Clinical trial results:
A phase III, open, randomized, controlled, multicentre, primary & booster study to demonstrate the non-inferiority of the MenC & Hib immune responses of GSK Biologicals' Hib-MenC vaccine co-administered with Infanrix™ penta versus NeisVac-C™ co-administered with Infanrix™ hexa when given as 2 primary doses at 3, 5 m of age & prior to a booster dose at 11 m, as well as the immunogenicity of the Hib-MenC vaccine given as a booster at 11 m & the persistence of antibodies prior to the booster dose.

Summary

EudraCT number	2005-005421-59
Trial protocol	FI IT
Global end of trial date	29 June 2007
Results information	
Result version number	v2 (current)
This version publication date	02 July 2016
First version publication date	24 April 2015
Version creation reason	• Correction of full data set Data (typos) were corrected in section: End points: - Number of subjects with solicited local symptoms for each dose, - Number of subjects with solicited general symptoms for each dose Adverse Events

Trial information

Trial identification	
Sponsor protocol code	106388-106390
Additional study identifiers	
ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT00327184
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,, 004 2089904466, GSKClinicalSupportHD@gsk.com
Scientific contact	Clinical Trials Call Center, GlaxoSmithKline Biologicals,, 004 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	01 March 2007
Is this the analysis of the primary completion data?	Yes
Primary completion date	04 April 2006
Global end of trial reached?	Yes
Global end of trial date	29 June 2007
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To demonstrate the non-inferiority of the Men-C and Hib immune responses induced by GSK Biologicals' Hib-MenC conjugate vaccine given concomitantly with Infanrix™ penta when administered as a 2-dose primary vaccination course (3-5 month schedule), compared to NeisVac-C™ co-administered with Infanrix™ hexa, in terms of: % of subjects with SBA-MenC titre >= 1:8 and of % of subjects with anti-PRP concentration >= 0.15µg/ml. (Criteria for meeting these objectives: 1 month post Dose II, the lower limit of the standardized asymptotic 95% confidence interval on the difference between the study vaccine group and (minus) the control group is >= to -5 % for the MenC response and >= to -10% for the Hib response).

Protection of trial subjects:

All subjects were supervised for 30 min after vaccination with appropriate medical treatment readily available. Vaccines were administered by qualified and trained personnel. Only eligible subjects that had no contraindications to any components of the vaccines were vaccinated. Subjects were followed-up for 30 days after each/last vaccination.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	04 April 2006
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	Finland: 560
Country: Number of subjects enrolled	Italy: 149
Worldwide total number of subjects	709
EEA total number of subjects	709

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)	709
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	Primary Study
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Not blinded

Arms

Are arms mutually exclusive?	Yes
Arm title	Menitorix™ Group

Arm description:

Subjects receive 2 primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age of Menitorix™+ Infanrix™ penta vaccines.

Arm type	Experimental
Investigational medicinal product name	Menitorix™
Investigational medicinal product code	
Other name	Haemophilus influenzae type b- and meningococcal serogroup C (vaccine)
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Two primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age.

Investigational medicinal product name	Infanrix™ penta
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Two primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age.

Arm title	NeisVac-C™ Group

Arm description:

Subjects receive 2 primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age of NeisVac-C™ + Infanrix™ hexa vaccines.

Arm type	Active comparator
Investigational medicinal product name	Infanrix™ hexa
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Two primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age

Investigational medicinal product name	NeisVac-C™
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Two primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age

Number of subjects in period 1	Menitorix™ Group	NeisVac-C™ Group
Started	355	354
Completed	346	349
Not completed	9	5
Consent withdrawn by subject	-	1
Unspecified	1	1
Non-serious Adverse Event	5	2
Lost to follow-up	-	1
Serious Adverse Event	3	-

Period 2

Period 2 title	Booster Study
Is this the baseline period?	No
Allocation method	Randomised - controlled
Blinding used	Not blinded

Arms

Are arms mutually exclusive?	Yes
Arm title	Menitorix™ Group

Arm description:

Subjects receive 2 primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age of Menitorix™+ Infanrix™ penta vaccines.

Arm type	Experimental
Investigational medicinal product name	Menitorix™
Investigational medicinal product code	
Other name	Haemophilus influenzae type b- and meningococcal serogroup C (vaccine)
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Two primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age.

Investigational medicinal product name	Infanrix™ penta
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection

Routes of administration	Intramuscular use

Dosage and administration details:

Two primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age.

Arm title	NeisVac-C™ Group

Arm description:

Subjects receive 2 primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age of NeisVac-C™ + Infanrix™ hexa vaccines.

Arm type	Active comparator
Investigational medicinal product name	Infanrix™ hexa
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Two primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age

Investigational medicinal product name	NeisVac-C™
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Two primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age

Number of subjects in period 2[1]	Menitorix™ Group	NeisVac-C™ Group
Started	340	350
Completed	338	345
Not completed	2	5
Consent withdrawn by subject	2	1
Lost to follow-up	-	4

Notes:

[1] - The number of subjects starting the period is not consistent with the number completing the preceding period. It is expected the number of subjects starting the subsequent period will be the same as the number completing the preceding period.
Justification: Not all subjects who participated in the Primary vaccination Phase returned for the Booster vaccination.

Baseline characteristics

Reporting groups	
Reporting group title	Menitorix™ Group
Reporting group description:	
Subjects receive 2 primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age of Menitorix™+ Infanrix™ penta vaccines.	
Reporting group title	NeisVac-C™ Group
Reporting group description:	
Subjects receive 2 primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age of NeisVac-C™ + Infanrix™ hexa vaccines.	

Reporting group values	Menitorix™ Group	NeisVac-C™ Group	Total
Number of subjects	355	354	709
Age categorical			
Units: Subjects			
In utero			0
Preterm newborn infants (gestational age < 37 wks)			0
Newborns (0-27 days)			0
Infants and toddlers (28 days-23 months)			0
Children (2-11 years)			0
Adolescents (12-17 years)			0
Adults (18-64 years)			0
From 65-84 years			0
85 years and over			0
Age continuous			
Units: weeks			
geometric mean	10.8	10.8	
standard deviation	± 1.19	± 1.21	-
Gender categorical			
Units: Subjects			
Female	170	158	328
Male	185	196	381

End points

End points reporting groups

Reporting group title	Menitorix™ Group
Reporting group description:	
Subjects receive 2 primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age of Menitorix™+ Infanrix™ penta vaccines.	
Reporting group title	NeisVac-C™ Group
Reporting group description:	
Subjects receive 2 primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age of NeisVac-C™ + Infanrix™ hexa vaccines.	
Reporting group title	Menitorix™ Group
Reporting group description:	
Subjects receive 2 primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age of Menitorix™+ Infanrix™ penta vaccines.	
Reporting group title	NeisVac-C™ Group
Reporting group description:	
Subjects receive 2 primary vaccination doses at 3 and 5 months of age and a booster dose at 11 months of age of NeisVac-C™ + Infanrix™ hexa vaccines.	

Primary: Number of subjects with rSBA-MenC antibody titers ≥ 1:8

End point title	Number of subjects with rSBA-MenC antibody titers ≥ 1:8
End point description:	
End point type	Primary
End point timeframe:	
One month after the second dose at Month 3 [PII(M3)]	

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	323	313		
Units: Subjects				
rSBA-MenC PII(M3) [N=323;313]	320	313		

Statistical analyses

Statistical analysis title	Difference in % of subjects with rSBA-MenC titer
Statistical analysis description:	
To demonstrate the non-inferiority of the meningococcal serogroup C immune response induced by Menitorix vaccine given concomitantly with Infanrix™ penta vaccine when administered as a 2-dose primary vaccination course (3-5 month schedule), compared to NeisVac-C vaccine co-administered with Infanrix™ hexa vaccine, in terms of percentage of subjects with functional anti-meningococcal serogroup C activity/antibody (rSBA-MenC) titer ≥ 1:8.	
Comparison groups	Menitorix™ Group v NeisVac-C™ Group

Number of subjects included in analysis	636
Analysis specification	Pre-specified
Analysis type	non-inferiority[1]
Parameter estimate	Difference in percentage
Point estimate	-0.93
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.69
upper limit	0.29

Notes:

[1] - Criterion for meeting this objective: One month after the second dose, the lower limit of the standardized asymptotic 95%
confidence interval (CI) on the difference between the study vaccine group and (minus) the control group was greater than
or equal to -5 %.

Primary: Number of subjects with anti-PRP antibody concentrations ≥ 0.15 µg/mL

End point title	Number of subjects with anti-PRP antibody concentrations ≥ 0.15 µg/mL

End point description:

End point type	Primary

End point timeframe:

One month after the second dose at Month 3 [PII(M3)]

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	325	314		
Units: Subjects				
Anti-PRP PII(M3) [N=325;314]	315	300		

Statistical analyses

Statistical analysis title	Difference in subjects with anti-PRP ≥ 0.15 µg/mL

Statistical analysis description:

To demonstrate the non-inferiority of the Hib immune response induced by Menitorix vaccine given concomitantly with Infanrix penta vaccine when administered as a 2-dose primary vaccination course (3-5 month schedule), compared to NeisVac-C vaccine co-administered with Infanrix hexa vaccine, in terms of percentage of subjects with anti-polyribosylribitol phosphate (anti-PRP) antibody concentration ≥ 0.15 µg/mL.

Comparison groups	Menitorix™ Group v NeisVac-C™ Group
Number of subjects included in analysis	639
Analysis specification	Pre-specified
Analysis type	non-inferiority[2]
Parameter estimate	Difference in percentage
Point estimate	1.38

Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.67
upper limit	4.62

Notes:

[2] - Criterion for meeting this objective: One month after the second dose, the lower limit of the standardized asymptotic 95%
CI on the difference between the study vaccine group and (minus) the control group was greater than or equal to -10 %.

Secondary: Number of subjects with rSBA-MenC antibody titre ≥ 1:128

End point title	Number of subjects with rSBA-MenC antibody titre ≥ 1:128

End point description:

End point type	Secondary

End point timeframe:

One month after the second dose at Month 3 [PII(M3)]

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	323	313		
Units: Subjects				
rSBA-MenC PII(M3) [N=323;313]	266	301		

Statistical analyses

No statistical analyses for this end point

Secondary: rSBA-MenC antibody titres

End point title	rSBA-MenC antibody titres

End point description:

End point type	Secondary

End point timeframe:

One month after the second dose at Month 3 [PII(M3)]

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	323	313		
Units: Titre				
geometric mean (confidence interval 95%)	466.1 (399.5 to 543.7)	1362.6 (1189.1 to 1561.4)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-serogroup C polysaccharide (anti-PSC) antibody concentrations ≥ 0.3 µg/mL, ≥ 2 µg/mL

End point title	Number of subjects with anti-serogroup C polysaccharide (anti-PSC) antibody concentrations ≥ 0.3 µg/mL, ≥ 2 µg/mL

End point description:

End point type	Secondary

End point timeframe:

One month after the second dose at Month 3 [PII(M3)]

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	324	314		
Units: Subjects				
Anti-PSC ≥ 0.3 µg/mL	324	314		
Anti-PSC ≥ 2 µg/mL	316	313		

Statistical analyses

No statistical analyses for this end point

Secondary: Concentration of anti-PSC antibodies

End point title	Concentration of anti-PSC antibodies

End point description:

End point type	Secondary

End point timeframe:

One month after the second dose at Month 3 [PII(M3)]

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	324	314		
Units: µg/mL				
geometric mean (confidence interval 95%)				
Anti-PSC	9.9 (9.13 to 10.73)	16.07 (15.03 to 17.19)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-polyribosylribitol phosphate (anti-PRP) antibodies ≥ 1 µg/mL

End point title	Number of subjects with anti-polyribosylribitol phosphate (anti-PRP) antibodies ≥ 1 µg/mL

End point description:

End point type	Secondary

End point timeframe:

One month after the second dose at Month 3 [PII(M3)]

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	325	314		
Units: Subjects				
Anti-PRP PII(M3) ≥ 1 µg/mL	256	231		

Statistical analyses

No statistical analyses for this end point

Secondary: Concentration of anti-PRP antibodies

End point title	Concentration of anti-PRP antibodies

End point description:

End point type	Secondary

End point timeframe:

One month after the second dose at Month 3 [PII(M3)]

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	325	314		
Units: µg/mL				
geometric mean (confidence interval 95%)				
Anti-PRP	4.236 (3.503 to 5.123)	2.487 (2.105 to 2.94)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-hepatitis B surface antigen (anti-HBs) antibodies ≥ 10 mIU/mL

End point title	Number of subjects with anti-hepatitis B surface antigen (anti-HBs) antibodies ≥ 10 mIU/mL

End point description:

End point type	Secondary

End point timeframe:

One month after the second dose at Month 3 [PII(M3)]

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	302	296		
Units: Subjects				
Anti-HBs	297	282		

Statistical analyses

No statistical analyses for this end point

Secondary: Concentration of anti-HBs antibodies

End point title	Concentration of anti-HBs antibodies

End point description:

End point type	Secondary

End point timeframe:

One month after the second dose at Month 3 [PII(M3)]

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	302	296		
Units: mIU/mL				
geometric mean (confidence interval 95%)				
Anti-HBs	704.7 (605.3 to 820.4)	390.8 (324.8 to 470.1)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with rSBA-MenC antibody titer ≥ 1:8 and ≥ 1:128

End point title	Number of subjects with rSBA-MenC antibody titer ≥ 1:8 and ≥ 1:128

End point description:

End point type	Secondary

End point timeframe:

At Pre (Month 11 of age) and Post (Month 12 of age) Booster vaccination

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	310	310		
Units: Subjects				
rSBA-MenC ≥ 1:8 Pre [N=303;308]	288	308		
rSBA-MenC ≥ 1:8 Post [N=310;310]	310	310		
rSBA-MenC ≥ 1:128 Pre [N=303;308]	165	245		
rSBA-MenC ≥ 1:128 Post [N=310;310]	304	310		

Statistical analyses

No statistical analyses for this end point

Secondary: rSBA-MenC antibody titres

End point title	rSBA-MenC antibody titres

End point description:

End point type	Secondary

End point timeframe:

At Pre (Month 11 of age) and Post (Month 12 of age) Booster vaccination

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	310	310		
Units: Titre				
geometric mean (confidence interval 95%)				
rSBA-MenC Pre [N=303;308]	124.2 (107.5 to 143.4)	292 (262 to 325.4)		
rSBA-MenC Post [N=310;310]	1861.8 (1646.2 to 2105.6)	4317.8 (3912.3 to 4765.4)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-PSC antibodies ≥ 0.3 µg/mL and ≥ 2 µg/mL

End point title	Number of subjects with anti-PSC antibodies ≥ 0.3 µg/mL and ≥ 2 µg/mL

End point description:

End point type	Secondary

End point timeframe:

At Pre (Month 11 of age) and Post (Month 12 of age) Booster vaccination

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	311	313		
Units: Subjects				
Anti-PSC ≥ 0.3 µg/mL Pre [N=306;310]	284	303		
Anti-PSC ≥ 0.3 µg/mL Post [N=311;313]	311	313		
Anti-PSC ≥ 2 µg/mL Pre [N=306;310]	70	99		
Anti-PSC ≥ 2µg/mL Post [N=311;313]	251	313		

Statistical analyses

No statistical analyses for this end point

Secondary: Concentration of anti-PSC antibodies

End point title	Concentration of anti-PSC antibodies

End point description:

End point type	Secondary

End point timeframe:

At Pre (Month 11 of age) and Post (Month 12 of age) Booster vaccination

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	311	313		
Units: µg/mL				
geometric mean (confidence interval 95%)				
Anti-PSC Pre [N=306;310]	1.06 (0.96 to 1.17)	1.34 (1.23 to 1.46)		
Anti-PSC Post [N=311;313]	4.13 (3.78 to 4.52)	10.4 (9.79 to 11.05)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-PRP antibodies ≥ 0.15 µg/mL and ≥ 1 µg/mL

End point title	Number of subjects with anti-PRP antibodies ≥ 0.15 µg/mL and ≥ 1 µg/mL

End point description:

End point type	Secondary

End point timeframe:

At Pre (Month 11 of age) and Post (Month 12 of age) Booster vaccination

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	311	314		
Units: Subjects				
Anti-PRP ≥ 0.15 µg/mL Pre [N=308;309]	263	268		
Anti-PRP ≥ 0.15 µg/mL Post [N=311;314]	311	314		
Anti-PRP ≥ 1 µg/mL Pre [N=308;309]	161	102		
Anti-PRP ≥ 1 µg/mL Post [N=311;314]	309	312		

Statistical analyses

No statistical analyses for this end point

Secondary: Concentration of anti-PRP antibodies

End point title	Concentration of anti-PRP antibodies

End point description:

End point type	Secondary

End point timeframe:

At Pre (Month 11 of age) and Post (Month 12 of age) Booster vaccination

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	311	314		
Units: µg/mL				
geometric mean (confidence interval 95%)				
Anti-PRP Pre [N=308;309]	0.929 (0.783 to 1.102)	0.573 (0.498 to 0.66)		
Anti-PRP Post [N=311;314]	30.49 (26.735 to 34.771)	17.415 (15.278 to 19.851)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-HBs antibodies ≥ 10 mIU/mL and ≥ 100 mIU/mL

End point title	Number of subjects with anti-HBs antibodies ≥ 10 mIU/mL and ≥ 100 mIU/mL

End point description:

End point type	Secondary

End point timeframe:

At Pre (Month 11 of age) and Post (Month 12 of age) Booster vaccination

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	305	305		
Units: Subjects				
Anti-HBs ≥ 10 mIU/mL Pre [N=296;305]	291	286		
Anti-HBs ≥ 10 mIU/mL Post [N=305;304]	304	301		
Anti-HBs ≥ 100 mIU/mL Pre [N=296;305]	204	166		
Anti-HBs ≥ 100 mIU/mL Post [N=305;304]	298	288		

Statistical analyses

No statistical analyses for this end point

Secondary: Concentration of anti-HBs antibodies

End point title	Concentration of anti-HBs antibodies

End point description:

End point type	Secondary

End point timeframe:

At Pre (Month 11 of age) and Post (Month 12 of age) Booster vaccination

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	305	305		
Units: mIU/mL				
geometric mean (confidence interval 95%)				
Anti-HBs Pre [N=296;305]	176.1 (152.7 to 203.1)	104.8 (89.9 to 122.2)		
Anti-HBs Post [N=305;304]	4583.4 (3918.4 to 5361.4)	2813.5 (2352.5 to 3364.9)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with solicited local symptoms for each dose

End point title	Number of subjects with solicited local symptoms for each dose

End point description:

End point type	Secondary

End point timeframe:

During the 4-days (Day 0-3) post-vaccination

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	355	354		
Units: Subjects				
Pain Dose 1 [N=355;354]	67	108		
Redness Dose 1 [N=355;354]	97	114		
Swelling Dose 1 [N=355;354]	51	77		
Pain Dose 2 [N=346;351]	55	83		
Redness Dose 2 [N=346;351]	142	163		
Swelling Dose 2 [N=346;351]	76	95		
Pain Across Doses [N=355;354]	92	146		
Redness Across Doses [N=355;354]	174	195		
Swelling Across Doses [N=355;354]	105	134		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with solicited general symptoms for each dose

End point title	Number of subjects with solicited general symptoms for each dose

End point description:

End point type	Secondary

End point timeframe:

During the 4-days (Day 0-3) post-vaccination

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	355	354		
Units: Subjects				
Drowsiness Dose 1 [N=355;354]	173	188		
Fever Dose 1 [N=355;354]	49	125		
Irritability Dose 1 [N=355;354]	193	217		
Loss of appetite Dose 1 [N=355;354]	68	70		
Drowsiness Dose 2 [N=346;351]	110	157		
Fever Dose 2 [N=346;351]	95	141		
Irritability Dose 2 [N=346;351]	170	196		

Loss of appetite Dose 2 [N=346;351]	68	77		
Drowsiness Across Doses [N=355;354]	209	232		
Fever Across Doses [N=355;354]	123	199		
Irritability Across Doses [N=355;354]	245	273		
Loss of appetite Across Doses [N=355;354]	113	117		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with unsolicited Adverse Events AE(s)

End point title	Number of subjects with unsolicited Adverse Events AE(s)

End point description:

End point type	Secondary

End point timeframe:

During the 30 days after each vaccination (Primary study)

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	355	354		
Units: Subjects				
Any AE(s)	149	149		

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:

End point type	Secondary

End point timeframe:

During the Primary study

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	355	354		
Units: Subjects				
Any SAE(s)	10	4		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with solicited local symptoms

End point title	Number of subjects with solicited local symptoms

End point description:

End point type	Secondary

End point timeframe:

During the 4-day (Day 0-3) post-booster vaccination (Booster study)

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	340	350		
Units: Subjects				
Pain	112	151		
Redness	159	176		
Swelling	101	122		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with solicited general symptoms

End point title	Number of subjects with solicited general symptoms

End point description:

End point type	Secondary

End point timeframe:

During the 4-day (Day 0-3) post-booster vaccination (Booster study)

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	340	350		
Units: Subjects				
Drowsiness	123	153		
Irritability	176	199		
Loss of appetite	95	109		
Fever	103	133		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with unsolicited Adverse Events

End point title	Number of subjects with unsolicited Adverse Events

End point description:

End point type	Secondary

End point timeframe:

During the 30 days after each vaccination (Booster study)

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	340	350		
Units: Subjects				
Any AE(s)	143	141		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with Serious Adverse Events

End point title	Number of subjects with Serious Adverse Events

End point description:

End point type	Secondary

End point timeframe:

Since the end of the primary phase until the start of the booster vaccination

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	355	354		
Units: Subjects				
Any SAE(s)	10	10		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with Serious Adverse Events

End point title	Number of subjects with Serious Adverse Events

End point description:

8 subjects had their last study visit/last study contact 27–28 days after the last vaccination of the primary phase.

End point type	Secondary

End point timeframe:

From the start of the Booster vaccination until the end of the Booster study

End point values	Menitorix™ Group	NeisVac-C™ Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	355	354		
Units: Subjects				
Any SAE(s)	10	10		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Solicited local and general adverse events: Days 0-3 post-vaccination period after each Primary and Booster dose;
Unsolicited AE(s): Days 0-30 after Primary and Booster vaccination;
Serious AE(s): From the end of Primary until the start of Booster.

Assessment type	Non-systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	9.1

Reporting groups

Reporting group title	Group Menitorix™ Primary Vaccination

Reporting group description:

Subjects receive 2 primary vaccination doses of Infanrix™ penta and Menitorix™ at 3 and 5 months of age.

Reporting group title	Group NeisVac-C Booster Vaccination

Reporting group description:

Subjects received a booster dose at 11 months of age of NeisVac-C™ + Infanrix™ hexa vaccines.

Reporting group title	Group Menitorix™ Booster vaccination

Reporting group description:

Subjects received a booster dose at 11 months of age of Menitorix™ + Infanrix™ penta vaccines.

Reporting group title	Group NeisVac-C Primary Vaccination

Reporting group description:

Subjects receive 2 primary vaccination doses of NeisVac-C™ and Infanrix™ hexa at 3 and 5 months of age.

Serious adverse events	Group Menitorix™ Primary Vaccination	Group NeisVac-C Booster Vaccination	Group Menitorix™ Booster vaccination
Total subjects affected by serious adverse events			
subjects affected / exposed	10 / 355 (2.82%)	8 / 350 (2.29%)	5 / 340 (1.47%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0
Investigations			
Neurological examination			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Injury, poisoning and procedural complications			
Concussion			

subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Skull fracture			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Foreign body trauma			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Poisoning			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Tibia fracture			
subjects affected / exposed	0 / 355 (0.00%)	0 / 350 (0.00%)	0 / 340 (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
Congenital, familial and genetic disorders			
Aorticopulmonary septal defect			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Interruption of aortic arch			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Laurence-moon-bardet-biedl syndrome			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Nervous system disorders			

Petit mal epilepsy			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Tremor neonatal			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Febrile convulsion			
subjects affected / exposed	0 / 355 (0.00%)	1 / 350 (0.29%)	0 / 340 (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
Reproductive system and breast disorders			
Epididymitis			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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 disorders			
Fatigue			
subjects affected / exposed	0 / 355 (0.00%)	0 / 350 (0.00%)	0 / 340 (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
Respiratory, thoracic and mediastinal disorders			
Sleep apnea syndrome			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Asthma			
subjects affected / exposed	0 / 355 (0.00%)	2 / 350 (0.57%)	0 / 340 (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
Musculoskeletal and connective tissue disorders			
Arthritis reactive			

subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Infections and infestations			
Bronchiolitis			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Gastroenteritis			
subjects affected / exposed	6 / 355 (1.69%)	1 / 350 (0.29%)	3 / 340 (0.88%)
occurrences causally related to treatment / all	0 / 6	0 / 1	0 / 3
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Oral candidiasis			
subjects affected / exposed	0 / 355 (0.00%)	0 / 350 (0.00%)	0 / 340 (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
Pneumococcal sepsis			
subjects affected / exposed	0 / 355 (0.00%)	0 / 350 (0.00%)	0 / 340 (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
Pyelonephritis			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Pyelonephritis acute			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Urinary tract infection			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	0 / 340 (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
Bronchitis chronic			

subjects affected / exposed	0 / 355 (0.00%)	1 / 350 (0.29%)	0 / 340 (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
Bronchitis			
subjects affected / exposed	1 / 355 (0.28%)	0 / 350 (0.00%)	1 / 340 (0.29%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastroenteritis rotavirus			
subjects affected / exposed	0 / 355 (0.00%)	1 / 350 (0.29%)	1 / 340 (0.29%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Viral tonsillitis			
subjects affected / exposed	0 / 355 (0.00%)	0 / 350 (0.00%)	0 / 340 (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
Pneumonia			
subjects affected / exposed	0 / 355 (0.00%)	1 / 350 (0.29%)	1 / 340 (0.29%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Laryngitis			
subjects affected / exposed	0 / 355 (0.00%)	1 / 350 (0.29%)	0 / 340 (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	Group NeisVac-C Primary Vaccination		
Total subjects affected by serious adverse events			
subjects affected / exposed	10 / 354 (2.82%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Investigations			
Neurological examination			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		

Injury, poisoning and procedural complications			
Concussion			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Skull fracture			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Foreign body trauma			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Poisoning			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Tibia fracture			
subjects affected / exposed	1 / 354 (0.28%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Congenital, familial and genetic disorders			
Aorticopulmonary septal defect			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Interruption of aortic arch			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Laurence-moon-bardet-biedl syndrome			

subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Nervous system disorders			
Petit mal epilepsy			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Tremor neonatal			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Febrile convulsion			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Reproductive system and breast disorders			
Epididymitis			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Gastrointestinal disorders			
Fatigue			
subjects affected / exposed	1 / 354 (0.28%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Respiratory, thoracic and mediastinal disorders			
Sleep apnea syndrome			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Asthma			

subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Musculoskeletal and connective tissue disorders			
Arthritis reactive			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Bronchiolitis			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Gastroenteritis			
subjects affected / exposed	3 / 354 (0.85%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 0		
Oral candidiasis			
subjects affected / exposed	1 / 354 (0.28%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Pneumococcal sepsis			
subjects affected / exposed	1 / 354 (0.28%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Pyelonephritis			
subjects affected / exposed	1 / 354 (0.28%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Pyelonephritis acute			
subjects affected / exposed	1 / 354 (0.28%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Urinary tract infection			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Bronchitis chronic			
subjects affected / exposed	3 / 354 (0.85%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 0		
Bronchitis			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Gastroenteritis rotavirus			
subjects affected / exposed	1 / 354 (0.28%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Viral tonsillitis			
subjects affected / exposed	1 / 354 (0.28%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Pneumonia			
subjects affected / exposed	0 / 354 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Laryngitis			
subjects affected / exposed	0 / 354 (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: 5 %

Non-serious adverse events	Group Menitorix™ Primary Vaccination	Group NeisVac-C Booster Vaccination	Group Menitorix™ Booster vaccination
Total subjects affected by non-serious adverse events			
subjects affected / exposed	245 / 355 (69.01%)	199 / 350 (56.86%)	176 / 340 (51.76%)
General disorders and administration site conditions			
Pain			
alternative assessment type: Systematic			
subjects affected / exposed	92 / 355 (25.92%)	151 / 350 (43.14%)	112 / 340 (32.94%)
occurrences (all)	92	151	112
Redness			
alternative assessment type: Systematic			
subjects affected / exposed	174 / 355 (49.01%)	176 / 350 (50.29%)	159 / 340 (46.76%)
occurrences (all)	174	176	159
Swelling			
alternative assessment type: Systematic			
subjects affected / exposed	105 / 355 (29.58%)	122 / 350 (34.86%)	101 / 340 (29.71%)
occurrences (all)	105	122	101
Drowsiness			
alternative assessment type: Systematic			
subjects affected / exposed	209 / 355 (58.87%)	153 / 350 (43.71%)	123 / 340 (36.18%)
occurrences (all)	209	153	123
Fever			
alternative assessment type: Systematic			
subjects affected / exposed	123 / 355 (34.65%)	133 / 350 (38.00%)	103 / 340 (30.29%)
occurrences (all)	123	133	103
Irritability			
alternative assessment type: Systematic			
subjects affected / exposed	245 / 355 (69.01%)	199 / 350 (56.86%)	176 / 340 (51.76%)
occurrences (all)	245	199	176
Loss of appetite			
alternative assessment type: Systematic			
subjects affected / exposed	113 / 355 (31.83%)	109 / 350 (31.14%)	95 / 340 (27.94%)
occurrences (all)	113	109	95
Injection site induration			
alternative assessment type: Systematic			

subjects affected / exposed	33 / 355 (9.30%)	20 / 350 (5.71%)	18 / 340 (5.29%)
occurrences (all)	33	20	18
Pyrexia			
subjects affected / exposed	13 / 355 (3.66%)	19 / 350 (5.43%)	18 / 340 (5.29%)
occurrences (all)	13	19	18
Infections and infestations			
Rhinitis			
subjects affected / exposed	21 / 355 (5.92%)	11 / 350 (3.14%)	9 / 340 (2.65%)
occurrences (all)	21	11	9
Upper respiratory tract infection			
subjects affected / exposed	7 / 355 (1.97%)	33 / 350 (9.43%)	17 / 340 (5.00%)
occurrences (all)	7	33	17
Otitis media			
subjects affected / exposed	8 / 355 (2.25%)	29 / 350 (8.29%)	44 / 340 (12.94%)
occurrences (all)	8	29	44

Non-serious adverse events	Group NeisVac-C Primary Vaccination		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	273 / 354 (77.12%)		
General disorders and administration site conditions			
Pain			
alternative assessment type: Systematic			
subjects affected / exposed	146 / 354 (41.24%)		
occurrences (all)	146		
Redness			
alternative assessment type: Systematic			
subjects affected / exposed	195 / 354 (55.08%)		
occurrences (all)	195		
Swelling			
alternative assessment type: Systematic			
subjects affected / exposed	134 / 354 (37.85%)		
occurrences (all)	134		
Drowsiness			
alternative assessment type: Systematic			

subjects affected / exposed	232 / 354 (65.54%)		
occurrences (all)	232		
Fever			
alternative assessment type: Systematic			
subjects affected / exposed	199 / 354 (56.21%)		
occurrences (all)	199		
Irritability			
alternative assessment type: Systematic			
subjects affected / exposed	273 / 354 (77.12%)		
occurrences (all)	273		
Loss of appetite			
alternative assessment type: Systematic			
subjects affected / exposed	117 / 354 (33.05%)		
occurrences (all)	117		
Injection site induration			
alternative assessment type: Systematic			
subjects affected / exposed	26 / 354 (7.34%)		
occurrences (all)	26		
Pyrexia			
subjects affected / exposed	12 / 354 (3.39%)		
occurrences (all)	12		
Infections and infestations			
Rhinitis			
subjects affected / exposed	15 / 354 (4.24%)		
occurrences (all)	15		
Upper respiratory tract infection			
subjects affected / exposed	16 / 354 (4.52%)		
occurrences (all)	16		
Otitis media			
subjects affected / exposed	9 / 354 (2.54%)		
occurrences (all)	9		

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