



## Clinical trial results:

### A PHASE 3, MULTI-CENTER, OPEN-LABEL STUDY TO EVALUATE IMMUNOGENICITY AND SAFETY OF NOVARTIS MENINGOCOCCAL ACWY CONJUGATE VACCINE (MENACWY-CRM) IN HEALTHY SUBJECTS FROM 2 TO 75 YEARS OF AGE IN INDIA.

Due to a system error, the data reported in v1 is not correct and has been removed from public view.

## Summary

EudraCT number	2014-004477-16
Trial protocol	Outside EU/EEA
Global end of trial date	28 April 2014

## Results information

Result version number	v2 (current)
This version publication date	04 June 2016
First version publication date	07 January 2015
Version creation reason	<ul style="list-style-type: none"><li>Correction of full data set re-QC study needed because of EudraCT system glitch and updates to results are required.</li></ul>

## Trial information

### Trial identification

Sponsor protocol code	V59_43
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### Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01547715
WHO universal trial number (UTN)	-

Notes:

## Sponsors

Sponsor organisation name	Novartis Vaccines
Sponsor organisation address	Via Fiorentina, 1, Siena, Italy, 53100
Public contact	Posting Director, Novartis Vaccines, RegistryContactVaccinesUS@novartis.com
Scientific contact	Posting Director, Novartis Vaccines, RegistryContactVaccinesUS@novartis.com

Notes:

## Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	Yes

Notes:

## Results analysis stage

Analysis stage	Final
Date of interim/final analysis	13 November 2014
Is this the analysis of the primary completion data?	No
Global end of trial reached?	Yes
Global end of trial date	28 April 2014
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

To assess the immunogenicity of a single injection of MenACWY-CRM vaccine as measured by the percentage of subjects with human serum bactericidal assay (hSBA) seroresponse, directed against *N.meningitidis* serogroups A, C, W and Y.

Protection of trial subjects:

Study vaccine were not administered to individuals with known hypersensitivity to any component of the vaccine.

Standard immunization practices were observed and care was taken to administer the injection intramuscularly. As with all injectable vaccines, appropriate medical treatment and supervision was readily available in case of rare anaphylactic reactions following administration of the study vaccine. Epinephrine 1:1000 and diphenhydramine or locally approved medications were available in case of any anaphylactic reactions. Care was taken to ensure that the vaccine was not injected into a blood vessel.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	21 March 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	India: 180
Worldwide total number of subjects	180
EEA total number of subjects	0

Notes:

### Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0

Children (2-11 years)	69
Adolescents (12-17 years)	51
Adults (18-64 years)	55
From 65 to 84 years	5
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details:

Subjects were enrolled from 3 study sites.

### Pre-assignment

Screening details:

All the enrolled subjects were included in the trial.

### Pre-assignment period milestones

Number of subjects started	180
Number of subjects completed	180

### Period 1

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

### Arms

Are arms mutually exclusive?	No
<b>Arm title</b>	2 - 10 years

Arm description:

Subjects between 2 and 10 years of age received one injection of MenACWY –CRM vaccine on day 1.

Arm type	Experimental
Investigational medicinal product name	Novartis MenACWY Conjugate Vaccine
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Powder and solution for solution for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Single dose 0.5 mL of injectable solution was administered intramuscularly.

<b>Arm title</b>	11 - 18 years
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Arm description:

Subjects between 11 and 18 years of age received one injection of MenACWY –CRM vaccine on day 1.

Arm type	Experimental
Investigational medicinal product name	Novartis MenACWY Conjugate Vaccine
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Powder and solution for solution for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Single dose 0.5 mL of injectable solution was administered intramuscularly.

<b>Arm title</b>	19 - 75 years
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Arm description:

Subjects between 19 and 75 years of age received one injection of MenACWY –CRM vaccine on day 1.

Arm type	Experimental
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Investigational medicinal product name	Novartis MenACWY Conjugate Vaccine
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Powder and solution for solution for injection
Routes of administration	Intramuscular use
Dosage and administration details:	
Single dose 0.5 mL of injectable solution was administered intramuscularly.	
<b>Arm title</b>	Overall ( $\geq 2$ years)

Arm description:

Subjects between 2 and 75 years of age received one injection of MenACWY –CRM vaccine on day 1.

Arm type	Experimental
Investigational medicinal product name	Novartis MenACWY Conjugate Vaccine
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Powder and solution for solution for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Single dose 0.5 mL of injectable solution was administered intramuscularly.

<b>Number of subjects in period 1</b>	2 - 10 years	11 - 18 years	19 - 75 years
Started	60	60	60
Completed	60	60	60

<b>Number of subjects in period 1</b>	Overall ( $\geq 2$ years)
Started	180
Completed	180

## Baseline characteristics

### Reporting groups

Reporting group title	2 - 10 years
Reporting group description:	
Subjects between 2 and 10 years of age received one injection of MenACWY –CRM vaccine on day 1.	
Reporting group title	11 - 18 years
Reporting group description:	
Subjects between 11 and 18 years of age received one injection of MenACWY –CRM vaccine on day 1.	
Reporting group title	19 - 75 years
Reporting group description:	
Subjects between 19 and 75 years of age received one injection of MenACWY –CRM vaccine on day 1.	

Reporting group values	2 - 10 years	11 - 18 years	19 - 75 years
Number of subjects	60	60	60
Age Group			
Units: AGE_UNITS.years			

Age Continuous			
Units: AGE_UNITS.years			
arithmetic mean	5.77	14.03	32.67
standard deviation	± 2.5	± 1.931	± 12.297
Gender Categorical			
Units: Subjects			
Female	33	33	21
Male	27	27	39

Reporting group values	Total		
Number of subjects	180		
Age Group			
Units: AGE_UNITS.years			

Age Continuous			
Units: AGE_UNITS.years			
arithmetic mean	-		
standard deviation			
Gender Categorical			
Units: Subjects			
Female	87		
Male	93		

### Subject analysis sets

Subject analysis set title	All Enrolled Set
Subject analysis set type	Intention-to-treat
Subject analysis set description:	
All subjects who signed an informed consent, underwent screening procedure(s), and had a subject number assigned.	
Subject analysis set title	Full Analysis Set

Subject analysis set type	Full analysis
Subject analysis set description: All subjects in the exposed population who provided at least one evaluable serum sample whose assay result is available for at least one serogroup.	
Subject analysis set title	Safety Set
Subject analysis set type	Safety analysis
Subject analysis set description: All subjects in the exposed population who provided any post-baseline safety data.	
Subject analysis set title	All Exposed Set
Subject analysis set type	Safety analysis
Subject analysis set description: All enrolled subjects who actually received study vaccination.	
Subject analysis set title	Per-Protocol Set
Subject analysis set type	Per protocol
Subject analysis set description: All subjects in the FAS who provided evaluable serum samples at day 1 and day 29, and had no major protocol violations.	

Reporting group values	All Enrolled Set	Full Analysis Set	Safety Set
Number of subjects	180	180	180
Age Group Units: AGE_UNITS.years			

Age Continuous Units: AGE_UNITS.years arithmetic mean standard deviation	17.49 ± 13.432	±	±
Gender Categorical Units: Subjects			
Female	87		
Male	93		

Reporting group values	All Exposed Set	Per-Protocol Set	
Number of subjects	180	175	
Age Group Units: AGE_UNITS.years			

Age Continuous Units: AGE_UNITS.years arithmetic mean standard deviation	±	±	
Gender Categorical Units: Subjects			
Female			
Male			

## End points

### End points reporting groups

Reporting group title	2 - 10 years
Reporting group description: Subjects between 2 and 10 years of age received one injection of MenACWY –CRM vaccine on day 1.	
Reporting group title	11 - 18 years
Reporting group description: Subjects between 11 and 18 years of age received one injection of MenACWY –CRM vaccine on day 1.	
Reporting group title	19 - 75 years
Reporting group description: Subjects between 19 and 75 years of age received one injection of MenACWY –CRM vaccine on day 1.	
Reporting group title	Overall (≥2 years)
Reporting group description: Subjects between 2 and 75 years of age received one injection of MenACWY –CRM vaccine on day 1.	
Subject analysis set title	All Enrolled Set
Subject analysis set type	Intention-to-treat
Subject analysis set description: All subjects who signed an informed consent, underwent screening procedure(s), and had a subject number assigned.	
Subject analysis set title	Full Analysis Set
Subject analysis set type	Full analysis
Subject analysis set description: All subjects in the exposed population who provided at least one evaluable serum sample whose assay result is available for at least one serogroup.	
Subject analysis set title	Safety Set
Subject analysis set type	Safety analysis
Subject analysis set description: All subjects in the exposed population who provided any post-baseline safety data.	
Subject analysis set title	All Exposed Set
Subject analysis set type	Safety analysis
Subject analysis set description: All enrolled subjects who actually received study vaccination.	
Subject analysis set title	Per-Protocol Set
Subject analysis set type	Per protocol
Subject analysis set description: All subjects in the FAS who provided evaluable serum samples at day 1 and day 29, and had no major protocol violations.	

### Primary: 1) Percentages of subjects with human Serum Bactericidal Assay (hSBA) seroresponse against N.meningitidis serogroup A at day 29

End point title	1) Percentages of subjects with human Serum Bactericidal Assay (hSBA) seroresponse against N.meningitidis serogroup A at day 29 <sup>[1]</sup>
End point description: The immunogenicity of a single injection of MenACWY-CRM vaccine was assessed in terms of percentage of subjects with hSBA seroresponse directed against N.meningitidis serogroup A. Analysis was done on the Full Analysis Set.	
End point type	Primary
End point timeframe: Day 29 (1 month post 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: No statistical analysis is associated to this endpoint. Analyses were run descriptively.

End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall ( $\geq 2$ years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	60	59	58	177
Units: Percentage of Subjects				
number (confidence interval 95%)				
Overall Seroresponse	75 (62 to 85)	76 (63 to 86)	66 (52 to 78)	72 (65 to 79)

## Statistical analyses

No statistical analyses for this end point

### Primary: 2) Percentages of subjects with hSBA seroresponse against N.meningitidis serogroup C at day 29

End point title	2) Percentages of subjects with hSBA seroresponse against N.meningitidis serogroup C at day 29 <sup>[2]</sup>
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End point description:

The immunogenicity of a single injection of MenACWY-CRM vaccine is assessed in terms of percentage of subjects with hSBA seroresponse directed against N.meningitidis serogroup C.

Analysis was done on the FAS.

End point type	Primary
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End point timeframe:

Day 29 (1 month post vaccination)

Notes:

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

Justification: No statistical analysis is associated to this endpoint. Analyses were run descriptively.

End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall ( $\geq 2$ years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	58	59	58	175
Units: Percentages of Subjects				
number (confidence interval 95%)				
Overall Seroresponse	84 (73 to 93)	90 (79 to 96)	90 (79 to 96)	88 (82 to 92)

## Statistical analyses

No statistical analyses for this end point

### Primary: 3) Percentages of subjects with hSBA seroresponse against N.meningitidis serogroup W at day 29

End point title	3) Percentages of subjects with hSBA seroresponse against N.meningitidis serogroup W at day 29 <sup>[3]</sup>
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End point description:

The immunogenicity of a single injection of MenACWY-CRM vaccine is assessed in terms of percentage of subjects with hSBA seroresponse directed against N.meningitidis serogroup W.  
Analysis was done on the Full Analysis Set.

End point type	Primary
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End point timeframe:

Day 29 (1 month post vaccination)

Notes:

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

Justification: No statistical analysis is associated to this endpoint. Analyses were run descriptively.

End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall (≥2 years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	60	59	57	176
Units: Number of Subjects				
number (confidence interval 95%)				
Overall Seroresponse	58 (45 to 71)	51 (37 to 64)	54 (41 to 68)	55 (47 to 62)

## Statistical analyses

No statistical analyses for this end point

### Primary: 4) Percentages of Subjects With hSBA Seroresponse Against N. meningitidis Serogroup Y at day 29

End point title	4) Percentages of Subjects With hSBA Seroresponse Against N. meningitidis Serogroup Y at day 29 <sup>[4]</sup>
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End point description:

The immunogenicity of a single injection of MenACWY-CRM vaccine is assessed in terms of percentage of subjects with hSBA seroresponse directed against N.meningitidis serogroup Y.  
Analysis was done on the FAS.

End point type	Primary
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End point timeframe:

Day 29 (1 month post vaccination)

Notes:

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

Justification: No statistical analysis is associated to this endpoint. Analyses were run descriptively.

End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall (≥2 years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	58	59	57	174
Units: Percentages of Subjects				
number (confidence interval 95%)				
Overall Seroresponse	69 (55 to 80)	69 (56 to 81)	75 (62 to 86)	71 (64 to 78)

## Statistical analyses

No statistical analyses for this end point

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**Secondary: 5) Percentages of Subjects With hSBA  $\geq$ 1:8 Directed Against N. meningitidis Serogroup A at day 1 and day 29**

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End point title	5) Percentages of Subjects With hSBA $\geq$ 1:8 Directed Against N. meningitidis Serogroup A at day 1 and day 29
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End point description:

To assess the immunogenicity of a single injection of MenACWY-CRM vaccine as measured by the percentage of subjects aged 2 through 75 with hSBA titer  $\geq$  1:8, directed against N. meningitidis serogroup A at day 1 and day 29.

Analysis was done on the FAS.

End point type	Secondary
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End point timeframe:

Day 1 and day 29

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End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall ( $\geq$ 2 years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	60	60	58	178
Units: Percentages of Subjects				
number (confidence interval 95%)				
Day 1 N= 60, 59, 60, 179	0 (0 to 6)	2 (0 to 9)	2 (0 to 9)	1 (0 to 4)
Day 29	75 (62 to 85)	77 (64 to 87)	66 (52 to 78)	72 (65 to 79)

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**Statistical analyses**

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No statistical analyses for this end point

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**Secondary: 6) Percentages of Subjects With hSBA  $\geq$ 1:8 Directed Against N. meningitidis Serogroup C at day 1 and day 29**

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End point title	6) Percentages of Subjects With hSBA $\geq$ 1:8 Directed Against N. meningitidis Serogroup C at day 1 and day 29
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End point description:

To assess the immunogenicity of a single injection of MenACWY-CRM vaccine as measured by the percentage of subjects aged 2 through 75 with hSBA titer  $\geq$  1:8, directed against N. meningitidis serogroup C at day 1 and day 29.

Analysis was done on the FAS.

End point type	Secondary
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End point timeframe:

Day 1 and day 29

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End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall (≥2 years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	60	60	58	178
Units: Percentages of Subjects				
number (confidence interval 95%)				
Day 1 N= 58, 59, 60, 177	14 (6 to 25)	24 (14 to 37)	25 (15 to 38)	21 (15 to 28)
Day 29	92 (82 to 97)	97 (88 to 100)	97 (88 to 100)	95 (91 to 98)

### Statistical analyses

No statistical analyses for this end point

### Secondary: 7) Percentages of Subjects With hSBA ≥1:8 Directed Against N. meningitidis Serogroup W at day 1 and day 29

End point title	7) Percentages of Subjects With hSBA ≥1:8 Directed Against N. meningitidis Serogroup W at day 1 and day 29
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End point description:

To assess the immunogenicity of a single injection of MenACWY-CRM vaccine as measured by the percentage of subjects aged 2 through 75 with hSBA titer ≥ 1:8, directed against N. meningitidis serogroup W at day 1 and day 29.

Analysis was done on the FAS.

End point type	Secondary
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End point timeframe:

Day 1 and day 29

End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall (≥2 years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	60	60	58	178
Units: Percentages of Subjects				
number (confidence interval 95%)				
Day 1 N= 60, 59, 59, 178	52 (38 to 65)	63 (49 to 75)	59 (46 to 72)	58 (50 to 65)
Day 29	95 (86 to 99)	95 (86 to 99)	93 (83 to 98)	94 (90 to 97)

### Statistical analyses

No statistical analyses for this end point

### Secondary: 8) Percentages of Subjects With hSBA ≥1:8 Directed Against N. meningitidis Serogroup Y at day 1 and day 29

End point title	8) Percentages of Subjects With hSBA ≥1:8 Directed Against N. meningitidis Serogroup Y at day 1 and day 29
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End point description:

To assess the immunogenicity of a single injection of MenACWY-CRM vaccine as measured by the percentage of subjects aged 2 through 75 with hSBA titer ≥ 1:8, directed against N. Meningitidis serogroup Y at day 1 and day 29.

Analysis was done on the FAS.

End point type	Secondary
End point timeframe:	
day 1 and day 29	

End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall ( $\geq 2$ years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	59	60	58	177
Units: Percentages of Subjects				
number (confidence interval 95%)				
Day 1 N= 59, 59, 59, 177	22 (12 to 35)	53 (39 to 66)	53 (39 to 66)	42 (35 to 50)
Day 29	83 (71 to 92)	95 (86 to 99)	93 (83 to 98)	90 (85 to 94)

### Statistical analyses

No statistical analyses for this end point

### Secondary: 9) hSBA Geometric Mean Titers (GMTs) Directed Against N. meningitidis Serogroup A at day 1 and day 29

End point title	9) hSBA Geometric Mean Titers (GMTs) Directed Against N. meningitidis Serogroup A at day 1 and day 29
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End point description:

To assess the immunogenicity of a single injection of MenACWY-CRM vaccine as measured by hSBA GMTs directed against N. meningitidis serogroup A at day 1 and day 29.

Analysis was done on the FAS.

End point type	Secondary
End point timeframe:	
Day 1 and day 29	

End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall ( $\geq 2$ years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	60	60	58	178
Units: Titers				
geometric mean (confidence interval 95%)				
Day 29	30 (19 to 47)	50 (30 to 84)	29 (16 to 51)	35 (26 to 47)
Day 1 N= 60, 59, 60, 179	( to )	( to )	( to )	( to )

### Statistical analyses

No statistical analyses for this end point

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**Secondary: 10) hSBA GMTs Directed Against N. meningitidis Serogroups C at day 1 and day 29**

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End point title	10) hSBA GMTs Directed Against N. meningitidis Serogroups C at day 1 and day 29
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End point description:

To assess the immunogenicity of a single injection of MenACWY-CRM vaccine as measured by hSBA GMTs directed against N. meningitidis serogroup C at day 1 and day 29.

End point type	Secondary
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End point timeframe:

Day 1 and day 29

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End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall (≥2 years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	60	60	58	178
Units: Titers				
geometric mean (confidence interval 95%)				
Day 1 N= 58, 59, 60, 177	2.88 (2.26 to 3.65)	4.01 (3 to 5.35)	4.14 (3.12 to 5.49)	3.63 (3.11 to 4.25)
Day 29	67 (44 to 101)	191 (117 to 310)	287 (191 to 431)	153 (117 to 199)

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**Statistical analyses**

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No statistical analyses for this end point

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**Secondary: 11) hSBA GMTs Directed Against N. meningitidis Serogroup W at day 1 and day 29**

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End point title	11) hSBA GMTs Directed Against N. meningitidis Serogroup W at day 1 and day 29
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End point description:

To assess the immunogenicity of a single injection of MenACWY-CRM vaccine as measured by hSBA GMTs directed against N. meningitidis serogroup W at day 1.

Analysis was done on the FAS.

End point type	Secondary
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End point timeframe:

Day 1 and day 29

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End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall (≥2 years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	60	60	58	178
Units: Titers				
geometric mean (confidence interval 95%)				
Day 29	60 (44 to 81)	75 (54 to 105)	116 (71 to 187)	80 (64 to 100)
Day 1 N= 60, 59, 59, 178	( to )	( to )	( to )	( to )

## Statistical analyses

No statistical analyses for this end point

### Secondary: 12) hSBA GMTs Directed Against N. meningitidis Serogroup Y at day 1 and day 29

End point title	12) hSBA GMTs Directed Against N. meningitidis Serogroup Y at day 1 and day 29
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End point description:

To assess the immunogenicity of a single injection of MenACWY-CRM vaccine as measured by hSBA GMTs directed against N. meningitidis serogroup Y at day 1 and day 29.  
Analysis was done on the FAS.

End point type	Secondary
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End point timeframe:

Day 1 and day 29

End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall (≥2 years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	59	60	58	177
Units: Titers				
geometric mean (confidence interval 95%)				
Day 29	45 (29 to 69)	105 (72 to 155)	173 (97 to 309)	93 (70 to 123)
Day 1 N= 59, 59, 59, 177	3.59 (2.75 to 4.7)	7.87 (5.48 to 11)	8.69 (5.98 to 13)	6.26 (5.13 to 7.65)

## Statistical analyses

No statistical analyses for this end point

### Secondary: 13) Number of Subjects Who Reported Any Solicited Local and Systemic Reactions Post Vaccination

End point title	13) Number of Subjects Who Reported Any Solicited Local and Systemic Reactions Post Vaccination
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End point description:

The safety of one dose of MenACWY - CRM was assessed in terms of the number of subjects reporting any solicited local and systemic reactions post vaccination.  
The analysis was performed on the safety analysis set.

End point type	Secondary
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End point timeframe:

From day 1 to Day 7 post vaccination

End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall (≥2 years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	60	60	60	180
Units: Number of Subjects				
INJECTION SITE REACTIONS	5	17	5	27
SYSTEMIC REACTIONS	3	7	9	19

## Statistical analyses

No statistical analyses for this end point

## Secondary: 14) Number of Subjects Who Reported Solicited Local and Systemic Reactions Post Vaccination

End point title	14) Number of Subjects Who Reported Solicited Local and Systemic Reactions Post Vaccination
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End point description:

The safety of one dose of MenACWY - CRM was assessed in terms of the number of subjects reporting solicited local and systemic reactions post vaccination.  
The analysis was performed on the safety analysis set.

End point type	Secondary
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End point timeframe:

From day 1 to Day 7 post vaccination

End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall (≥2 years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	60	60	60	180
Units: Number of Subjects				
ANALGESIC ANTIPYRETIC	2	5	2	9
Body Temperature >=40C	0	0	0	0
ERYTHEMA (mm)	0	0	0	0
INDURATION (mm)	0	0	0	0
PAIN	4	17	5	26
TENDERNESS	1	0	0	1
ARTHRALGIA	1	1	0	2
BODY TEMPERATURE >=38C	1	1	1	3
CHANGE IN EATING HABITS	0	0	0	0



CHILLS	0	4	2	6
DIARRHEA	0	0	0	0
HEADACHE	2	5	7	14
IRRITABILITY	0	0	0	0
MALAISE	2	2	2	6
MYALGIA	1	0	2	3
NAUSEA	0	1	1	2
RASH	0	0	0	0
SLEEPINESS	0	0	0	0
VOMITING	0	0	0	0

## Statistical analyses

No statistical analyses for this end point

### Secondary: 15) Number of Subjects With Unsolicited Adverse Events

End point title	15) Number of Subjects With Unsolicited Adverse Events
End point description:	
The safety of one dose of MenACWY -CRM was assessed in terms of the number of subjects reporting unsolicited adverse events. All AEs were recorded from day 1 to day 7; SAE, medically attended AEs and AEs Leading to premature withdrawal were recorded throughout the entire study period. The analysis was performed on the safety analysis set.	
End point type	Secondary
End point timeframe:	
Day 1 through day 29	

End point values	2 - 10 years	11 - 18 years	19 - 75 years	Overall (≥2 years)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	60	60	60	180
Units: Number of Subjects				
Any Unsolicited AE	9	6	4	19
Any SAE	0	0	1	1
Medically Attended AEs	8	5	4	17
AEs Leading to premature withdrawal	0	0	0	0

## Statistical analyses

No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

Day 1-7 after vaccination for Solicited Adverse; Unsolicited AEs were collected throughout the study period.

Adverse event reporting additional description:

Any solicited and unsolicited adverse events were collected from 30 minutes post vaccination up to 7 days. Serious Adverse Events (SAE), medically attended AEs, AEs leading to withdrawal from the study were collected from day 1 through day 29.

Assessment type	Non-systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	17.0
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### Reporting groups

Reporting group title	2 - 10 years
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Reporting group description:

Subjects between 2 and 10 years of age who received one injection of MenACWY - CRM vaccine on day 1.

Reporting group title	11 - 18 years
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Reporting group description:

Subjects between 11 and 18 years of age who received one injection of MenACWY - CRM vaccine on day 1.

Reporting group title	19 - 75 years
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Reporting group description:

Subjects between 19 and 75 years of age who received one injection of MenACWY - CRM vaccine on day 1.

Reporting group title	Overall (>2 years)
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Reporting group description:

Subjects between 2 and 75 years of age who received one injection of MenACWY -CRM vaccine on day 1.

Serious adverse events	2 - 10 years	11 - 18 years	19 - 75 years
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 60 (0.00%)	0 / 60 (0.00%)	1 / 60 (1.67%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0
General disorders and administration site conditions			
PYREXIA			
subjects affected / exposed	0 / 60 (0.00%)	0 / 60 (0.00%)	1 / 60 (1.67%)
occurrences causally related to treatment / all	0 / 0	0 / 0	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Serious adverse events	Overall (>2 years)		
Total subjects affected by serious			

adverse events			
subjects affected / exposed	1 / 180 (0.56%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
General disorders and administration site conditions			
PYREXIA			
subjects affected / exposed	1 / 180 (0.56%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		

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

<b>Non-serious adverse events</b>	2 - 10 years	11 - 18 years	19 - 75 years
Total subjects affected by non-serious adverse events			
subjects affected / exposed	10 / 60 (16.67%)	21 / 60 (35.00%)	10 / 60 (16.67%)
Nervous system disorders			
HEADACHE			
alternative assessment type: Systematic			
subjects affected / exposed	2 / 60 (3.33%)	5 / 60 (8.33%)	7 / 60 (11.67%)
occurrences (all)	3	5	8
General disorders and administration site conditions			
CHILLS			
alternative assessment type: Systematic			
subjects affected / exposed	0 / 60 (0.00%)	4 / 60 (6.67%)	2 / 60 (3.33%)
occurrences (all)	0	4	2
INJECTION SITE PAIN			
alternative assessment type: Systematic			
subjects affected / exposed	5 / 60 (8.33%)	17 / 60 (28.33%)	5 / 60 (8.33%)
occurrences (all)	5	17	6
Infections and infestations			
UPPER RESPIRATORY TRACT INFECTION			
subjects affected / exposed	4 / 60 (6.67%)	1 / 60 (1.67%)	0 / 60 (0.00%)
occurrences (all)	4	1	0

<b>Non-serious adverse events</b>	Overall (>2 years)		
Total subjects affected by non-serious adverse events			

subjects affected / exposed	41 / 180 (22.78%)		
Nervous system disorders			
HEADACHE			
alternative assessment type: Systematic			
subjects affected / exposed	14 / 180 (7.78%)		
occurrences (all)	16		
General disorders and administration site conditions			
CHILLS			
alternative assessment type: Systematic			
subjects affected / exposed	6 / 180 (3.33%)		
occurrences (all)	6		
INJECTION SITE PAIN			
alternative assessment type: Systematic			
subjects affected / exposed	27 / 180 (15.00%)		
occurrences (all)	28		
Infections and infestations			
UPPER RESPIRATORY TRACT INFECTION			
subjects affected / exposed	5 / 180 (2.78%)		
occurrences (all)	5		

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
02 February 2012	Protocol title; protocol synopsis, methodology section; protocol synopsis, medical history section; protocol synopsis, number of subjects planned section; new section: 4.3 Criteria for Delay of Blood Sampling; A new text: Subjects who are withdrawn from study should be encouraged to continue in the study for safety and immunogenicity assessments; Clarification for Serious Adverse Event definition.
06 February 2012	New text: Enrollment will commence with approximately 60 subjects 19 up to 75 years of age. Following safety evaluation in this cohort, younger subjects will be enrolled. New text: All adult subjects' (19-75 years of age) safety data collected through Day 1 until Day 29 will be analyzed before subjects from 2 up to 18 years of age are enrolled into the study. Inclusion of one interim safety analysis planned for the study.
09 January 2013	Clarification of an ambiguity as regard to the subject numbering and identification. Clarification of the process for subject's identification and the definition of 'subject number'.
22 May 2013	Inclusion of a second planned interim safety analysis of all subjects age 11 to 18 years will be analyzed before subjects aged 2 to 10 years are enrolled. Further stratification of pediatric population to enroll approximately 30 subjects each in age groups 2 to 5, 6 to 10, 11 to 14 and 15 to 18. Deletion of the phrase: 'The analysis of the serologic specimens by the lab will be done in a blinded fashion'.
26 March 2014	Inclusion of "End of Trial" definition

Notes:

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### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported