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Bronchitis chronic				
subjects affected / exposed	1 / 103 (0.97%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Investigations				
Hepatic enzyme increased				
alternative assessment type: Non-systematic				
subjects affected / exposed	1 / 103 (0.97%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Injury, poisoning and procedural complications				
Contusion				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 103 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Head injury				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 103 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Congenital, familial and genetic disorders				
Atrial septal defect				
alternative assessment type: Non-systematic				

subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Double ureter			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Nervous system disorders			
Febrile convulsion			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Blood and lymphatic system disorders			
Microcytic anaemia			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Thrombocytopenic purpura			
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 103 (0.97%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Gastrointestinal disorders			
Diarrhoea			
alternative assessment type: Non-systematic			
subjects affected / exposed	3 / 103 (2.91%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 0		
Enterocolitis			
alternative assessment type: Non-systematic			

subjects affected / exposed	1 / 103 (0.97%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Gastrooesophageal reflux disease			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Aphthous stomatitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Dyspepsia			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Enteritis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Gastritis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Skin and subcutaneous tissue disorders			
Dermatitis atopic			
alternative assessment type: Non-systematic			

subjects affected / exposed	1 / 103 (0.97%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Rash				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 103 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Renal and urinary disorders				
Nephrotic syndrome				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 103 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Infections and infestations				
Bronchitis				
alternative assessment type: Non-systematic				
subjects affected / exposed	2 / 103 (1.94%)			
occurrences causally related to treatment / all	0 / 2			
deaths causally related to treatment / all	0 / 0			
Pneumonia				
alternative assessment type: Non-systematic				
subjects affected / exposed	3 / 103 (2.91%)			
occurrences causally related to treatment / all	0 / 3			
deaths causally related to treatment / all	0 / 0			
Gastroenteritis				
alternative assessment type: Non-systematic				
subjects affected / exposed	2 / 103 (1.94%)			
occurrences causally related to treatment / all	0 / 2			
deaths causally related to treatment / all	0 / 0			
Gastroenteritis rotavirus				
alternative assessment type: Non-systematic				

subjects affected / exposed	3 / 103 (2.91%)			
occurrences causally related to treatment / all	0 / 3			
deaths causally related to treatment / all	0 / 0			
Urinary tract infection				
alternative assessment type: Non-systematic				
subjects affected / exposed	1 / 103 (0.97%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Otitis media				
alternative assessment type: Non-systematic				
subjects affected / exposed	2 / 103 (1.94%)			
occurrences causally related to treatment / all	0 / 2			
deaths causally related to treatment / all	0 / 0			
Bronchopneumonia				
alternative assessment type: Non-systematic				
subjects affected / exposed	2 / 103 (1.94%)			
occurrences causally related to treatment / all	0 / 2			
deaths causally related to treatment / all	0 / 0			
Nasopharyngitis				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 103 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Bacterial infection				
alternative assessment type: Non-systematic				
subjects affected / exposed	1 / 103 (0.97%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Pharyngitis				
alternative assessment type: Non-systematic				
subjects affected / exposed	1 / 103 (0.97%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			

Pyelonephritis acute				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 103 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Respiratory tract infection				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 103 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Rhinitis				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 103 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Dengue fever				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 103 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Gastrointestinal infection				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 103 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Laryngitis				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 103 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Paronychia				
alternative assessment type: Non-systematic				

subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Pneumonia mycoplasmal			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Upper respiratory tract infection			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Urosepsis			
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 103 (0.97%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Metabolism and nutrition disorders			
Dehydration			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Iron deficiency			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 2 %

Non-serious adverse events	Synflorix 1 Group	Synflorix 2 Group	Prevenar 1 Group
Total subjects affected by non-serious adverse events			
subjects affected / exposed	296 / 300 (98.67%)	300 / 303 (99.01%)	95 / 100 (95.00%)
Vascular disorders			
Haematoma			
subjects affected / exposed	11 / 300 (3.67%)	0 / 303 (0.00%)	1 / 100 (1.00%)
occurrences (all)	11	0	1
Nervous system disorders			
Somnolence			
subjects affected / exposed	184 / 300 (61.33%)	256 / 303 (84.49%)	56 / 100 (56.00%)
occurrences (all)	346	547	95
General disorders and administration site conditions			
Pain			
subjects affected / exposed	258 / 300 (86.00%)	86 / 303 (28.38%)	82 / 100 (82.00%)
occurrences (all)	599	193	175
Swelling			
subjects affected / exposed	174 / 300 (58.00%)	226 / 303 (74.59%)	42 / 100 (42.00%)
occurrences (all)	324	467	93
Pyrexia			
subjects affected / exposed	255 / 300 (85.00%)	262 / 303 (86.47%)	88 / 100 (88.00%)
occurrences (all)	543	542	187
Gastrointestinal disorders			
Diarrhoea			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 300 (0.00%)	7 / 303 (2.31%)	0 / 100 (0.00%)
occurrences (all)	0	10	0
Skin and subcutaneous tissue disorders			
Erythema			
subjects affected / exposed	221 / 300 (73.67%)	265 / 303 (87.46%)	67 / 100 (67.00%)
occurrences (all)	420	360	124
Psychiatric disorders			
Irritability			
subjects affected / exposed	258 / 300 (86.00%)	289 / 303 (95.38%)	82 / 100 (82.00%)
occurrences (all)	590	732	170
Infections and infestations			
Upper respiratory tract infection			
alternative assessment type: Non-systematic			

subjects affected / exposed	84 / 300 (28.00%)	16 / 303 (5.28%)	25 / 100 (25.00%)
occurrences (all)	97	17	31
Rhinitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	38 / 300 (12.67%)	39 / 303 (12.87%)	7 / 100 (7.00%)
occurrences (all)	42	43	10
Bronchitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	9 / 300 (3.00%)	6 / 303 (1.98%)	0 / 100 (0.00%)
occurrences (all)	9	6	0
Gastroenteritis			
alternative assessment type: Non-systematic			
subjects affected / exposed	17 / 300 (5.67%)	3 / 303 (0.99%)	7 / 100 (7.00%)
occurrences (all)	19	3	7
Pharyngitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	4 / 300 (1.33%)	17 / 303 (5.61%)	2 / 100 (2.00%)
occurrences (all)	4	18	2
Nasopharyngitis			
subjects affected / exposed	0 / 300 (0.00%)	3 / 303 (0.99%)	0 / 100 (0.00%)
occurrences (all)	0	4	0
Urinary tract infection			
subjects affected / exposed	0 / 300 (0.00%)	4 / 303 (1.32%)	1 / 100 (1.00%)
occurrences (all)	0	4	1
Viral infection			
subjects affected / exposed	11 / 300 (3.67%)	1 / 303 (0.33%)	4 / 100 (4.00%)
occurrences (all)	11	1	4
Viral rhinitis			
subjects affected / exposed	15 / 300 (5.00%)	0 / 303 (0.00%)	2 / 100 (2.00%)
occurrences (all)	16	0	2
Metabolism and nutrition disorders			
Decreased appetite			
subjects affected / exposed	140 / 300 (46.67%)	79 / 303 (26.07%)	39 / 100 (39.00%)
occurrences (all)	231	152	65

Non-serious adverse events	Prevenar 2 Group		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	98 / 103 (95.15%)		
Vascular disorders			
Haematoma			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences (all)	0		
Nervous system disorders			
Somnolence			
subjects affected / exposed	85 / 103 (82.52%)		
occurrences (all)	173		
General disorders and administration site conditions			
Pain			
subjects affected / exposed	89 / 103 (86.41%)		
occurrences (all)	182		
Swelling			
subjects affected / exposed	75 / 103 (72.82%)		
occurrences (all)	160		
Pyrexia			
subjects affected / exposed	77 / 103 (74.76%)		
occurrences (all)	155		
Gastrointestinal disorders			
Diarrhoea			
alternative assessment type: Non-systematic			
subjects affected / exposed	8 / 103 (7.77%)		
occurrences (all)	9		
Skin and subcutaneous tissue disorders			
Erythema			
subjects affected / exposed	91 / 103 (88.35%)		
occurrences (all)	195		
Psychiatric disorders			
Irritability			
subjects affected / exposed	93 / 103 (90.29%)		
occurrences (all)	221		
Infections and infestations			
Upper respiratory tract infection			
alternative assessment type: Non-systematic			

subjects affected / exposed	12 / 103 (11.65%)		
occurrences (all)	13		
Rhinitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	9 / 103 (8.74%)		
occurrences (all)	9		
Bronchitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	6 / 103 (5.83%)		
occurrences (all)	7		
Gastroenteritis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences (all)	0		
Pharyngitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	3 / 103 (2.91%)		
occurrences (all)	4		
Nasopharyngitis			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences (all)	0		
Urinary tract infection			
subjects affected / exposed	1 / 103 (0.97%)		
occurrences (all)	1		
Viral infection			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences (all)	0		
Viral rhinitis			
subjects affected / exposed	0 / 103 (0.00%)		
occurrences (all)	0		
Metabolism and nutrition disorders			
Decreased appetite			
subjects affected / exposed	64 / 103 (62.14%)		
occurrences (all)	99		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
06 July 2006	Amendment 1 This study is designed to evaluate safety, reactogenicity and immunogenicity of GlaxoSmithKline (GSK) Biologicals' 10-valent pneumococcal conjugate vaccine compared to the licensed vaccine Prevenar when co-administered with DTPw-HBV/Hib and OPV or IPV vaccines. Both the immunization schedule for infants recommended by the WHO Expanded Programme on Immunization (EPI: 6, 10, 14 weeks of age) and a 2-4-6 months of age schedule were evaluated. Incidence of fever is increased in infants following co-administration of the pneumococcal vaccine with standard infant vaccines when compared to infants that received either pneumococcal vaccine or standard vaccines separately. Therefore, this study evaluated and compared the incidence of rectal fever >39.0°C for both pneumococcal conjugate vaccines. Immune response of the vaccines, when co-administered with DTPw-HBV/Hib and OPV or IPV vaccines, were also assessed according to the 2 different schedules.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported