Clinical trial results:
A phase III, open, controlled study to evaluate immunogenicity of GSK Biologicals' MenACWY-TT conjugate vaccine administered intramuscularly to at risk subjects from 1 to less than 18 years and to an age-matched control group of healthy subjects

Due to the EudraCT – Results system being out of service between 31 July 2015 and 12 January 2016, these results have been published in compliance with revised timelines.

Summary

EudraCT number	2011-002410-36
Trial protocol	CZ Outside EU/EEA
Global end of trial date	03 March 2015

Results information

Result version number	v1 (current)
This version publication date	27 May 2016
First version publication date	27 May 2016

Trial information

Trial identification

Sponsor protocol code	115524

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01641042
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)	Yes
EMA paediatric investigation plan number(s)	EMEA-000429-PIP01-08
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	03 March 2015
Is this the analysis of the primary completion data?	Yes
Primary completion date	10 October 2014
Global end of trial reached?	Yes
Global end of trial date	03 March 2015
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To evaluate the immunogenicity of 1 and 2 doses of MenACWY-TT administered to at risk subjects compared to age-matched healthy subjects in terms of rSBA and hSBA vaccine response rates for N. meningitidis serogroups A, C, W-135 and Y.

Protection of trial subjects:

All subjects were supervised for 30 minutes after vaccination/product administration with appropriate medical treatment readily available. Vaccines/products were administered by qualified and trained personnel. Vaccines/products were administered only to eligible subjects that had no contraindications to any components of the vaccines/products. Subjects were followed-up for 31 days after the last vaccination/product administration.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	10 September 2012
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	Czech Republic: 62
Country: Number of subjects enrolled	United States: 24
Worldwide total number of subjects	86
EEA total number of subjects	62

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)	0
Children (2-11 years)	36
Adolescents (12-17 years)	50
Adults (18-64 years)	0
From 65 to 84 years	0

85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

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

Period 1

Period 1 title	Overall Period (overall period)
Is this the baseline period?	Yes
Allocation method	Non-randomised - controlled
Blinding used	Not blinded

Arms

Are arms mutually exclusive?	Yes
Arm title	Nimenrix™ At risk Group

Arm description:

Subjects with an increased risk for meningococcal disease such as anatomic asplenia or some degree of functional asplenia received two doses of the MenACWY-TT vaccine at Visit 1 (Month 0) and Visit 3 (Month 2).

Arm type	Experimental
Investigational medicinal product name	NimenrixTM
Investigational medicinal product code	
Other name	Meningococcal vaccine GSK134612
Pharmaceutical forms	Powder and solvent for solution for injection
Routes of administration	Intramuscular use

Dosage and administration details:

2 doses administered intramuscularly in the anterolateral thigh muscle of the non-dominant leg for subjects aged 12 months to 2 years and in the deltoid of the non-dominant arm for older subjects.

Arm title	Nimenrix™ Healthy Group

Arm description:

Subjects age matched with the subjects in the At-risk Group received two doses of the MenACWY-TT vaccine at Visit 1 (Month 0) and Visit 3 (Month 2).

Arm type	Experimental
Investigational medicinal product name	NimenrixTM
Investigational medicinal product code	
Other name	Meningococcal vaccine GSK134612
Pharmaceutical forms	Powder and solvent for solution for injection
Routes of administration	Intramuscular use

Dosage and administration details:

2 doses administered intramuscularly in the anterolateral thigh muscle of the non-dominant leg for subjects aged 12 months to 2 years and in the deltoid of the non-dominant arm for older subjects.

Number of subjects in period 1	Nimenrix™ At risk Group	Nimenrix™ Healthy Group
Started	43	43
Completed	43	43

Baseline characteristics

Reporting groups	
Reporting group title	Nimenrix™ At risk Group
Reporting group description:	
Subjects with an increased risk for meningococcal disease such as anatomic asplenia or some degree of functional asplenia received two doses of the MenACWY-TT vaccine at Visit 1 (Month 0) and Visit 3 (Month 2).	
Reporting group title	Nimenrix™ Healthy Group
Reporting group description:	
Subjects age matched with the subjects in the At-risk Group received two doses of the MenACWY-TT vaccine at Visit 1 (Month 0) and Visit 3 (Month 2).	

Reporting group values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group	Total
Number of subjects	43	43	86
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: years			
arithmetic mean	12	11.5	
standard deviation	± 4.4	± 3.6	-
Gender categorical Units: Subjects			
Female	20	22	42
Male	23	21	44

End points

End points reporting groups

Reporting group title	Nimenrix™ At risk Group
Reporting group description:	
Subjects with an increased risk for meningococcal disease such as anatomic asplenia or some degree of functional asplenia received two doses of the MenACWY-TT vaccine at Visit 1 (Month 0) and Visit 3 (Month 2).	
Reporting group title	Nimenrix™ Healthy Group
Reporting group description:	
Subjects age matched with the subjects in the At-risk Group received two doses of the MenACWY-TT vaccine at Visit 1 (Month 0) and Visit 3 (Month 2).	

Primary: Number of subjects with a vaccine response to rSBA-MenA, rSBA-MenC, rSBA-MenW-135 and rSBA-MenY antibodies

End point title	Number of subjects with a vaccine response to rSBA-MenA, rSBA-MenC, rSBA-MenW-135 and rSBA-MenY antibodies[1]
End point description:	
Vaccine response to rSBA-MenA, rSBA-MenC, rSBA-MenW-135 and rSBA-MenY is defined as rSBA antibody titers ≥1:32, for initially seronegative subjects (i.e. pre-vaccination rSBA antibody titres <1:8) and at least a 4-fold increase in rSBA antibody titres from pre to post-vaccination for initially seropositive subjects (i.e. pre-vaccination rSBA antibody titres ≥1:8).	
End point type	Primary
End point timeframe:	
At 1 month post first vaccine dose	

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: The scope of this primary endpoint was descriptive, no statistical analyses were conducted.

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	40	40		
Units: Subjects				
rSBA-MenA	40	39		
rSBA-MenC	37	39		
rSBA-MenW-135	40	39		
rSBA-MenY	39	40		

Statistical analyses

No statistical analyses for this end point

Primary: Number of subjects with a vaccine response to hSBA-MenA, hSBA-MenC, hSBA-MenW-135 and hSBA-MenY antibodies

End point title	Number of subjects with a vaccine response to hSBA-MenA, hSBA-MenC, hSBA-MenW-135 and hSBA-MenY antibodies[2]

End point description:

Vaccine response to hSBA-MenA, hSBA-MenC, rSBA-MenW-135 and hSBA-MenY is defined as hSBA antibody titers ≥1:8, for initially seronegative subjects (i.e. pre-vaccination hSBA antibody titres <1:4) and at least a 4-fold increase in hSBA antibody titres from pre to post-vaccination for initially seropositive subjects (i.e. pre-vaccination hSBA antibody titres ≥1:4).

End point type	Primary

End point timeframe:

At 1 month post first vaccine dose

Notes:

[2] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: The scope of this primary endpoint was descriptive, no statistical analyses were conducted.

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	38	38		
Units: Subjects				
hSBA-MenA [N = 33, 33]	23	23		
hSBA-MenC [N = 35, 33]	27	20		
hSBA-MenW-135 [N = 36, 32]	20	21		
hSBA-MenY [N = 38, 38]	23	29		

Statistical analyses

No statistical analyses for this end point

Primary: Number of subjects with a vaccine response to rSBA-MenA, rSBA-MenC, rSBA-MenW-135 and rSBA-MenY antibodies

End point title	Number of subjects with a vaccine response to rSBA-MenA, rSBA-MenC, rSBA-MenW-135 and rSBA-MenY antibodies[3]

End point description:

Vaccine response to rSBA-MenA, rSBA-MenC, rSBA-MenW-135 and rSBA-MenY is defined as rSBA antibody titers ≥1:32, for initially seronegative subjects (i.e. pre-vaccination rSBA antibody titres <1:8) and at least a 4-fold increase in rSBA antibody titres from pre to post-vaccination for initially seropositive subjects (i.e. pre-vaccination rSBA antibody titres ≥1:8).

End point type	Primary

End point timeframe:

At 1 month post second vaccine dose

Notes:

[3] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: The scope of this primary endpoint was descriptive, no statistical analyses were conducted.

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	39	39		
Units: Subjects				
rSBA-MenA	39	39		
rSBA-MenC	39	39		
rSBA-MenW-135	39	39		
rSBA-MenY	39	39		

Statistical analyses

No statistical analyses for this end point

Primary: Number of subjects with a vaccine response to hSBA-MenA, hSBA-MenC, hSBA-MenW-135 and hSBA-MenY antibodies

End point title	Number of subjects with a vaccine response to hSBA-MenA, hSBA-MenC, hSBA-MenW-135 and hSBA-MenY antibodies[4]

End point description:

Vaccine response to hSBA-MenA, hSBA-MenC, rSBA-MenW-135 and hSBA-MenY is defined as hSBA antibody titers ≥1:8, for initially seronegative subjects (i.e. pre-vaccination hSBA antibody titres <1:4) and at least a 4-fold increase in hSBA antibody titres from pre to post-vaccination for initially seropositive subjects (i.e. pre-vaccination hSBA antibody titres ≥1:4).

End point type	Primary

End point timeframe:

At 1 month post second vaccine dose

Notes:

[4] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: The scope of this primary endpoint was descriptive, no statistical analyses were conducted.

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	37	37		
Units: Subjects				
hSBA-MenA [N = 33, 32]	28	24		
hSBA-MenC [N = 34, 34]	34	29		
hSBA-MenW-135 [N = 36, 31]	29	24		
hSBA-MenY [N = 37, 37]	27	27		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with rSBA-MenA, rSBA-MenC, rSBA-MenW-135, rSBA-MenY titers equal to or above the cut-off values

End point title	Number of subjects with rSBA-MenA, rSBA-MenC, rSBA-MenW-135, rSBA-MenY titers equal to or above the cut-off values

End point description:

Antibody titers equal to or above (≥) 1:8.

End point type	Secondary

End point timeframe:

At pre, post first vaccine dose and post second vaccine dose

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	40	40		
Units: Subjects				
rSBA-MenA; Month 0 [N = 40, 40]	7	2		
rSBA-MenA; Month 1 [N = 40, 40]	40	40		
rSBA-MenA; Month 3 [N = 39, 39]	39	39		
rSBA-MenC; Month 0 [N = 40, 40]	10	5		
rSBA-MenC; Month 1 [N = 40, 40]	37	39		
rSBA-MenC; Month 3 [N = 39, 39]	39	39		
rSBA-MenW-135; Month 0 [N = 40, 40]	5	3		
rSBA-MenW-135; Month 1 [N = 40, 40]	40	39		
rSBA-MenW-135; Month 3 [N = 39, 39]	39	39		
rSBA-MenY; Month 0 [N = 40, 40]	9	8		
rSBA-MenY; Month 1 [N = 40, 40]	40	40		
rSBA-MenY; Month 3 [N = 39, 39]	39	39		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with rSBA-MenA, rSBA-MenC, rSBA-MenW-135, rSBA-MenY titers equal to or above the cut-off values

End point title	Number of subjects with rSBA-MenA, rSBA-MenC, rSBA-MenW-135, rSBA-MenY titers equal to or above the cut-off values
End point description:	
Antibody titers equal to or above (≥) 1:128.	
End point type	Secondary
End point timeframe:	
At pre, post first vaccine dose and post second vaccine dose	

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	40	40		
Units: Subjects				
rSBA-MenA; Month 0 [N = 40, 40]	6	1		
rSBA-MenA; Month 1 [N = 40, 40]	40	40		
rSBA-MenA; Month 3 [N = 39, 39]	39	39		
rSBA-MenC; Month 0 [N = 40, 40]	3	4		
rSBA-MenC; Month 1 [N = 40, 40]	37	39		
rSBA-MenC; Month 3 [N = 39, 39]	38	38		
rSBA-MenW-135; Month 0 [N = 40, 40]	4	2		

rSBA-MenW-135; Month 1 [N = 40, 40]	40	39		
rSBA-MenW-135; Month 3 [N = 39, 39]	38	39		
rSBA-MenY; Month 0 [N = 40, 40]	8	8		
rSBA-MenY; Month 1 [N = 40, 40]	40	40		
rSBA-MenY; Month 3 [N = 39, 39]	39	39		

Statistical analyses

No statistical analyses for this end point

Secondary: Antibody titers for rSBA-MenA, rSBA-MenC, rSBA-MenW-135, rSBA-MenY meningococcal antigens

End point title	Antibody titers for rSBA-MenA, rSBA-MenC, rSBA-MenW-135, rSBA-MenY meningococcal antigens

End point description:

Antibody titers were measured in Geometric mean titers (GMTs).

End point type	Secondary

End point timeframe:

At pre, post first vaccine dose and post second vaccine dose

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	40	40		
Units: Titers				
geometric mean (confidence interval 95%)				
rSBA-MenA; Month 0 [N = 40, 40]	8.6 (4.8 to 15.3)	4.8 (3.6 to 6.3)		
rSBA-MenA; Month 1 [N = 40, 40]	2012.8 (1414 to 2865.3)	4025.6 (3065.1 to 5287.2)		
rSBA-MenA; Month 3 [N = 39, 39]	2820.1 (1899 to 4187.9)	3553.1 (2640.3 to 4781.5)		
rSBA-MenC; Month 0 [N = 40, 40]	9 (5.4 to 15)	6.3 (4.2 to 9.3)		
rSBA-MenC; Month 1 [N = 40, 40]	1374.8 (693.4 to 2725.7)	2233.4 (1197.4 to 4165.6)		
rSBA-MenC; Month 3 [N = 39, 39]	1684.3 (1097.8 to 2584.1)	1684.3 (1087.8 to 2608.1)		
rSBA-MenW-135; Month 0 [N = 40, 40]	7 (4.2 to 11.7)	5.1 (3.8 to 6.9)		
rSBA-MenW-135; Month 1 [N = 40, 40]	3050.9 (2029.8 to 4585.5)	4167.6 (2620 to 6629.2)		
rSBA-MenW-135; Month 3 [N = 39, 39]	5844.3 (4046.3 to 8441.3)	6981.1 (5467.9 to 8913)		
rSBA-MenY; Month 0 [N = 40, 40]	10.6 (5.7 to 19.7)	9.7 (5.4 to 17.3)		

rSBA-MenY; Month 1 [N = 40, 40]	4624.2 (3125.5 to 6841.6)	7009 (5175.6 to 9491.9)		
rSBA-MenY; Month 3 [N = 39, 39]	5640.2 (4142.5 to 7679.5)	6618.6 (4875.6 to 8984.6)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with hSBA-MenA, hSBA-MenC, hSBA-MenW-135 and hSBA-MenY titers equal to or above the cut-off values

End point title	Number of subjects with hSBA-MenA, hSBA-MenC, hSBA-MenW-135 and hSBA-MenY titers equal to or above the cut-off values

End point description:

Antibody titers equal to or above (≥) 1:4.

End point type	Secondary

End point timeframe:

At pre, post first vaccine dose and post second vaccine dose

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	40	40		
Units: Subjects				
hSBA-MenA; Month 0 [N = 36, 35]	14	12		
hSBA-MenA; Month 1 [N = 35, 37]	29	28		
hSBA-MenA; Month 3 [N = 37, 36]	35	29		
hSBA-MenC; Month 0 [N = 36, 35]	21	23		
hSBA-MenC; Month 1 [N = 37, 38]	34	36		
hSBA-MenC; Month 3 [N = 38, 39]	38	39		
hSBA-MenW-135; Month 0 [N = 37, 33]	20	16		
hSBA-MenW-135; Month 1 [N = 37, 39]	34	39		
hSBA-MenW-135; Month 3 [N = 39, 38]	39	38		
hSBA-MenY; Month 0 [N = 38, 38]	24	25		
hSBA-MenY; Month 1 [N = 40, 40]	37	40		
hSBA-MenY; Month 3 [N = 39, 39]	39	39		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with hSBA-MenA, hSBA-MenC, hSBA-MenW-135 and hSBA-MenY titers equal to or above the cut-off values

End point title	Number of subjects with hSBA-MenA, hSBA-MenC, hSBA-MenW-135 and hSBA-MenY titers equal to or above the cut-off values

End point description:

Antibody titers equal to or above (≥) 1:8.

End point type	Secondary

End point timeframe:

At pre, post first vaccine dose and post second vaccine dose

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	40	40		
Units: Subjects				
hSBA-MenA; Month 0 [N = 36, 35]	13	12		
hSBA-MenA; Month 1 [N = 35, 37]	29	28		
hSBA-MenA; Month 3 [N = 37, 36]	35	29		
hSBA-MenC; Month 0 [N = 36, 35]	20	22		
hSBA-MenC; Month 1 [N = 37, 38]	34	36		
hSBA-MenC; Month 3 [N = 38, 39]	38	39		
hSBA-MenW-135; Month 0 [N = 37, 33]	20	16		
hSBA-MenW-135; Month 1 [N = 37, 39]	34	39		
hSBA-MenW-135; Month 3 [N = 39, 38]	39	38		
hSBA-MenY; Month 0 [N = 38, 38]	24	25		
hSBA-MenY; Month 1 [N = 40, 40]	37	40		
hSBA-MenY; Month 3 [N = 39, 39]	39	39		

Statistical analyses

No statistical analyses for this end point

Secondary: Antibody titers for hSBA-MenA, hSBA-MenC, hSBA-MenW-135 and hSBA-MenY meningococcal antigens

End point title	Antibody titers for hSBA-MenA, hSBA-MenC, hSBA-MenW-135 and hSBA-MenY meningococcal antigens

End point description:

Antibody titers were measured in Geometric mean titers (GMTs).

End point type	Secondary

End point timeframe:

At pre, post first vaccine dose and post second vaccine dose

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	40	40		
Units: Titers				
geometric mean (confidence interval 95%)				
hSBA-MenA; Month 0 [N = 36, 35]	5.5 (3.4 to 8.9)	4.2 (2.9 to 6.1)		
hSBA-MenA; Month 1 [N = 35, 37]	105.9 (47.6 to 235.6)	68.7 (32.6 to 144.5)		
hSBA-MenA; Month 3 [N = 37, 36]	235.1 (136.2 to 405.9)	90.3 (44.8 to 182.1)		
hSBA-MenC; Month 0 [N = 36, 35]	12.9 (6.5 to 25.7)	10.9 (6.3 to 18.6)		
hSBA-MenC; Month 1 [N = 37, 38]	812.9 (283.5 to 2330.9)	196.7 (84.6 to 457.2)		
hSBA-MenC; Month 3 [N = 38, 39]	1472.1 (733.6 to 2954)	764.6 (404.8 to 1444.5)		
hSBA-MenW-135; Month 0 [N = 37, 33]	21.7 (9.9 to 47.7)	13.6 (6.4 to 28.5)		
hSBA-MenW-135; Month 1 [N = 37, 39]	283.7 (137.4 to 585.6)	263.7 (187.3 to 371.2)		
hSBA-MenW-135; Month 3 [N = 39, 38]	884.5 (567.2 to 1379.2)	590.8 (443 to 787.8)		
hSBA-MenY; Month 0 [N = 38, 38]	37 (16.7 to 82.4)	32 (15.5 to 65.8)		
hSBA-MenY; Month 1 [N = 40, 40]	743.6 (352.9 to 1566.7)	661.7 (460.2 to 951.6)		
hSBA-MenY; Month 3 [N = 39, 39]	1415.1 (905.2 to 2212.2)	800.7 (638.1 to 1004.7)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-PSA, anti-PSC, anti-PSW-135 and anti-PSY antibody concentrations equal to or above the cut-off values

End point title	Number of subjects with anti-PSA, anti-PSC, anti-PSW-135 and anti-PSY antibody concentrations equal to or above the cut-off values

End point description:

Antibody titers equal to or above (≥) 0.3 µg/mL.

End point type	Secondary

End point timeframe:

At pre, post first vaccine dose and post second vaccine dose

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	33	34		
Units: Subjects				
anti-PSA; Month 0 [N = 28, 30]	28	30		
anti-PSA; Month 1 [N = 29, 34]	29	34		
anti-PSA; Month 3 [N = 33, 32]	33	32		
anti-PSC; Month 0 [N = 33, 34]	15	4		
anti-PSC; Month 1 [N = 29, 34]	29	34		
anti-PSC; Month 3 [N = 33, 32]	33	32		
anti-PSW-135; Month 0 [N = 28, 30]	21	19		
anti-PSW-135; Month 1 [N = 29, 34]	29	34		
anti-PSW-135; Month 3 [N = 33, 32]	33	32		
anti-PSY; Month 0 [N = 7, 5]	7	5		
anti-PSY; Month 1 [N = 10, 13]	10	13		
anti-PSY; Month 3 [N = 10, 11]	10	11		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-PSA, anti-PSC, anti-PSW-135 and anti-PSY antibody concentration equal to or above the cut-off values

End point title	Number of subjects with anti-PSA, anti-PSC, anti-PSW-135 and anti-PSY antibody concentration equal to or above the cut-off values
End point description:	
Antibody titers equal to or above (≥) 2.0 µg/mL.	
End point type	Secondary
End point timeframe:	
At pre, post first vaccine dose and post second vaccine dose	

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	33	34		
Units: Subjects				
anti-PSA; Month 0 [N = 28, 30]	12	9		
anti-PSA; Month 1 [N = 29, 34]	29	34		
anti-PSA; Month 3 [N = 33, 32]	33	32		
anti-PSC; Month 0 [N = 33, 34]	3	2		
anti-PSC; Month 1 [N = 29, 34]	26	32		
anti-PSC; Month 3 [N = 33, 32]	30	27		
anti-PSW-135; Month 0 [N = 28, 30]	4	2		
anti-PSW-135; Month 1 [N = 29, 34]	28	33		
anti-PSW-135; Month 3 [N = 33, 32]	33	32		
anti-PSY; Month 0 [N = 7, 5]	3	3		

anti-PSY; Month 1 [N = 10, 13]	10	13		
anti-PSY; Month 3 [N = 10, 11]	10	11		

Statistical analyses

No statistical analyses for this end point

Secondary: Antibody titers for hSBA-MenA, hSBA-MenC, hSBA-MenW-135 and hSBA-MenY meningococcal antigens

End point title	Antibody titers for hSBA-MenA, hSBA-MenC, hSBA-MenW-135 and hSBA-MenY meningococcal antigens

End point description:

Antibody titers were measured in Geometric mean concentrations (GMCs).

End point type	Secondary

End point timeframe:

At pre, post first vaccine dose and post second vaccine dose

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	33	34		
Units: Titers				
geometric mean (confidence interval 95%)				
anti-PSA; Month 0 [N = 28, 30]	1.9 (1.5 to 2.4)	1.4 (1.1 to 1.8)		
anti-PSA; Month 1 [N = 29, 34]	17.4 (11.7 to 25.8)	16.2 (11.3 to 23.3)		
anti-PSA; Month 3 [N = 33, 32]	14.2 (10.5 to 19.3)	10.7 (8 to 14.3)		
anti-PSC; Month 0 [N = 33, 34]	0.4 (0.2 to 0.6)	0.2 (0.1 to 0.3)		
anti-PSC; Month 1 [N = 29, 34]	8.3 (5.6 to 12.5)	8.4 (5.9 to 11.8)		
anti-PSC; Month 3 [N = 33, 32]	6 (4.4 to 8.1)	5.8 (4.2 to 8)		
anti-PSW-135; Month 0 [N = 28, 30]	0.6 (0.3 to 1.1)	0.4 (0.3 to 0.6)		
anti-PSW-135; Month 1 [N = 29, 34]	14.9 (8.4 to 26.3)	13.3 (9.2 to 19.4)		
anti-PSW-135; Month 3 [N = 33, 32]	19 (12.8 to 28.2)	14 (9.9 to 19.8)		
anti-PSY; Month 0 [N = 7, 5]	2.9 (1.1 to 7.9)	2.5 (1 to 6.1)		
anti-PSY; Month 1 [N = 10, 13]	20.4 (6.3 to 66.2)	17.3 (11.2 to 26.8)		
anti-PSY; Month 3 [N = 10, 11]	30 (10.4 to 86.5)	12.5 (9.4 to 16.7)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects reporting any and grade 3 solicited local symptom at age stratum 1-5 years

End point title	Number of subjects reporting any and grade 3 solicited local symptom at age stratum 1-5 years

End point description:

Assessed solicited local symptoms were pain, redness and swelling. Any = occurrence of the symptom regardless of intensity grade. Grade 3 pain = cried when limb was moved/spontaneously painful. Grade 3 redness/swelling = redness/swelling spreading beyond 30 millimeters (mm) of injection site.

End point type	Secondary

End point timeframe:

During the 4-day (Days 0-3) post-vaccination period following each dose and overall

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	3	3		
Units: Subjects				
Any Pain; Dose 1 [N=3;3]	2	0		
Grade 3 Pain; Dose 1 [N=3;3]	0	0		
Any Redness; Dose 1 [N=3;3]	2	0		
Grade 3 Redness; Dose 1 [N=3;3]	0	0		
Any Swelling; Dose 1 [N=3;3]	2	0		
Grade 3 Swelling; Dose 1 [N=3;3]	0	0		
Any Pain; Dose 2 [N=3;2]	1	1		
Grade 3 Pain; Dose 2 [N=3;2]	0	0		
Any Redness; Dose 2 [N=3;2]	0	0		
Grade 3 Redness; Dose 2 [N=3;2]	0	0		
Any Swelling; Dose 2 [N=3;2]	0	0		
Grade 3 Swelling; Dose 2 [N=3;2]	0	0		
Any Pain Across Doses [N=3;3]	2	1		
Grade 3 Pain Across Doses [N=3;3]	0	0		
Any Redness Across Doses [N=3;3]	2	0		
Grade 3 Redness Across Doses [N=3;3]	0	0		
Any Swelling Across Doses [N=3;3]	2	0		
Grade 3 Swelling Across Doses [N=3;3]	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects reporting any and grade 3 solicited local symptom at age stratum 6-17 years

End point title	Number of subjects reporting any and grade 3 solicited local symptom at age stratum 6-17 years

End point description:

Assessed solicited local symptoms were pain, redness and swelling. Any = occurrence of the symptom

regardless of intensity grade. Grade 3 pain = cried when limb was moved/spontaneously painful. Grade 3 redness/swelling = redness/swelling spreading beyond 30 millimeters (mm) of injection site.

End point type	Secondary

End point timeframe:

During the 4-day (Days 0-3) post-vaccination period following each dose and overall

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	40	39		
Units: Subjects				
Any Pain; Dose 1 [N=40; 39]	28	23		
Grade 3 Pain; Dose 1 [N=40; 39]	2	1		
Any Redness; Dose 1 [N=40; 39]	7	13		
Grade 3 Redness; Dose 1 [N=40; 39]	0	0		
Any Swelling; Dose 1 [N=40; 39]	12	8		
Grade 3 Swelling; Dose 1 [N=40; 39]	2	2		
Any Pain; Dose 2 [N=38; 38]	29	24		
Grade 3 Pain; Dose 2 [N=38; 38]	3	1		
Any Redness; Dose 2 [N=38; 38]	12	8		
Grade 3 Redness; Dose 2 [N=38; 38]	1	0		
Any Swelling; Dose 2 [N=38; 38]	12	10		
Grade 3 Swelling; Dose 2 [N=38; 38]	3	2		
Any Pain; Across Doses [N=40; 39]	32	28		
Grade 3 Pain; Across Doses [N=40; 39]	4	2		
Any Redness; Across Doses [N=40; 39]	14	14		
Grade 3 Redness; Across Doses [N=40; 39]	1	0		
Any Swelling; Across Doses [N=40; 39]	18	12		
Grade 3 Swelling; Across Doses [N=40; 39]	4	3		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects reporting any, grade 3 and related solicited general symptoms at age stratum 1-5 years

End point title	Number of subjects reporting any, grade 3 and related solicited general symptoms at age stratum 1-5 years

End point description:

Assessed solicited general symptoms were drowsiness, irritability, loss of appetite and fever. Any = occurrence of the symptom regardless of intensity grade. Grade 3 symptoms = symptoms which prevented normal everyday activities. Grade 3 fever = oral temperature >39.5 °C. Related = symptom assessed by the investigator as related to the vaccination.

End point type	Secondary

End point timeframe:

During the 4-day (Days 0-3) post-vaccination period following each dose and overall

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	3	3		
Units: Subjects				
Any Drowsiness; Dose 1 [N=3;3]	3	1		
Grade 3 Drowsiness; Dose 1 [N=3;3]	1	0		
Related Drowsiness; Dose 1 [N=3;3]	3	0		
Any Irritability; Dose 1 [N=3;3]	2	1		
Grade 3 Irritability; Dose 1 [N=3;3]	1	0		
Related Irritability; Dose 1 [N=3;3]	2	0		
Any Loss of appetite; Dose 1 [N=3;3]	2	0		
Grade 3 Loss of appetite; Dose 1 [N=3;3]	0	0		
Related Loss of appetite; Dose 1 [N=3;3]	2	0		
Any Fever; Dose 1 [N=3;3]	0	0		
Grade 3 Fever; Dose 1 [N=3;3]	0	0		
Related Fever; Dose 1 [N=3;3]	0	0		
Any Drowsiness; Dose 2 [N=3;2]	0	1		
Grade 3 Drowsiness; Dose 2 [N=3;2]	0	0		
Related Drowsiness; Dose 2 [N=3;2]	0	1		
Any Irritability; Dose 2 [N=3;2]	0	1		
Grade 3 Irritability; Dose 2 [N=3;2]	0	0		
Related Irritability; Dose 2 [N=3;2]	0	1		
Any Loss of appetite; Dose 2 [N=3;2]	0	0		
Grade 3 Loss of appetite; Dose 2 [N=3;2]	0	0		
Related Loss of appetite; Dose 2 [N=3;2]	0	0		
Any Fever; Dose 2 [N=3;2]	0	0		
Grade 3 Fever; Dose 2 [N=3;2]	0	0		
Related Fever; Dose 2 [N=3;2]	0	0		
Any Drowsiness; Across Doses [N=3;3]	3	2		
Grade 3 Drowsiness; Across Doses [N=3;3]	1	0		
Related Drowsiness; Across Doses [N=3;3]	3	1		
Any Irritability; Across Doses [N=3;3]	2	2		
Grade 3 Irritability; Across Doses [N=3;3]	1	0		
Related Irritability; Across Doses [N=3;3]	2	1		
Any Loss of appetite; Across Doses [N=3;3]	2	0		
Grade 3 Loss of appetite; Across Doses [N=3;3]	0	0		
Related Loss of appetite; Across Doses [N=3;3]	2	0		
Any Fever; Across Doses [N=3;3]	0	0		
Grade 3 Fever; Across Doses [N=3;3]	0	0		
Related Fever; Across Doses [N=3;3]	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects reporting any, grade 3 and related solicited general symptoms at age stratum 6-17 years

End point title	Number of subjects reporting any, grade 3 and related solicited general symptoms at age stratum 6-17 years

End point description:

Assessed solicited general symptoms were fatigue, gastrointestinal symptoms, headache and fever. Gastrointestinal symptoms include nausea, vomiting, diarrhoea and/or abdominal pain. Any = occurrence of the symptom regardless of intensity grade. Grade 3 symptoms = symptoms which prevented normal everyday activities. Grade 3 fever = oral temperature >39.5 °C. Related = symptom assessed by the investigator as related to the vaccination.

End point type	Secondary

End point timeframe:

During the 4-day (Days 0-3) post-vaccination period following each dose and overall

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	40	39		
Units: Subjects				
Any Fatigue; Dose 1 [N=40; 39]	18	12		
Grade 3 Fatigue; Dose 1 [N=40; 39]	1	0		
Related Fatigue; Dose 1 [N=40; 39]	17	12		
Any Gastrointestinal; Dose 1 [N=40; 39]	5	3		
Grade 3 Gastrointestinal; Dose 1 [N=40; 39]	0	0		
Related Gastrointestinal; Dose 1 [N=40; 39]	4	3		
Any Headache; Dose 1 [N=40; 39]	12	9		
Grade 3 Headache; Dose 1 [N=40; 39]	0	0		
Related Headache; Dose 1 [N=40; 39]	9	9		
Any Fever; Dose 1 [N=40; 39]	3	0		
Grade 3 Fever; Dose 1 [N=40; 39]	0	0		
Related Fever; Dose 1 [N=40; 39]	2	0		
Any Fatigue; Dose 2 [N=38; 38]	13	7		
Grade 3 Fatigue; Dose 2 [N=38; 38]	0	1		
Related Fatigue; Dose 2 [N=38; 38]	13	6		
Any Gastrointestinal; Dose 2 [N=38; 38]	1	6		
Grade 3 Gastrointestinal; Dose 2 [N=38; 38]	0	2		

Related Gastrointestinal; Dose 2 [N=38; 38]	1	3		
Any Headache; Dose 2 [N=38; 38]	7	5		
Grade 3 Headache; Dose 2 [N=38; 38]	0	1		
Related Headache; Dose 2 [N=38; 38]	6	4		
Any Fever; Dose 2 [N=38; 38]	1	2		
Grade 3 Fever; Dose 2 [N=38; 38]	0	0		
Related Fever; Dose 2 [N=38; 38]	1	1		
Any Fatigue; Across Doses [N=40; 39]	21	14		
Grade 3 Fatigue; Across Doses [N=40; 39]	1	1		
Related Fatigue; Across Doses [N=40; 39]	21	14		
Any Gastrointestinal; Across Doses [N=40; 39]	6	8		
Grade 3 Gastrointestinal; Across Doses [N=40; 39]	0	2		
Related Gastrointestinal; Across Doses [N=40; 39]	5	5		
Any Headache; Across Doses [N=40; 39]	16	10		
Grade 3 Headache; Across Doses [N=40; 39]	0	1		
Related Headache; Across Doses [N=40; 39]	14	10		
Any Fever; Across Doses [N=40; 39]	4	2		
Grade 3 Fever; Across Doses [N=40; 39]	0	0		
Related Fever; Across Doses [N=40; 39]	3	1		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects reporting New Onset of Chronic Illnesses (NOCIs)

End point title	Number of subjects reporting New Onset of Chronic Illnesses (NOCIs)

End point description:

New Onset of Chronic Illnesses such as autoimmune disorders, asthma, type 1 diabetes and allergies.

End point type	Secondary

End point timeframe:

From vaccination (dose 1) until the end of the Extended Safety Follow-Up (ESFU)

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	43	43		
Units: Subjects				
Any NOCI(s)	0	0		

Statistical analyses

No statistical analyses for this end point

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

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

End point description:

An unsolicited adverse event (AE) covers any untoward medical occurrence in a clinical subject investigation temporally associated with the use of a medicinal product, whether or not considered related to the medicinal product. Any was defined as an AE reported in addition to those solicited during the clinical study. Also any solicited symptom with onset outside the specified period of follow-up for solicited symptoms was reported as an unsolicited AE.

End point type	Secondary

End point timeframe:

During the 31-day (Days 0-30) post first vaccination period

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	43	43		
Units: Subjects				
Any AE(s)	7	7		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects reporting any unsolicited AEs

End point title	Number of subjects reporting any unsolicited AEs

End point description:

An unsolicited AE covers any untoward medical occurrence in a clinical subject investigation temporally associated with the use of a medicinal product, whether or not considered related to the medicinal product. Any was defined as an AE reported in addition to those solicited during the clinical study. Also any solicited symptom with onset outside the specified period of follow-up for solicited symptoms was reported as an unsolicited AE.

End point type	Secondary

End point timeframe:

During the 31-day (Days 0-30) post second vaccination period

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	43	43		
Units: Subjects				
Any AE(s)	3	8		

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:

From vaccination (dose 1) until the end of ESFU.

End point values	Nimenrix™ At risk Group	Nimenrix™ Healthy Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	43	43		
Units: Subjects				
Any SAE(s)	4	1		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Solicited symptoms during the 4-day (Days 0-3) post-vaccination period, Unsolicited AEs during the 31 Day (Days 0-30) post-vaccination period, SAEs from Dose 1 up to the end of the Extended Safety Follow-Up (ESFU).

Adverse event reporting additional description:

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

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	18.0

Reporting groups

Reporting group title	Nimenrix™At risk Group

Reporting group description:

Subjects with an increased risk for meningococcal disease such as anatomic asplenia or some degree of functional asplenia received two doses of the MenACWY-TT vaccine at Visit 1 (Month 0) and Visit 3 (Month 2).

Reporting group title	Nimenrix™ Healthy Group

Reporting group description:

Subjects age matched with the subjects in the At-risk Group received two doses of the MenACWY-TT vaccine at Visit 1 (Month 0) and Visit 3 (Month 2).

Serious adverse events	Nimenrix™At risk Group	Nimenrix™ Healthy Group	
Total subjects affected by serious adverse events			
subjects affected / exposed	4 / 43 (9.30%)	1 / 43 (2.33%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events	0	0	
Injury, poisoning and procedural complications			
Joint injury			
subjects affected / exposed	0 / 43 (0.00%)	1 / 43 (2.33%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood and lymphatic system disorders			
Sickle cell anaemia with crisis			
subjects affected / exposed	1 / 43 (2.33%)	0 / 43 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Infections and infestations			

Cystitis escherichia			
subjects affected / exposed	1 / 43 (2.33%)	0 / 43 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pneumococcal bacteraemia			
subjects affected / exposed	1 / 43 (2.33%)	0 / 43 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Salmonellosis			
subjects affected / exposed	1 / 43 (2.33%)	0 / 43 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

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

Non-serious adverse events	Nimenrix™At risk Group	Nimenrix™ Healthy Group	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	32 / 43 (74.42%)	28 / 43 (65.12%)	
General disorders and administration site conditions			
Pain (1-5 years)			
subjects affected / exposed[1]	2 / 3 (66.67%)	1 / 3 (33.33%)	
occurrences (all)	2	1	
Redness (1-5 years)			
subjects affected / exposed[2]	2 / 3 (66.67%)	0 / 3 (0.00%)	
occurrences (all)	2	0	
Swelling (1-5 years)			
subjects affected / exposed[3]	2 / 3 (66.67%)	0 / 3 (0.00%)	
occurrences (all)	2	0	
Pain (6-17 years)			
subjects affected / exposed[4]	32 / 40 (80.00%)	28 / 39 (71.79%)	
occurrences (all)	32	28	
Redness (6-17 years)			
subjects affected / exposed[5]	14 / 40 (35.00%)	14 / 39 (35.90%)	
occurrences (all)	14	14	
Swelling (6-17 years)			

subjects affected / exposed[6]	18 / 40 (45.00%)	12 / 39 (30.77%)	
occurrences (all)	18	12	
Drowsiness (1-5 years)			
subjects affected / exposed[7]	3 / 3 (100.00%)	2 / 3 (66.67%)	
occurrences (all)	3	2	
Irritability (1-5 years)			
subjects affected / exposed[8]	2 / 3 (66.67%)	2 / 3 (66.67%)	
occurrences (all)	2	2	
Loss of appetite (1-5 years)			
subjects affected / exposed[9]	2 / 3 (66.67%)	0 / 3 (0.00%)	
occurrences (all)	2	0	
Fatigue (6-17 years)			
subjects affected / exposed[10]	21 / 40 (52.50%)	14 / 39 (35.90%)	
occurrences (all)	21	14	
Gastrointestinal Symptom (6-17 years)			
subjects affected / exposed[11]	6 / 40 (15.00%)	8 / 39 (20.51%)	
occurrences (all)	6	8	
Headache (6-17 years)			
subjects affected / exposed[12]	16 / 40 (40.00%)	10 / 39 (25.64%)	
occurrences (all)	16	10	
Fever (orally, ≥37.5) (6-17 years)			
subjects affected / exposed[13]	4 / 40 (10.00%)	2 / 39 (5.13%)	
occurrences (all)	4	2	

Notes:

[1] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[2] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[3] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[4] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[5] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[6] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.
[7] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.
[8] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.
[9] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.
[10] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.
[11] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.
[12] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.
[13] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
01 April 2014	Amendment 2 Interference had been observed when Menactra and the pneumococcal conjugate vaccine PCV7 were co-administered in subjects < 2 years of age. In order not to compromise the immunogenicity of PCV, the Advisory Committee on Immunization Practices (ACIP) had formulated vaccination recommendations for children aged 9 through 23 months. Following these recommendations, children < 2 years of age with functional or anatomic asplenia were not enrolled in the study. Only children < 2 years of age with complement component deficiencies were enrolled in the 'At risk' group in this study.
01 April 2014	Amendment 3 The physicochemical stability data on the reconstituted MenACWY-TT vaccine has been complemented by microbial stability data, simulating a contamination that may potentially happen during the reconstitution of the vaccine. These microbial data do not support the use of the vaccine up to 24 hours after reconstitution. Therefore, the storage condition of keeping the reconstituted MenACWY-TT vaccine in the refrigerator for up to 24 hours was removed from the protocol and a reference to the Study Procedures Manual was added for further details. In order to reflect this change, the Study Procedures Manual was modified as well.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported