Clinical trial results:
A Phase II, Randomized, Observer Blind, Multi-Center, Active Controlled Study to Evaluate the Safety and Immunogenicity of Novartis Meningococcal ACWY Conjugate Vaccine in Healthy Children Aged 12-59 Months

Summary

EudraCT number	2004-001896-21
Trial protocol	FI
Global end of trial date	16 May 2006

Results information

Result version number	v1 (current)
This version publication date	31 January 2019
First version publication date	31 January 2019

Trial information

Trial identification

Sponsor protocol code	V59P7

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	-
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Novartis Vaccines and Diagnostics
Sponsor organisation address	CH-4002, Basel, Switzerland,
Public contact	Clinical Disclosure Office, Novartis Vaccines and Diagnostics, 41 613241111, Novartis.email@novartis.com
Scientific contact	Clinical Disclosure Office, Novartis Vaccines and Diagnostics, 41 613241111, Novartis.email@novartis.com

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	Yes
EMA paediatric investigation plan number(s)	EMEA-000032-PIP01-07
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?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	16 May 2006
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	16 May 2006
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To compare the functional immune response 28 days after administration of one dose of Men ACWY Ad-with that of a Men ACWY PS vaccine in healthy children aged 36-<60 months, as measured by the percentage of subjects with hSBA ≥1:4 (i.e., the percentage of responders) against N. meningitidis serogroups A, C, W and Y.

Protection of trial subjects:

The study was in compliance with the ethical principles derived from the Declaration of Helsinki and the International Conference on Harmonization (ICH) Good Clinical Practice (GCP) guidelines. All the local regulatory requirements pertinent to safety of trial subjects were also followed during the conduct of the trial.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	14 March 2005
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: 239
Country: Number of subjects enrolled	Poland: 384
Worldwide total number of subjects	623
EEA total number of subjects	623

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)	411
Children (2-11 years)	212
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:

Subjects were enrolled at one center in Finland and in two centers in Poland.

Pre-assignment

Screening details:

All enrolled subjects were included in the trial.

Period 1

Period 1 title	Overall Study (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator

Arms

Are arms mutually exclusive?	Yes
Arm title	MenACWY-CRM(Ad+) 12 to 35 Months

Arm description:

Subjects received one dose of MenACWY-CRM(Ad+) vaccine on day 1 and second dose at 28 days or at 6 months or at 12 months after the first vaccination.

Arm type	Experimental
Investigational medicinal product name	MenACWY conjugate vaccine with adjuvant
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Suspension for injection
Routes of administration	Intramuscular use

Dosage and administration details:

MenACWY conjugate vaccine with/without adjuvant was obtained by extemporaneous mixing just before injection of the lyophilized ManA component to be re-suspended with the Man CWY component.

Arm title	MenACWY-CRM(Ad-) 12 to 35 Months

Arm description:

Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second dose either at 28 days or at 6 months or at 12 months after the first vaccination.

Arm type	Experimental
Investigational medicinal product name	MenACWY conjugate vaccine without adjuvant
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Suspension for injection
Routes of administration	Intramuscular use

Dosage and administration details:

MenACWY conjugate vaccine with/without adjuvant was obtained by extemporaneous mixing just before injection of the lyophilized ManA component to be re-suspended with the Man CWY component.

Arm title	MenACWY-CRM(Ad-) 36 to 59 Months

Arm description:

Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second dose on day 169 or day 337.

Arm type	Experimental

Investigational medicinal product name	MenACWY conjugate vaccine without adjuvant
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Suspension for injection
Routes of administration	Intramuscular use

Dosage and administration details:

MenACWY conjugate vaccine with/without adjuvant was obtained by extemporaneous mixing just before injection of the lyophilized ManA component to be re-suspended with the Man CWY component.

Arm title	MenACWY-PS (36 to 59 Months)

Arm description:

Subjects received one dose of MenACWY-PS vaccine on day 1 and second dose of MenACWY conjugate vaccine without adjuvant on day 169 or day 337.

Arm type	Active comparator
Investigational medicinal product name	MenACWY capsular polysaccharide
Investigational medicinal product code	
Other name	Mencevax
Pharmaceutical forms	Suspension for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Mencevax was obtained by extemporaneous mixing just before injection of two vials: a vial containing the lyophilized purified polysaccharide of N. meningitides and a vial containing diluent.

Number of subjects in period 1	MenACWY-CRM(Ad+) 12 to 35 Months	MenACWY-CRM(Ad-) 12 to 35 Months	MenACWY-CRM(Ad-) 36 to 59 Months
Started	207	206	128
Completed	196	198	120
Not completed	11	8	8
Consent withdrawn by subject	1	4	6
Unable to classify	3	1	-
AE or Death	3	1	-
Lost to follow-up	2	1	-
Inappropriate Enrollment	1	-	1
Protocol deviation	1	1	1

Number of subjects in period 1	MenACWY-PS (36 to 59 Months)
Started	82
Completed	74
Not completed	8
Consent withdrawn by subject	7
Unable to classify	-
AE or Death	-
Lost to follow-up	-
Inappropriate Enrollment	-
Protocol deviation	1

Baseline characteristics

Reporting groups	
Reporting group title	MenACWY-CRM(Ad+) 12 to 35 Months
Reporting group description:	
Subjects received one dose of MenACWY-CRM(Ad+) vaccine on day 1 and second dose at 28 days or at 6 months or at 12 months after the first vaccination.	
Reporting group title	MenACWY-CRM(Ad-) 12 to 35 Months
Reporting group description:	
Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second dose either at 28 days or at 6 months or at 12 months after the first vaccination.	
Reporting group title	MenACWY-CRM(Ad-) 36 to 59 Months
Reporting group description:	
Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second dose on day 169 or day 337.	
Reporting group title	MenACWY-PS (36 to 59 Months)
Reporting group description:	
Subjects received one dose of MenACWY-PS vaccine on day 1 and second dose of MenACWY conjugate vaccine without adjuvant on day 169 or day 337.	

Reporting group values	MenACWY-CRM(Ad+) 12 to 35 Months	MenACWY-CRM(Ad-) 12 to 35 Months	MenACWY-CRM(Ad-) 36 to 59 Months
Number of subjects	207	206	128
Age categorical			
Units: Subjects			
In utero			
Preterm newborn infants (gestational age < 37 wks)			
Newborns (0-27 days)			
Infants and toddlers (28 days-23 months)			
Children (2-11 years)			
Adolescents (12-17 years)			
Adults (18-64 years)			
From 65-84 years			
85 years and over			
Age Continuous			
Units: Months			
arithmetic mean	24.1	23.7	45.1
standard deviation	± 6.4	± 6.2	± 6.7
Gender, Male/Female			
Units: Subjects			
Female	110	107	68
Male	97	99	60

Reporting group values	MenACWY-PS (36 to 59 Months)	Total	
Number of subjects	82	623	
Age categorical			
Units: Subjects			
In utero		0	

Preterm newborn infants (gestational age < 37 wks)		0	
Newborns (0-27 days)		0	
Infants and toddlers (28 days-23 months)		0	
Children (2-11 years)		0	
Adolescents (12-17 years)		0	
Adults (18-64 years)		0	
From 65-84 years		0	
85 years and over		0	
Age Continuous			
Units: Months			
arithmetic mean	44.7		
standard deviation	± 6.4	-	
Gender, Male/Female			
Units: Subjects			
Female	44	329	
Male	38	294	

End points

End points reporting groups

Reporting group title	MenACWY-CRM(Ad+) 12 to 35 Months
Reporting group description:	
Subjects received one dose of MenACWY-CRM(Ad+) vaccine on day 1 and second dose at 28 days or at 6 months or at 12 months after the first vaccination.	
Reporting group title	MenACWY-CRM(Ad-) 12 to 35 Months
Reporting group description:	
Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second dose either at 28 days or at 6 months or at 12 months after the first vaccination.	
Reporting group title	MenACWY-CRM(Ad-) 36 to 59 Months
Reporting group description:	
Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second dose on day 169 or day 337.	
Reporting group title	MenACWY-PS (36 to 59 Months)
Reporting group description:	
Subjects received one dose of MenACWY-PS vaccine on day 1 and second dose of MenACWY conjugate vaccine without adjuvant on day 169 or day 337.	
Subject analysis set title	MenACWY-CRM(Ad-) (36 to 59 Months)
Subject analysis set type	Per protocol
Subject analysis set description:	
Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second vaccination on day 169 or day 337.	
Subject analysis set title	MenACWY-CRM(Ad-) (36 to 59 Months)
Subject analysis set type	Per protocol
Subject analysis set description:	
Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second vaccination on day 169 or day 337	
Subject analysis set title	MenACWY-CRM(Ad-) (36 to 59 M6-)
Subject analysis set type	Per protocol
Subject analysis set description:	
Subjects received two doses of MenACWY-CRM(Ad-) on day 1 and day 169 (6 months after the first vaccination).	
Subject analysis set title	MenACWY-CRM(Ad-) (36 to 59 M12-)
Subject analysis set type	Per protocol
Subject analysis set description:	
Subjects received two doses of MenACWY-CRM(Ad-) on day 1 and day 358 (12 months after the first vaccination).	
Subject analysis set title	MenACWY-PS (36-59 M6PS)
Subject analysis set type	Per protocol
Subject analysis set description:	
Subjects received one dose of MenACWY-PS vaccine on day 1 and second dose of MenACWY-CRM(Ad-) vaccine on day 169 (6 months after first vaccination).	
Subject analysis set title	MenACWY-PS (36-59 M12PS)
Subject analysis set type	Per protocol
Subject analysis set description:	
Subjects received one dose of MenACWY-PS vaccine on day 1 and second dose of MenACWY-CRM(-Ad) vaccine on day 358 (12 months after first vaccination).	
Subject analysis set title	MenACWY-CRM(Ad)- (36 to 59 M6-)
Subject analysis set type	Per protocol
Subject analysis set description:	
Subjects received two doses of MenACWY-CRM(Ad-) on day 1 and day 169 (6 months after the first vaccination).	

Subject analysis set title	MenACWY-CRM(Ad-) (36 to 59 M12-)
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received two doses of MenACWY-CRM(Ad-) on day 1 and day 358 (12 months after the first vaccination).

Subject analysis set title	MeMenACWY-PS (36-59 M12PS)
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-PS vaccine on day 1 and second dose of MenACWY-CRM(-Ad) vaccine on day 358 (12 months after first vaccination).

Subject analysis set title	MenACWY-PS (36-59 M6PS)
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-PS vaccine on day 1 and second dose of MenACWY-CRM(Ad-) on day 169 (6 months after first vaccination).

Subject analysis set title	MenACWY-PS (36-59 M12PS)
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY PS vaccine on day 1 and second dose of MenACWY-CRM(Ad-) vaccine on day 358 (12 months after first vaccination).

Subject analysis set title	MenACWY-PS (36-59 M12PS)
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-PS vaccine on day 1 and second dose of MenACWY-CRM(Ad-) vaccine on day 358 (12 months after first vaccination).

Subject analysis set title	MenACWY-CRM(Ad+) (12 to 35 Months)
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad+) vaccine on day 1 and second dose at 28 days or at 6 months or at 12 months after the first vaccination.

Subject analysis set title	MenACWY-CRM(Ad-) (12 to 35 Months)
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second dose either at 28 days or at 6 months or at 12 months after the first vaccination.

Subject analysis set title	MenACWY-CRM(Ad-) (12 to 35 Months)
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second dose either at 28 days or at 6 months or at 12 months after the first vaccination.

Subject analysis set title	MenACWY-CRM(Ad+) (12 to 35 Months)
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad+) vaccine with on day 1 and second dose at 28 days or at 6 months or at 12 months after the first vaccination.

Subject analysis set title	MenACWY-CRM(Ad+) 12-35M1+
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad+) vaccine on day 1 and second dose on day 28 (1 month after the first vaccination).

Subject analysis set title	MenACWY-CRM(Ad-) 12-35M1-
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second dose on day 28 (1 month after the first vaccination).

Subject analysis set title	MenACWY-CRM (Ad+) 12-35M1+
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad+) vaccine on day 1 and second dose on day 28 (1 month after the first vaccination).

Subject analysis set title	MenACWY-CRM (Ad-)12-35M1-
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad-)vaccine on day 1 and second dose on day 28 (1 month after the first vaccination).

Subject analysis set title	MenACWY-CRM(Ad+) 12-35M6+
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad+) vaccine on day 1 and second dose at 6 months after the first vaccination.

Subject analysis set title	MenACWY-CRM(Ad+) 12-35M12+
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad+) vaccine on day 1 and second dose at 12 months after the first vaccination.

Subject analysis set title	MenACWY-CRM(Ad-) 12-35M6-
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second dose at 6 months after the first vaccination.

Subject analysis set title	MenACWY-CRM(Ad-) 12-35M12-
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second dose at 12 months after the first vaccination.

Subject analysis set title	MenACWY-CRM(Ad-) (12-35M12-)
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second dose at 12 months after the first vaccination.

Subject analysis set title	MenACWY-CRM(Ad+) 12-35M12+
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad+) vaccine on day 1 and second dose at 12 months after the first vaccination.

Subject analysis set title	MenACWY-CRM(Ad-) 12-35M12-
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second dose at 12 months after the first vaccination.

Subject analysis set title	MenACWY-CRM(Ad+) 12-35M6+
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MEnACWY-CRM(Ad+) vaccine on day 1 and second dose at 6 months after the first vaccination.

Subject analysis set title	MenACWY-CRM(Ad-) 12-35M6-
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MEnACWY-CRM(Ad-) vaccine on day 1 and second dose at 6 months after the first vaccination.

Subject analysis set title	MenACWY-CRM(Ad-) 12-35M1-
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-CRM(Ad-) vaccine on day 1 and second dose on day 28 (1 month after the first vaccination).

Subject analysis set title	MenACWY-PS 36 to 59 Months
Subject analysis set type	Per protocol

Subject analysis set description:

Subjects received one dose of MenACWY-PS vaccine on day 1 and second dose of MenACWY-CRM(Ad-) vaccine on day 169 or day 337.

Primary: Percentages of subjects with Human complement serum Bactericidal Activity (hSBA) Titers ≥ 1:4, After One Dose Of Either MenACWY-CRM(Ad-) or MenACWY-PS Vaccine In subjects 36-59 Months Of age

End point title	Percentages of subjects with Human complement serum Bactericidal Activity (hSBA) Titers ≥ 1:4, After One Dose Of Either MenACWY-CRM(Ad-) or MenACWY-PS Vaccine In subjects 36-59 Months Of age[1][2]

End point description:

Immune response of one dose of MenACWY-CRM(Ad-) compared to that of one dose of MenACWY polysaccharide(MenACWY-PS) vaccine, 28 days after administration to subjects aged 36 to 59 months, as measured by the percentage of subjects with human complement serum bactericidal activity (hSBA) titers ≥ 1:4 against N. meningitidis serogroups A, C, W, and Y.

End point type	Primary

End point timeframe:

28 days after first vaccination.

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: descriptive statistics.

[2] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: descriptive statistics.

End point values	MenACWY-PS (36 to 59 Months)	MenACWY-CRM(Ad-) (36 to 59 Months)		
Subject group type	Reporting group	Subject analysis set		
Number of subjects analysed	81	101		
Units: percentages of subjects				
number (confidence interval 95%)				
MenA (Baseline; N=101,80)	1 (0.032 to 7)	2 (0 to 7)		
MenA (28 days after 1st vaccination; N=101,80)	55 (43 to 66)	75 (66 to 83)		
MenC (Baseline; N=99,79)	10 (4 to 19)	14 (8 to 23)		
MenC (28 days after 1st vaccination; N=99,79)	52 (40 to 63)	60 (49 to 69)		
MenW (Baseline; N=100,81)	19 (11 to 29)	17 (10 to 26)		
MenW (28 days after 1st vaccination; N=100,81)	67 (55 to 77)	91 (84 to 96)		
MenY (Baseline; N=100,79)	11 (5 to 21)	10 (5 to 18)		
MenY (28 days after 1st vaccination; N=100,79)	67 (56 to 77)	77 (68 to 85)		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentages of subjects with hSBA titers ≥ 1:8 After One Dose Of Either MenACWY-CRM(Ad-) or MenACWY-PS Vaccine In Subjects 36-59 Months Of Age

End point title	Percentages of subjects with hSBA titers ≥ 1:8 After One Dose Of Either MenACWY-CRM(Ad-) or MenACWY-PS Vaccine In Subjects 36-59 Months Of Age[3]

End point description:

Immune response of one dose of MenACWY-CRM(Ad-) compared to that of a MenACWY-PS vaccine, 28 days after administration to subjects aged 36 to 59 months, as measured by the percentages of subjects with hSBA titers ≥ 1:8 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

28 days after first vaccination

Notes:

[3] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period. Justification: descriptive statistics.

End point values	MenACWY-PS (36 to 59 Months)	MenACWY-CRM(Ad-) (36 to 59 Months)		
Subject group type	Reporting group	Subject analysis set		
Number of subjects analysed	81	101		
Units: percentages of subjects				
number (confidence interval 95%)				
MenA (Baseline)	0 (0 to 5)	2 (0 to 7)		
MenA (28 days after 1st vaccination)	39 (28 to 50)	61 (51 to 71)		
MenC (Baseline; N=99,79)	8 (3 to 16)	5 (2 to 11)		
MenC (28 days after 1st vaccination; N=99,79)	39 (28 to 51)	54 (43 to 64)		
MenW (Baseline; N=100,81)	14 (7 to 23)	15 (9 to 24)		
MenW (28 days after 1st vaccination; N=100,81)	59 (48 to 70)	84 (75 to 91)		
MenY (Baseline; N=100,79)	6 (2 to 14)	7 (3 to 14)		
MenY (28 days after 1st vaccination; N=100,79)	57 (45 to 68)	67 (57 to 67)		

Statistical analyses

No statistical analyses for this end point

Secondary: hSBA Geometric Mean Titers (GMT) After One Dose Of Either MenACWY-CRM(Ad-) or MenACWY-PS Vaccine In subjects 36-59 Months Of Age

End point title	hSBA Geometric Mean Titers (GMT) After One Dose Of Either MenACWY-CRM(Ad-) or MenACWY-PS Vaccine In subjects 36-59 Months Of Age[4]

End point description:

Immune response of one dose of MenACWY-CRM(Ad-) vaccine compared with that of one dose of MenACWY-PS vaccine, 28 days after administration in subjects 36-59 months of age, as measured by hSBA geometric mean titers (GMTs) against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

28 days after first vaccination

Notes:

[4] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: descriptive statistics.

End point values	MenACWY-PS (36 to 59 Months)	MenACWY-CRM(Ad-) (36 to 59 Months)		
Subject group type	Reporting group	Subject analysis set		
Number of subjects analysed	81	101		
Units: titers				
geometric mean (confidence interval 95%)				
MenA (Baseline; N=101,80)	2.03 (1.98 to 2.07)	2.06 (2.02 to 2.1)		
MenA (28 days after 1st vaccination; N=101,80)	6.82 (4.89 to 9.53)	15 (11 to 20)		
MenC (Baseline; N=99,79)	2.54 (2.3 to 2.8)	2.42 (2.22 to 2.65)		
MenC (28 days after 1st vaccination; N=99,79)	7.16 (5.31 to 9.65)	7.12 (5.45 to 9.3)		
MenW (Baseline; N=100,81)	3.14 (2.66 to 3.7)	3.05 (2.63 to 3.53)		
MenW (28 days after 1st vaccination; N=100,81)	12 (8.68 to 16)	24 (18 to 31)		
MenY (Baseline; N=100,79)	2.46 (2.21 to 2.73)	2.42 (2.21 to 2.66)		
MenY (28 days after 1st vaccination; N=100,79)	14 (9.99 to 21)	21 (15 to 29)		

Statistical analyses

No statistical analyses for this end point

Secondary: hSBA GMTs After One Dose of Either MenACWY-CRM(Ad-) or MenACWY-PS Vaccine In Subjects 36-59 Months Of Age

End point title	hSBA GMTs After One Dose of Either MenACWY-CRM(Ad-) or MenACWY-PS Vaccine In Subjects 36-59 Months Of Age

End point description:

Persistence of functional immune response at 6 or 12 months following administration of one dose of either MenACWY-CRM(Ad-) or MenACWY-PS vaccine in children aged 36 to 59 months, as measured by hSBA GMTs against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

6 months after first vaccination and 12 months after first vaccination

End point values	MenACWY-CRM(Ad-) (36 to 59 M6-)	MenACWY-CRM(Ad-) (36 to 59 M12-)	MenACWY-PS (36-59 M6PS)	MenACWY-PS (36-59 M12PS)
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	48	45	32	36
Units: titers				
geometric mean (confidence interval 95%)				
MenA	2.84 (2.17 to 3.73)	2.51 (1.9 to 3.32)	2.96 (2.03 to 4.32)	2.78 (1.95 to 3.96)
MenC (N=47,45,32,36)	5.06 (3.43 to 7.46)	4.3 (2.89 to 6.39)	3.33 (2.04 to 5.43)	3.89 (2.45 to 6.16)
MenW (N=47,45,32,35)	22 (14 to 33)	20 (13 to 30)	9.98 (5.86 to 17)	13 (7.76 to 21)
MenY (N=47,45,32,36)	11 (7.14 to 18)	18 (11 to 29)	6.44 (3.86 to 11)	5.29 (3.26 to 8.57)

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of subjects with hSBA titers ≥ 1:4 After One Dose Of Either MenACWY-CRM(Ad-) or MenACWY-PS Vaccine In Subjects 36-59 Months Of age

End point title	Percentage of subjects with hSBA titers ≥ 1:4 After One Dose Of Either MenACWY-CRM(Ad-) or MenACWY-PS Vaccine In Subjects 36-59 Months Of age

End point description:

Persistence of functional immune response at 6 or 12 months following administration of one dose of either MenACWY-CRM(Ad-) or MenACWY-PS vaccine in children aged 36 to 59 months, as measured by the percentage of hSBA titers ≥ 1:4 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

6 months after first vaccination and 12 months after first vaccination

End point values	MenACWY-PS (36-59 M6PS)	MenACWY-PS (36-59 M12PS)	MenACWY-CRM(Ad)- (36 to 59 M6-)	MenACWY-CRM(Ad-) (36 to 59 M12-)
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	32	36	48	45
Units: percentages of subjects				
number (confidence interval 95%)				
MenA (Day 169)	19 (7 to 36)	14 (5 to 29)	23 (12 to 37)	13 (5 to 27)
MenC (Day 169; N=47,45,32,36)	28 (14 to 47)	22 (10 to 39)	45 (30 to 60)	42 (28 to 58)
MenW (Day 169; N=47,45,32,36)	56 (38 to 74)	61 (43 to 77)	94 (82 to 99)	84 (71 to 94)
MenY (Day 169; N=47,45,32,36)	53 (35 to 71)	42 (26 to 59)	70 (55 to 83)	80 (65 to 90)

Statistical analyses

No statistical analyses for this end point

Secondary: Percentages of subjects with hSBA titers ≥ 1:8 After One Dose Of Either MenACWY -CRM(Ad-) or MenACWY-PS Vaccine In Subjects 36-59 Months Of Age

End point title	Percentages of subjects with hSBA titers ≥ 1:8 After One Dose Of Either MenACWY -CRM(Ad-) or MenACWY-PS Vaccine In Subjects 36-59 Months Of Age

End point description:

Persistence of functional immune response at 6 or 12 months following administration of one dose of either MenACWY-CRM(Ad-) or MenACWY-PS vaccine in children aged 36 to 59 months, as measured by the percentage of subjects with hSBA titers ≥ 1:8 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

6 months after first vaccination and 12 months after first vaccination

End point values	MenACWY-CRM(Ad-) (36 to 59 M6-)	MenACWY-CRM(Ad-) (36 to 59 M12-)	MenACWY-PS (36-59 M6PS)	MenACWY-PS (36-59 M12PS)
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	48	45	32	36
Units: percentages of subjects				
number (confidence interval 95%)				
MenA	10 (3 to 23)	9 (2 to 21)	16 (5 to 33)	14 (5 to 29)
MenC (N=47,45)	32 (19 to 47)	24 (13 to 40)	19 (7 to 36)	19 (8 to 36)
MenW (N=47,45)	77 (62 to 88)	76 (60 to 87)	53 (35 to 71)	56 (38 to 72)
Men Y (N=47,45)	60 (44 to 74)	64 (49 to 78)	38 (21 to 56)	36 (21 to 54)

Statistical analyses

No statistical analyses for this end point

Secondary: hSBA GMTs After Second Dose Of MenACWY-CRM(Ad-) Vaccine In Subjects 36-59 Months Of Age

End point title	hSBA GMTs After Second Dose Of MenACWY-CRM(Ad-) Vaccine In Subjects 36-59 Months Of Age

End point description:

Booster effect of a second dose of MenACWY-CRM(Ad-) vaccine administered either 6 or 12 months after an initial dose of MenACWY-CRM(Ad-) or MenACWY-PS vaccine in children aged 36 to 59 months, as measured 21 days after the booster dose by hSBA GMT against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

21 days after second vaccination

End point values	MenACWY-CRM(Ad-) (36 to 59 M6-)	MenACWY-CRM(Ad-) (36 to 59 M12-)	MenACWY-PS (36-59 M6PS)	MeMenACWY-PS (36-59 M12PS)
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	48	45	32	36
Units: titers				
geometric mean (confidence interval 95%)				
MenA	51 (35 to 75)	149 (99 to 222)	72 (48 to 108)	116 (79 to 169)
MenC	129 (83 to 200)	472 (301 to 739)	7.33 (4.22 to 13)	17 (9.92 to 28)
MenW	371 (256 to 535)	1120 (769 to 1632)	38 (23 to 64)	82 (50 to 134)
MenY	247 (168 to 364)	911 (613 to 1353)	22 (13 to 38)	24 (14 to 40)

Statistical analyses

No statistical analyses for this end point

Secondary: Percentages of subjects with hSBA titers ≥ 1:4 After Second Dose Of MenACWY-CRM(Ad-) Vaccine In subjects 36-59 Months Of Age

End point title	Percentages of subjects with hSBA titers ≥ 1:4 After Second Dose Of MenACWY-CRM(Ad-) Vaccine In subjects 36-59 Months Of Age

End point description:

Booster effect of a second dose of MenACWY–CRM(-Ad) vaccine administered either 6 or 12 months after an initial dose of MenACWY-CRM(Ad-) or MenACWY-PS in children aged 36 to 59 months, as measured 21 days after the booster dose by the percentage of subjects with hSBA titers ≥ 1:4 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

21 days after second vaccination

End point values	MenACWY-CRM(Ad-) (36 to 59 M6-)	MenACWY-PS (36-59 M6PS)	MenACWY-PS (36-59 M12PS)	MenACWY-CRM(Ad-) (36 to 59 M12-)
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	48	32	36	45
Units: percentages of subjects				
number (confidence interval 95%)				
MenA	92 (80 to 98)	100 (89 to 100)	94 (81 to 99)	98 (88 to 100)
MenC (N=47,45)	100 (92 to 100)	44 (26 to 62)	56 (38 to 72)	100 (92 to 100)
MenW (N=47,45)	100 (92 to 100)	97 (84 to 100)	92 (78 to 98)	100 (92 to 100)
MenY (N=47,45)	100 (92 to 100)	75 (57 to 89)	75 (58 to 88)	100 (92 to 100)

Statistical analyses

No statistical analyses for this end point

Secondary: Percentages of Subjects With hSBA titers ≥ 1:8 After Second Dose Of MenACWY-CRM(Ad-) Vaccine In Subjects 36-59 Months Of Age

End point title	Percentages of Subjects With hSBA titers ≥ 1:8 After Second Dose Of MenACWY-CRM(Ad-) Vaccine In Subjects 36-59 Months Of Age

End point description:

Booster effect of a second dose of MenACWY-CRM(Ad-) vaccine administered either 6 or 12 months after an initial dose of MenACWY-CRM(Ad-) or MenACWY-PS in children aged 36 to 59 months, as measured 21 days after the booster dose by the percentage of subjects with hSBA titers ≥ 1:8 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

21 days after the second vaccination

End point values	MenACWY-CRM(Ad-) (36 to 59 M6-)	MenACWY-CRM(Ad-) (36 to 59 M12-)	MenACWY-PS (36-59 M6PS)	MenACWY-PS (36-59 M12PS)
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	48	45	32	36
Units: percentages of subjects				
number (confidence interval 95%)				
MenA	90 (77 to 97)	98 (88 to 100)	97 (84 to 100)	94 (81 to 99)
MenC (N=47,45)	96 (85 to 99)	100 (92 to 100)	34 (19 to 53)	47 (30 to 65)
MenW (N=47,45)	100 (92 to 100)	100 (92 to 100)	78 (60 to 91)	89 (74 to 97)
MenY (N=47,45)	100 (92 to 100)	100 (92 to 100)	66 (47 to 81)	58 (41 to 74)

Statistical analyses

No statistical analyses for this end point

Secondary: Percentages of Subjects With hSBA Titers ≥ 1:4 After One Dose Of MenACWY-CRM Vaccine, with adjuvant or without adjuvant, In subjects 12-35 Months Of Age

End point title	Percentages of Subjects With hSBA Titers ≥ 1:4 After One Dose Of MenACWY-CRM Vaccine, with adjuvant or without adjuvant, In subjects 12-35 Months Of Age

End point description:

Immune response of one dose of MenACWY-CRM vaccine, with adjuvant or without adjuvant, 28 days after administration to subjects aged 12 to 35 months, as measured by the percentage of subjects with hSBA titers ≥ 1:4 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

28 days after first vaccination.

End point values	MenACWY-CRM(Ad+) (12 to 35 Months)	MenACWY-CRM(Ad-) (12 to 35 Months)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	200	191		
Units: percentages of subjects				
number (confidence interval 95%)				
MenA (Baseline)	0 (0 to 2)	0 (0 to 2)		
MenA (28 days after 1st vaccination)	82 (75 to 87)	70 (63 to 77)		
MenC (Baseline; N=198,190)	5 (2 to 9)	1 (0 to 4)		
MenC (28 days after 1st vaccination; N=198,190)	56 (49 to 63)	49 (42 to 56)		
MenW (Baseline)	8 (4 to 12)	6 (3 to 10)		
MenW (28 days after 1st vaccination)	82 (76 to 87)	80 (73 to 85)		
MenY (Baseline; N=199,188)	5 (2 to 8)	3 (1 to 7)		
MenY (28 days after 1st vaccination; N=199,188)	67 (60 to 74)	67 (60 to 74)		

Statistical analyses

No statistical analyses for this end point

Secondary: hSBA GMT After One Dose Of MenACWY-CRM Vaccine, With adjuvant or without adjuvant, In subjects 12-35 Months Of Age

End point title	hSBA GMT After One Dose Of MenACWY-CRM Vaccine, With adjuvant or without adjuvant, In subjects 12-35 Months Of Age

End point description:

Immune response of one dose of MenACWY-CRM vaccine with adjuvant or without adjuvant, 28 days after administration to subjects aged 12 to 35 months, as measured by hSBA GMTs against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

28 days after first vaccination

End point values	MenACWY-CRM(Ad+) (12 to 35 Months)	MenACWY-CRM(Ad-) (12 to 35 Months)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	200	191		
Units: titers				
geometric mean (confidence interval 95%)				
MenA (Baseline)	2 (1.97 to 2.03)	2 (1.97 to 2.03)		
MenA (28 days after 1st vaccination)	18 (15 to 23)	13 (11 to 16)		
MenC (Baseline; N=198,190)	2.16 (2.03 to 2.3)	2.05 (1.92 to 2.18)		
MenC (28 days after 1st vaccination; N=198,190)	7.43 (6.15 to 8.97)	5.9 (4.87 to 7.15)		
MenW (Baseline)	2.38 (2.14 to 2.64)	2.26 (2.03 to 2.52)		
MenW (28 days after 1st vaccination)	17 (14 to 21)	16 (13 to 20)		
MenY (Baseline; N=199,188)	2.18 (2.04 to 2.34)	2.12 (1.98 to 2.27)		
MenY (28 days after 1st vaccination; N=199,188)	12 (9.39 to 15)	12 (9.54 to 15)		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentages of Subjects With hSBA Titers ≥ 1:8 After One Dose Of MenACWY-CRM Vaccine, with adjuvant or without adjuvant, In subjects 12-35 Months Of Age

End point title	Percentages of Subjects With hSBA Titers ≥ 1:8 After One Dose Of MenACWY-CRM Vaccine, with adjuvant or without adjuvant, In subjects 12-35 Months Of Age

End point description:

Immune response of one dose of MenACWY-CRM vaccine, with adjuvant or without adjuvant, 28 days after administration to subjects aged 12 to 35 months, as measured by the percentage of subjects with human complement serum bactericidal antibody (hSBA) titers ≥ 1:8 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

28 days after first vaccination.

End point values	MenACWY-CRM(Ad+) (12 to 35 Months)	MenACWY-CRM(Ad-) (12 to 35 Months)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	200	191		
Units: percentages of subjects				
number (confidence interval 95%)				
MenA (Baseline)	0 (0 to 2)	0 (0 to 2)		
MenA (28 days after 1st vaccination)	72 (65 to 78)	61 (53 to 68)		
MenC (Baseline; N=198,190)	3 (1 to 6)	1 (0.013 to 3)		

MenC (28 days after 1st vaccination; N=198,190)	47 (40 to 54)	36 (29 to 44)		
MenW (Baseline)	6 (3 to 10)	4 (1 to 7)		
MenW (28 days after 1st vaccination)	72 (65 to 78)	69 (62 to 76)		
MenY (Baseline; N=199,188)	4 (2 to 8)	2 (1 to 5)		
MenY (28 days after 1st vaccination; N=199,188)	60 (53 to 67)	57 (50 to 64)		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentages of Subjects With hSBA Titers ≥ 1:4 After Second Dose Of MenACWY-CRM Vaccine, With Adjuvant or Without Adjuvant, In Subjects 12-35 Months Of Age

End point title	Percentages of Subjects With hSBA Titers ≥ 1:4 After Second Dose Of MenACWY-CRM Vaccine, With Adjuvant or Without Adjuvant, In Subjects 12-35 Months Of Age

End point description:

Immune response to a second dose of MenACWY-CRM vaccine, with adjuvant or without adjuvant, administered 28 days after initial dose to subjects aged 12 to 35 months, as measured 21 days after the second dose by the percentage of subjects with hSBA titers ≥ 1:4 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

21 days after second vaccination

End point values	MenACWY-CRM(Ad+) 12-35M1+	MenACWY-CRM(Ad-) 12-35M1-		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	61	48		
Units: percentages of subjects				
number (confidence interval 95%)				
MenA (N=61,47)	98 (91 to 100)	91 (80 to 98)		
MenC	100 (94 to 100)	94 (83 to 99)		
MenW	97 (89 to 100)	98 (89 to 100)		
MenY (N=61,47)	97 (89 to 100)	91 (80 to 98)		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentages of Subjects With hSBA Titers ≥ 1:8 After Second Dose Of MenACWY-CRM Vaccine, With Adjuvant or Without Adjuvant, In Subjects 12-35 Months Of Age

End point title	Percentages of Subjects With hSBA Titers ≥ 1:8 After Second

	Dose Of MenACWY-CRM Vaccine, With Adjuvant or Without Adjuvant, In Subjects 12-35 Months Of Age

End point description:

Immune response to a second dose of either MenACWY-CRM vaccine, with adjuvant or without adjuvant, administered 28 days after the initial dose to subjects aged 12 to 35 months, as measured 21 days after the second dose by the percentage of subjects with hSBA titers ≥ 1:8 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

21 days after second vaccination

End point values	MenACWY-CRM(Ad+) 12-35M1+	MenACWY-CRM(Ad-) 12-35M1-		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	61	48		
Units: percentages of subjects				
number (confidence interval 95%)				
MenA (N=61,47)	98 (91 to 100)	85 (72 to 94)		
MenC	98 (91 to 100)	90 (77 to 97)		
MenW	97 (89 to 100)	90 (77 to 97)		
MenY (N=61,47)	97 (89 to 100)	83 (69 to 92)		

Statistical analyses

No statistical analyses for this end point

Secondary: hSBA GMTs After Second Dose Of MenACWY-CRM Vaccine, with adjuvant or without adjuvant, In subjects 12-35 Months Of Age

End point title	hSBA GMTs After Second Dose Of MenACWY-CRM Vaccine, with adjuvant or without adjuvant, In subjects 12-35 Months Of Age

End point description:

Immune response to a second dose of MenACWY-CRM vaccine, with adjuvant or without adjuvant, administered 28 days after the initial dose to subjects aged 12 to 35 months, as measured 21 days after the second dose by hSBA GMTs against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

21 days after second vaccination

End point values	MenACWY-CRM (Ad+) 12-35M1+	MenACWY-CRM (Ad-)12-35M1-		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	61	48		
Units: titers				
geometric mean (confidence interval 95%)				

MenA (N=61,47)	107 (80 to 143)	39 (26 to 58)		
MenC	117 (78 to 174)	104 (67 to 161)		
MenW	84 (57 to 122)	61 (42 to 88)		
MenY (N=61,47)	74 (50 to 110)	41 (28 to 60)		

Statistical analyses

No statistical analyses for this end point

Secondary: hSBA GMTs After One Dose Of MenACWY-CRM Vaccine, with adjuvant or without adjuvant, In subject 12-35 Months Of Age

End point title	hSBA GMTs After One Dose Of MenACWY-CRM Vaccine, with adjuvant or without adjuvant, In subject 12-35 Months Of Age

End point description:

Persistence of immune response at 6 or 12 months following administration of one dose of MenACWY-CRM vaccine, with adjuvant or without adjuvant, in subjects aged 12 to 35 months, as measured by hSBA GMTs against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

6 months after first vaccination and 12 months after first vaccination

End point values	MenACWY-CRM(Ad+) 12-35M6+	MenACWY-CRM(Ad+) 12-35M12+	MenACWY-CRM(Ad-) 12-35M6-	MenACWY-CRM(Ad-) 12-35M12-
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	57	56	56	54
Units: titers				
geometric mean (confidence interval 95%)				
MenA	3.54 (2.67 to 4.69)	2.54 (1.91 to 3.37)	2.66 (2.07 to 3.42)	2.41 (1.87 to 3.12)
MenC	10 (7.21 to 15)	4.02 (2.78 to 5.82)	9.07 (6.35 to 13)	4.79 (3.33 to 6.88)
MenW (N=57,54,56,54)	21 (14 to 31)	19 (12 to 28)	14 (9.6 to 21)	8.19 (5.5 to 12)
MenY (N=57,55,55,52)	12 (8.1 to 17)	8.69 (5.88 to 13)	10 (6.62 to 16)	10 (6.39 to 16)

Statistical analyses

No statistical analyses for this end point

Secondary: Percentages of Subjects With hSBA Titers ≥ 1:4 After One Dose Of MenACWY-CRM Vaccine, With Adjuvant or Without Adjuvant, In subjects 12-35 Months Of Age

End point title	Percentages of Subjects With hSBA Titers ≥ 1:4 After One Dose

	Of MenACWY-CRM Vaccine, With Adjuvant or Without Adjuvant, In subjects 12-35 Months Of Age

End point description:

Persistence of immune response at 6 or 12 months following administration of one dose of MenACWY-CRM vaccine, with adjuvant or without adjuvant, in subjects aged 12 to 35 months, as measured by the percentage of subjects with hSBA titers ≥ 1:4 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

6 months after first vaccination and 12 months after first vaccination

End point values	MenACWY-CRM(Ad+) 12-35M6+	MenACWY-CRM(Ad+) 12-35M12+	MenACWY-CRM(Ad-) 12-35M6-	MenACWY-CRM(Ad-) (12-35M12-)
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	57	56	56	54
Units: percentages of subjects				
number (confidence interval 95%)				
MenA	26 (16 to 40)	14 (6 to 26)	18 (9 to 30)	9 (3 to 20)
MenC	56 (42 to 69)	34 (22 to 48)	63 (49 to 75)	33 (21 to 47)
MenW	82 (70 to 91)	79 (66 to 88)	77 (64 to 87)	54 (40 to 67)
MenY (N=57,56,55,52)	65 (51 to 77)	66 (52 to 78)	67 (53 to 79)	56 (41 to 70)

Statistical analyses

No statistical analyses for this end point

Secondary: Percentages of Subjects With hSBA Titers ≥ 1:8 After One Dose Of MenACWY-CRM Vaccine, with or without Adjuvant, In subjects 12-35 Months Of Age

End point title	Percentages of Subjects With hSBA Titers ≥ 1:8 After One Dose Of MenACWY-CRM Vaccine, with or without Adjuvant, In subjects 12-35 Months Of Age

End point description:

Persistence of immune response at 6 or 12 months after one dose of MenACWY-CRM vaccine, with adjuvant or without adjuvant, in subjects aged 12 to 35 months of age, as measured by the percentage of subjects with hSBA titers ≥ 1:8 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

6 months after first vaccination and 12 months after first vaccination

End point values	MenACWY-CRM(Ad+) 12-35M6+	MenACWY-CRM(Ad+) 12-35M12+	MenACWY-CRM(Ad-) 12-35M6-	MenACWY-CRM(Ad-) 12-35M12-
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	57	56	56	54
Units: percentages of subjects				
number (confidence interval 95%)				
MenA	21 (11 to 34)	13 (5 to 24)	11 (4 to 22)	7 (2 to 18)

MenC	51 (37 to 64)	25 (14 to 38)	57 (43 to 70)	26 (15 to 40)
MenW	72 (58 to 83)	73 (60 to 84)	70 (56 to 81)	50 (36 to 64)
MenY (N=57,56,55,52)	58 (44 to 71)	50 (36 to 64)	55 (41 to 68)	46 (32 to 61)

Statistical analyses

No statistical analyses for this end point

Secondary: hSBA GMT After Second Dose Of MenACWY-CRM Vaccine, With Adjuvant or Without Adjuvant, In Subjects 12-35 Months Of Age

End point title	hSBA GMT After Second Dose Of MenACWY-CRM Vaccine, With Adjuvant or Without Adjuvant, In Subjects 12-35 Months Of Age

End point description:

Booster effect of a second dose of MenACWY-CRM vaccine, with adjuvant or without adjuvant, administered at 6 or 12 months after an initial dose in children aged 12 to 35 months, as measured 21 days after the booster dose by hSBA GMTs against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

21 days after the second vaccination

End point values	MenACWY-CRM(Ad+) 12-35M6+	MenACWY-CRM(Ad-) 12-35M6-	MenACWY-CRM(Ad+) 12-35M12+	MenACWY-CRM(Ad-) 12-35M12-
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	57	56	57	56
Units: titers				
geometric mean (confidence interval 95%)				
MenA (N=54,56,57,56)	141 (104 to 191)	66 (46 to 94)	168 (116 to 242)	328 (242 to 445)
MenC (N=54,56,56,57)	252 (168 to 377)	297 (197 to 449)	575 (381 to 866)	586 (386 to 889)
MenW (N=57,55,57,56)	687 (465 to 1015)	518 (370 to 726)	1238 (878 to 1745)	1263 (849 to 1879)
MenY (N=52,56,57,55)	489 (325 to 735)	302 (211 to 432)	915 (633 to 1322)	983 (651 to 1483)

Statistical analyses

No statistical analyses for this end point

Secondary: Percentages of Subjects With hSBA titers ≥ 1:4 After Second Dose Of MenACWY-CRM Vaccine, With adjuvant or without adjuvant, In subjects 12-35 Months Of Age

End point title	Percentages of Subjects With hSBA titers ≥ 1:4 After Second Dose Of MenACWY-CRM Vaccine, With adjuvant or without adjuvant, In subjects 12-35 Months Of Age

End point description:

Booster effect of a second dose of MenACWY-CRM vaccine, with adjuvant or without adjuvant, administered at 6 or 12 months after an initial dose in children aged 12 to 35 months, as measured 21 days after the booster dose by the percentage of subjects with hSBA titers ≥ 1:4 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

21 days after second vaccination

End point values	MenACWY-CRM(Ad+) 12-35M6+	MenACWY-CRM(Ad+) 12-35M12+	MenACWY-CRM(Ad-) 12-35M6-	MenACWY-CRM(Ad-) 12-35M12-
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	57	56	56	54
Units: percentages of subjects				
number (confidence interval 95%)				
MenA	100 (94 to 100)	100 (94 to 100)	95 (85 to 99)	96 (87 to 100)
MenC	100 (94 to 100)	98 (90 to 100)	100 (94 to 100)	96 (87 to 100)
MenW	100 (94 to 100)	98 (90 to 100)	100 (94 to 100)	100 (93 to 100)
MenY (N=56,52,57,55)	100 (94 to 100)	100 (94 to 100)	100 (94 to 100)	100 (93 to 100)

Statistical analyses

No statistical analyses for this end point

Secondary: Percentages of Subjects With hSBA Titers ≥ 1:8 After Second Dose Of MenACWY-CRM Vaccine, with or without adjuvant, In Subjects 12-35 Months Of Age

End point title	Percentages of Subjects With hSBA Titers ≥ 1:8 After Second Dose Of MenACWY-CRM Vaccine, with or without adjuvant, In Subjects 12-35 Months Of Age

End point description:

Booster effect of a second dose of MenACWY-CRM vaccine, with adjuvant or without adjuvant, administered either at 6 or 12 months after an initial dose in children aged 12 to 35 months, as measured 21 days after the booster dose by the percentage of subjects with hSBA titers ≥ 1:8 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

21 days after second vaccination

End point values	MenACWY-CRM(Ad+) 12-35M6+	MenACWY-CRM(Ad+) 12-35M12+	MenACWY-CRM(Ad-) 12-35M6-	MenACWY-CRM(Ad-) 12-35M12-
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	57	56	56	54
Units: percentages of subjects				
number (confidence interval 95%)				
MenA	100 (94 to 100)	100 (94 to 100)	91 (80 to 97)	96 (87 to 100)
MenC	100 (94 to 100)	98 (90 to 100)	100 (94 to 100)	96 (87 to 100)
MenW	100 (94 to 100)	98 (90 to 100)	100 (94 to 100)	100 (93 to 100)
MenY (N=56,52,57,55)	100 (94 to 100)	100 (94 to 100)	100 (94 to 100)	100 (93 to 100)

Statistical analyses

No statistical analyses for this end point

Secondary: hSBA GMTs After Two Doses Of MenACWY-CRM Vaccine, With adjuvant or without adjuvant, In subject 12-35 Months Of Age

End point title	hSBA GMTs After Two Doses Of MenACWY-CRM Vaccine, With adjuvant or without adjuvant, In subject 12-35 Months Of Age

End point description:

Persistence of immune response at 12 months following administration of two doses of MenACWY-CRM vaccine, with adjuvant or without adjuvant, in subjects aged 12 to 35 months, as measured by hSBA GMTs against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

12 months after second vaccination

End point values	MenACWY-CRM(Ad+) 12-35M1+	MenACWY-CRM(Ad-) 12-35M1-		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	61	49		
Units: titers				
geometric mean (confidence interval 95%)				
MenA (N=61,48)	5.24 (3.98 to 6.89)	4.15 (3.16 to 5.45)		
MenC	13 (8.86 to 18)	18 (12 to 28)		
MenW (N=61,47)	29 (20 to 42)	25 (17 to 37)		
MenY (N=61,48)	19 (13 to 27)	19 (12 to 31)		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentages of Subjects With hSBA Titers ≥ 1:4 After Two Doses Of MenACWY-CRM Vaccine, with adjuvant or without adjuvant, In subjects 12-35 Months Of Age

End point title	Percentages of Subjects With hSBA Titers ≥ 1:4 After Two Doses Of MenACWY-CRM Vaccine, with adjuvant or without adjuvant, In subjects 12-35 Months Of Age

End point description:

Persistence of immune response, at 12 months following administration of two doses of MenACWY-CRM vaccine, with adjuvant or without adjuvant, in subjects aged 12 to 35 months of age, as measured by the percentage of subjects with hSBA titers ≥ 1:4 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

12 months after second vaccination

End point values	MenACWY-CRM(Ad+) 12-35M1+	MenACWY-CRM(Ad-) 12-35M1-		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	61	49		
Units: percentages of subjects				
number (confidence interval 95%)				
MenA (N=61,48)	43 (30 to 56)	29 (17 to 44)		
MenC	66 (52 to 77)	73 (59 to 85)		
MenW (N=61,47)	89 (78 to 95)	87 (74 to 95)		
MenY	80 (68 to 89)	81 (67 to 91)		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentages of Subjects With hSBA Titers ≥ 1:8 After Two Doses Of MenACWY-CRM Vaccine, With Adjuvant or Without Adjuvant, In Subject 12-35 Months Of Age

End point title	Percentages of Subjects With hSBA Titers ≥ 1:8 After Two Doses Of MenACWY-CRM Vaccine, With Adjuvant or Without Adjuvant, In Subject 12-35 Months Of Age

End point description:

Persistence of immune response, at 12 months following administration of two doses of MenACWY-CRM vaccine, with adjuvant or without adjuvant, in subjects aged 12 to 35 months of age, as measured by the percentage of subjects with hSBA titers ≥ 1:8 against N. meningitidis serogroups A, C, W, and Y.

End point type	Secondary

End point timeframe:

12 months after second vaccination

End point values	MenACWY-CRM(Ad+) 12-35M1+	MenACWY-CRM(Ad-) 12-35M1-		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	61	49		
Units: percentages of subjects				
number (confidence interval 95%)				
MenA (N=61,48)	38 (26 to 51)	23 (12 to 37)		
MenC	59 (46 to 71)	63 (48 to 77)		
MenW (N=61,47)	87 (76 to 94)	85 (72 to 94)		
MenY (N=61,48)	69 (56 to 80)	71 (56 to 83)		

Statistical analyses

No statistical analyses for this end point

Secondary: Numbers of subjects 12 to 59 Months of age Who Reported Solicited Local and Systemic Adverse Events After Any Vaccination

End point title	Numbers of subjects 12 to 59 Months of age Who Reported Solicited Local and Systemic Adverse Events After Any Vaccination[5]

End point description:

Safety was assessed as the number of subjects 12 to 59 months of age who reported solicited local and systemic adverse events from day 1 up to and including day 7 after the first or second vaccination(s) with MenACWY-CRM vaccine, with adjuvant or without adjuvant or MenACWY-PS vaccine.

End point type	Secondary

End point timeframe:

From day 1 through day 7 after first or second vaccination(s)

Notes:

[5] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: descriptive statistics.

End point values	MenACWY-CRM(Ad+) 12 to 35 Months	MenACWY-CRM(Ad-) 12 to 35 Months	MenACWY-CRM(Ad-) 36 to 59 Months	MenACWY-PS 36 to 59 Months
Subject group type	Reporting group	Reporting group	Reporting group	Subject analysis set
Number of subjects analysed	205	206	125	81
Units: Subjects				
Any Local	100	109	70	48
Injection site tenderness	73	79	57	42
Injection site erythema	60	63	37	19
Injetion site induration	37	38	25	15
Any systemic	98	103	53	26
Change in Eating Habits	31	46	20	10
Irritability	68	74	31	12
Vomiting	17	15	9	2
Diarrhea	22	24	12	1
Fever (≥ 38°C)	18	23	10	5
Other	44	38	22	11
Analgesic/Antipyretic Med Used	39	35	20	11

Statistical analyses

No statistical analyses for this end point

Secondary: Numbers of subjects 12 to 59 Months Of Age Who Reported Unsolicited Adverse Events and Serious Adverse Events After Any Vaccination

End point title	Numbers of subjects 12 to 59 Months Of Age Who Reported Unsolicited Adverse Events and Serious Adverse Events After Any Vaccination[6]

End point description:

Safety was assessed as the number of subjects 12 to 59 months of age who reported serious adverse events (SAE), AEs necessitating a physician's visit and/or resulting in premature withdrawal from the study, AEs were to be collected between day 7 and the subsequent visit (approximately 1 month later) after the first or second vaccination(s) of MenACWY-CRM vaccine, with or without adjuvant, or MenACWY-PS vaccine. Any SAE were to be collected throughout the study.

End point type	Secondary

End point timeframe:

28 days after first vaccination and 21 days after second vaccination

Notes:

[6] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: descriptive statistics.

End point values	MenACWY-CRM(Ad+) 12 to 35 Months	MenACWY-CRM(Ad-) 12 to 35 Months	MenACWY-CRM(Ad-) 36 to 59 Months	MenACWY-PS 36 to 59 Months
Subject group type	Reporting group	Reporting group	Reporting group	Subject analysis set
Number of subjects analysed	205	206	125	81
Units: Subjects				
Any AE	117	99	64	41
Possibly/probably related AE	9	9	3	1
SAE	13	12	11	9
AE leading to discontinuation	3	1	0	0
Possibly/probably related SAE	0	0	0	0
Death	0	0	0	0

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

All solicited adverse events (AEs) were collected upto day 7 after each vaccination.

Adverse event reporting additional description:

SAEs, AEs necessitating a physician's visit and/or resulting in premature withdrawal from the study AEs were to be collected between day 7 and the subsequent visit (approximately 1 month later) after the first or second vaccination(s) of MenACWY-CRM(Ad+) or MenACWY-CRM(Ad-) or MenACWY-PS vaccine. Any SAE were to be collected throughout the study.

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	10.0

Reporting groups

Reporting group title	MenACWY-CRM(Ad+) 12 to 35 Months

Reporting group description:

Subjects received one dose of MenACWY-CRM(Ad+)vaccine on day 1 and second dose at 28 days or at 6 months or at 12 months after the first vaccination.

Reporting group title	MenACWY-PS (36 to 59 Months)

Reporting group description:

Subjects received one dose of MenACWY-PS vaccine on day 1 and second dose of MenACWY conjugate vaccine without adjuvant on day 169 or day 337.

Reporting group title	MenACWY-CRM(Ad-) 36 to 59 Months

Reporting group description:

Subjects received one dose of MenACWY-CRM(Ad+) vaccine on day 1 and second dose on day 169 or day 337.

Reporting group title	MenACWY-CRM(Ad-) 12 to 35 Months

Reporting group description:

Subjects received one dose of MenACWY-CRM(Ad-)vaccine on day 1 and second dose either at 28 days or at 6 months or at 12 months after the first vaccination.

Serious adverse events	MenACWY-CRM(Ad+) 12 to 35 Months	MenACWY-PS (36 to 59 Months)	MenACWY-CRM(Ad-) 36 to 59 Months
Total subjects affected by serious adverse events			
subjects affected / exposed	13 / 205 (6.34%)	9 / 81 (11.11%)	11 / 125 (8.80%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Brain Neoplasm			
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 205 (0.49%)	0 / 81 (0.00%)	0 / 125 (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			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 205 (0.00%)	1 / 81 (1.23%)	0 / 125 (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
Humerus Fracture			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 205 (0.00%)	0 / 81 (0.00%)	1 / 125 (0.80%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Limb Injury			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 205 (0.00%)	0 / 81 (0.00%)	0 / 125 (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
Nervous system disorders			
Febrile Convulsion			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 205 (0.00%)	0 / 81 (0.00%)	0 / 125 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastrointestinal disorders			
Enterocolitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 205 (0.49%)	0 / 81 (0.00%)	0 / 125 (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
Inguinal Hernia			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 205 (0.00%)	0 / 81 (0.00%)	0 / 125 (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
Renal and urinary disorders			

Nephrolithiasis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 205 (0.00%)	0 / 81 (0.00%)	1 / 125 (0.80%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infections and infestations			
Epiglottitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 205 (0.00%)	0 / 81 (0.00%)	0 / 125 (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
Gastroenteritis			
alternative assessment type: Non-systematic			
subjects affected / exposed	3 / 205 (1.46%)	0 / 81 (0.00%)	1 / 125 (0.80%)
occurrences causally related to treatment / all	3 / 3	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Laryngitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 205 (0.00%)	0 / 81 (0.00%)	2 / 125 (1.60%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 2
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Localised Infection			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 205 (0.00%)	1 / 81 (1.23%)	0 / 125 (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
Otitis Media			
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 205 (0.49%)	0 / 81 (0.00%)	0 / 125 (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
Pneumonia			
alternative assessment type: Non-systematic			

subjects affected / exposed	1 / 205 (0.49%)	0 / 81 (0.00%)	0 / 125 (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
Pneumonia mycoplasmal			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 205 (0.00%)	1 / 81 (1.23%)	0 / 125 (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
Varicella			
alternative assessment type: Non-systematic			
subjects affected / exposed	6 / 205 (2.93%)	6 / 81 (7.41%)	6 / 125 (4.80%)
occurrences causally related to treatment / all	0 / 0	0 / 6	0 / 6
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Kawasaki's Disease			
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 205 (0.49%)	0 / 81 (0.00%)	0 / 125 (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
Metabolism and nutrition disorders			
Diabetes Mellitus			
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 205 (0.49%)	0 / 81 (0.00%)	0 / 125 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Serious adverse events	MenACWY-CRM(Ad-) 12 to 35 Months		
Total subjects affected by serious adverse events			
subjects affected / exposed	12 / 206 (5.83%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Brain Neoplasm			
alternative assessment type: Non-systematic			

subjects affected / exposed	0 / 206 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Injury, poisoning and procedural complications			
Concussion			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 206 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Humerus Fracture			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 206 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Limb Injury			
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 206 (0.49%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Nervous system disorders			
Febrile Convulsion			
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 206 (0.49%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Gastrointestinal disorders			
Enterocolitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 206 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Inguinal Hernia			
alternative assessment type: Non-systematic			

subjects affected / exposed	1 / 206 (0.49%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Renal and urinary disorders			
Nephrolithiasis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 206 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Epiglottitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	1 / 206 (0.49%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Gastroenteritis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 206 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Laryngitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 206 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Localised Infection			
alternative assessment type: Non-systematic			
subjects affected / exposed	0 / 206 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Otitis Media			
alternative assessment type: Non-systematic			

subjects affected / exposed	0 / 206 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Pneumonia				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 206 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Pneumonia mycoplasmal				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 206 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Varicella				
alternative assessment type: Non-systematic				
subjects affected / exposed	8 / 206 (3.88%)			
occurrences causally related to treatment / all	0 / 8			
deaths causally related to treatment / all	0 / 0			
Kawasaki's Disease				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 206 (0.00%)			
occurrences causally related to treatment / all	0 / 0			
deaths causally related to treatment / all	0 / 0			
Metabolism and nutrition disorders				
Diabetes Mellitus				
alternative assessment type: Non-systematic				
subjects affected / exposed	0 / 206 (0.00%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			

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

Non-serious adverse events	MenACWY-CRM(Ad+) 12 to 35 Months	MenACWY-PS (36 to 59 Months)	MenACWY-CRM(Ad-) 36 to 59 Months
Total subjects affected by non-serious adverse events			
subjects affected / exposed	155 / 205 (75.61%)	58 / 81 (71.60%)	97 / 125 (77.60%)
Nervous system disorders			
Somnolence			
alternative assessment type: Non-systematic			
subjects affected / exposed	36 / 205 (17.56%)	12 / 81 (14.81%)	29 / 125 (23.20%)
occurrences (all)	36	12	29
General disorders and administration site conditions			
Injection Site Erythema			
subjects affected / exposed	60 / 205 (29.27%)	19 / 81 (23.46%)	37 / 125 (29.60%)
occurrences (all)	60	19	37
Injection Site Induration			
subjects affected / exposed	37 / 205 (18.05%)	15 / 81 (18.52%)	25 / 125 (20.00%)
occurrences (all)	37	15	25
Injection Site Pain			
subjects affected / exposed	73 / 205 (35.61%)	42 / 81 (51.85%)	57 / 125 (45.60%)
occurrences (all)	73	42	57
Irritability			
subjects affected / exposed	68 / 205 (33.17%)	12 / 81 (14.81%)	31 / 125 (24.80%)
occurrences (all)	68	12	31
Pyrexia			
subjects affected / exposed	26 / 205 (12.68%)	10 / 81 (12.35%)	15 / 125 (12.00%)
occurrences (all)	26	10	15
Gastrointestinal disorders			
Diarrhoea			
subjects affected / exposed	23 / 205 (11.22%)	1 / 81 (1.23%)	13 / 125 (10.40%)
occurrences (all)	23	1	13
Vomiting			
subjects affected / exposed	17 / 205 (8.29%)	2 / 81 (2.47%)	9 / 125 (7.20%)
occurrences (all)	17	2	9
Respiratory, thoracic and mediastinal disorders			
Cough			
subjects affected / exposed	13 / 205 (6.34%)	12 / 81 (14.81%)	6 / 125 (4.80%)
occurrences (all)	13	12	6
Psychiatric disorders			

Eating Disorder			
alternative assessment type: Non-systematic			
subjects affected / exposed	31 / 205 (15.12%)	10 / 81 (12.35%)	20 / 125 (16.00%)
occurrences (all)	31	10	20
Infections and infestations			
Bronchitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	10 / 205 (4.88%)	3 / 81 (3.70%)	3 / 125 (2.40%)
occurrences (all)	10	3	3
Nasopharyngitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	11 / 205 (5.37%)	2 / 81 (2.47%)	3 / 125 (2.40%)
occurrences (all)	11	2	3
Otitis Media			
alternative assessment type: Non-systematic			
subjects affected / exposed	19 / 205 (9.27%)	4 / 81 (4.94%)	9 / 125 (7.20%)
occurrences (all)	19	4	9
Rhinitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	13 / 205 (6.34%)	4 / 81 (4.94%)	6 / 125 (4.80%)
occurrences (all)	13	4	6
Upper Respiratory Tract Infection			
alternative assessment type: Non-systematic			
subjects affected / exposed	18 / 205 (8.78%)	7 / 81 (8.64%)	14 / 125 (11.20%)
occurrences (all)	18	7	14

Non-serious adverse events	MenACWY-CRM(Ad-) 12 to 35 Months		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	158 / 206 (76.70%)		
Nervous system disorders			
Somnolence			
alternative assessment type: Non-systematic			
subjects affected / exposed	45 / 206 (21.84%)		
occurrences (all)	45		
General disorders and administration site conditions			

Injection Site Erythema subjects affected / exposed occurrences (all)	63 / 206 (30.58%) 63		
Injection Site Induration subjects affected / exposed occurrences (all)	38 / 206 (18.45%) 38		
Injection Site Pain subjects affected / exposed occurrences (all)	79 / 206 (38.35%) 79		
Irritability subjects affected / exposed occurrences (all)	74 / 206 (35.92%) 74		
Pyrexia subjects affected / exposed occurrences (all)	33 / 206 (16.02%) 33		
Gastrointestinal disorders Diarrhoea subjects affected / exposed occurrences (all)	25 / 206 (12.14%) 25		
Vomiting subjects affected / exposed occurrences (all)	16 / 206 (7.77%) 16		
Respiratory, thoracic and mediastinal disorders Cough subjects affected / exposed occurrences (all)	5 / 206 (2.43%) 5		
Psychiatric disorders Eating Disorder alternative assessment type: Non-systematic subjects affected / exposed occurrences (all)	46 / 206 (22.33%) 46		
Infections and infestations Bronchitis alternative assessment type: Non-systematic subjects affected / exposed occurrences (all)	11 / 206 (5.34%) 11		

Nasopharyngitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	7 / 206 (3.40%)		
occurrences (all)	7		
Otitis Media			
alternative assessment type: Non-systematic			
subjects affected / exposed	16 / 206 (7.77%)		
occurrences (all)	16		
Rhinitis			
alternative assessment type: Non-systematic			
subjects affected / exposed	7 / 206 (3.40%)		
occurrences (all)	7		
Upper Respiratory Tract Infection			
alternative assessment type: Non-systematic			
subjects affected / exposed	19 / 206 (9.22%)		
occurrences (all)	19		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
29 July 2004	1) added a second site in Poland 2) changed comparator from Menomune to another licensed meningococcal ACWY Polysaccharide vaccine (GSK Mencevax), due to lack of availability of Menomune in EU countries.
03 September 2004	To reduce the number of Finnish sites from nine to six.
06 December 2004	1) changed the study design in order to evaluate the responses to the non-adjuvanted formulation of Novartis MenACWY. 2) evaluated the responses to the non-adjuvanted formulation in response to a request from FDA. 3) investigated the immunogenicity of a 2nd dose of Novartis MenACWY either with or without adjuvant at different time points as well as the persistence of antibodies at either 6 or 12 months after the 1st or 2nd dose of vaccine.
09 June 2005	1)specified that sponsor did not request the original of the SAE form and that submission of SAE to EC/IRB was to be perforemed forrlowing EC/IRB and local law requirements. 2) added hSBA >= 8 3) defined the collection of AEs at 6 months after any vaccination or subject's withdrawal 4) changed the local reactions (erythema, induration) categorization.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported