



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 Children, Adolescents and Adults in Russia

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

Summary

| | |
|--------------------------|----------------|
| EudraCT number | 2014-004617-82 |
| Trial protocol | Outside EU/EEA |
| Global end of trial date | 19 March 2013 |

Results information

| | |
|--------------------------------|---|
| Result version number | v2 (current) |
| This version publication date | 16 June 2016 |
| First version publication date | 08 January 2015 |
| Version creation reason | <ul style="list-style-type: none">Correction of full data set e-QC of the study needed because of EudraCT system glitch and updates are required. |

Trial information

Trial identification

| | |
|-----------------------|--------|
| Sponsor protocol code | V59_50 |
|-----------------------|--------|

Additional study identifiers

| | |
|------------------------------------|-------------|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | NCT01725217 |
| WHO universal trial number (UTN) | - |

Notes:

Sponsors

| | |
|------------------------------|---|
| Sponsor organisation name | Novartis Vaccines and Diagnostics SRL |
| 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 September 2013 |
| Is this the analysis of the primary completion data? | No |
| Global end of trial reached? | Yes |
| Global end of trial date | 19 March 2013 |
| 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:

Standard immunization practices were observed and care was taken to administer the injection intramuscularly. As with all injectable vaccines, appropriate medical treatment and supervision were readily available in case of 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.

This clinical study was designed and implemented and reported in accordance with the ICH (International Conference on Harmonization) Harmonized Tripartite Guidelines for Good Clinical Practice (GCP), with applicable local regulations and with the ethical principles laid down in the Declaration of Helsinki.

Background therapy: -

Evidence for comparator: -

| | |
|---|------------------|
| Actual start date of recruitment | 14 November 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 | Russian Federation: 198 |
| Worldwide total number of subjects | 198 |
| 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) | 76 |
| Adolescents (12-17 years) | 56 |

| | |
|----------------------|----|
| Adults (18-64 years) | 63 |
| From 65 to 84 years | 3 |
| 85 years and over | 0 |

Subject disposition

Recruitment

Recruitment details:

Subjects were recruited from 4 centres in Russia.

Pre-assignment

Screening details:

All subjects were enrolled in the trial.

Period 1

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

Arms

| | |
|------------------------------|----|
| Are arms mutually exclusive? | No |
|------------------------------|----|

| | |
|------------------|-----------------|
| Arm title | ≥2 to ≤10 Years |
|------------------|-----------------|

Arm description:

Subjects ≥2 to ≤10 years of age who received one vaccination of MenACWY-CRM

| | |
|--|--|
| Arm type | Experimental |
| Investigational medicinal product name | Meningococcal (groups A, C, W, and Y) oligosaccharide diphtheria CRM-197 |
| 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

| | |
|------------------|------------------|
| Arm title | ≥11 to ≤17 Years |
|------------------|------------------|

Arm description:

Subjects ≥11 to ≤17 years of age who received one vaccination of MenACWY-CRM

| | |
|--|--|
| Arm type | Experimental |
| Investigational medicinal product name | Meningococcal (groups A, C, W, and Y) oligosaccharide diphtheria CRM-197 |
| 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

| | |
|------------------|-----------|
| Arm title | ≥18 years |
|------------------|-----------|

Arm description:

Subjects ≥18 years of age who received one vaccination of MenACWY-CRM

| | |
|----------|--------------|
| Arm type | Experimental |
|----------|--------------|

| | |
|--|--|
| Investigational medicinal product name | Meningococcal (groups A, C, W, and Y) oligosaccharide diphtheria CRM-197 |
| 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

| | |
|------------------|--------------------|
| Arm title | Overall (≥2 years) |
|------------------|--------------------|

Arm description:

All subjects ≥2 years of age who received one vaccination of MenACWY-CRM

| | |
|--|--|
| Arm type | Experimental |
| Investigational medicinal product name | Meningococcal (groups A, C, W, and Y) oligosaccharide diphtheria CRM-197 |
| 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

| Number of subjects in period 1 | ≥2 to ≤10 Years | ≥11 to ≤17 Years | ≥18 years |
|---------------------------------------|-----------------|------------------|-----------|
| Started | 66 | 66 | 66 |
| Completed | 65 | 66 | 66 |
| Not completed | 1 | 0 | 0 |
| Consent withdrawn by subject | 1 | - | - |

| Number of subjects in period 1 | Overall (≥2 years) |
|---------------------------------------|--------------------|
| Started | 198 |
| Completed | 197 |
| Not completed | 1 |
| Consent withdrawn by subject | 1 |

Baseline characteristics

Reporting groups

| | |
|--|--------------------|
| Reporting group title | ≥2 to ≤10 Years |
| Reporting group description: | |
| Subjects ≥2 to ≤10 years of age who received one vaccination of MenACWY-CRM | |
| Reporting group title | ≥11 to ≤17 Years |
| Reporting group description: | |
| Subjects ≥11 to ≤17 years of age who received one vaccination of MenACWY-CRM | |
| Reporting group title | ≥18 years |
| Reporting group description: | |
| Subjects ≥18 years of age who received one vaccination of MenACWY-CRM | |
| Reporting group title | Overall (≥2 years) |
| Reporting group description: | |
| All subjects ≥2 years of age who received one vaccination of MenACWY-CRM | |

| Reporting group values | ≥2 to ≤10 Years | ≥11 to ≤17 Years | ≥18 years |
|------------------------|-----------------|------------------|-----------|
| Number of subjects | 66 | 66 | 66 |
| Age categorical | | | |
| Units: Subjects | | | |

| | | | |
|---|-------|-------|--------|
| Age continuous | | | |
| Analysis was done on the all enrolled set | | | |
| Units: years | | | |
| arithmetic mean | 6 | 13.8 | 38.8 |
| standard deviation | ± 2.7 | ± 2.1 | ± 12.5 |
| Gender categorical | | | |
| Analysis was done on the all enrolled set | | | |
| Units: Subjects | | | |
| Female | 35 | 29 | 44 |
| Male | 31 | 37 | 22 |

| Reporting group values | Overall (≥2 years) | Total | |
|------------------------|--------------------|-------|--|
| Number of subjects | 198 | 198 | |
| Age categorical | | | |
| Units: Subjects | | | |

| | | | |
|---|--------|-----|--|
| Age continuous | | | |
| Analysis was done on the all enrolled set | | | |
| Units: years | | | |
| arithmetic mean | 19.6 | | |
| standard deviation | ± 15.9 | - | |
| Gender categorical | | | |
| Analysis was done on the all enrolled set | | | |
| Units: Subjects | | | |
| Female | 108 | 108 | |
| Male | 90 | 90 | |

End points

End points reporting groups

| | |
|--|-------------------------------------|
| Reporting group title | ≥2 to ≤10 Years |
| Reporting group description: Subjects ≥2 to ≤10 years of age who received one vaccination of MenACWY-CRM | |
| Reporting group title | ≥11 to ≤17 Years |
| Reporting group description: Subjects ≥11 to ≤17 years of age who received one vaccination of MenACWY-CRM | |
| Reporting group title | ≥18 years |
| Reporting group description: Subjects ≥18 years of age who received one vaccination of MenACWY-CRM | |
| Reporting group title | Overall (≥2 years) |
| Reporting group description: All subjects ≥2 years of age who received one vaccination of MenACWY-CRM | |
| Subject analysis set title | All enrolled Set |
| Subject analysis set type | Intention-to-treat |
| Subject analysis set description: All subjects who have signed an informed consent, undergone screening procedure(s), and have a subject number assigned. | |
| Subject analysis set title | Full Analysis Set (FAS) |
| Subject analysis set type | Full analysis |
| Subject analysis set description: All subjects in the exposed population who provided evaluable serum samples whose assay results are available for at least one serogroup on day 1 and/or day 29 | |
| Subject analysis set title | Exposed Set |
| Subject analysis set type | Safety analysis |
| Subject analysis set description: All enrolled subjects who actually received study vaccination | |
| Subject analysis set title | Safety Set (>2 - <3 years of age) |
| Subject analysis set type | Safety analysis |
| Subject analysis set description: All subjects in the exposed population between 2 and 3 years of age who provided any post-baseline safety data | |
| Subject analysis set title | Safety Set (>2 - <5 years of age) |
| Subject analysis set type | Safety analysis |
| Subject analysis set description: All subjects in the exposed population between 2 and 5 years of age who provided any post-baseline safety data | |
| Subject analysis set title | Safety Set (>2 years of age) |
| 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 | Safety Set (>6 - <10 years of age) |
| Subject analysis set type | Safety analysis |
| Subject analysis set description: All subjects in the exposed population between 6 and 10 years of age who provided any post-baseline safety data | |
| Subject analysis set title | Safety Set (>6 years of age) |

| | |
|---------------------------|-----------------|
| Subject analysis set type | Safety analysis |
|---------------------------|-----------------|

Subject analysis set description:

All subjects in the exposed population older than 6 years of age who provided any post-baseline safety data

Primary: 1) Percentages of Overall Subjects With Seroresponse After MenACWY-CRM Vaccination

| | |
|-----------------|--|
| End point title | 1) Percentages of Overall Subjects With Seroresponse After MenACWY-CRM Vaccination ^{[1][2]} |
|-----------------|--|

End point description:

Immunogenicity was measured as the percentages of overall subjects with hSBA seroresponse, directed against N. meningitidis serogroups A, C, W and Y, evaluated by serum bactericidal assay using human complement (hSBA), 28 days after one vaccination of MenACWY-CRM (day 29).

The seroresponse is defined as the percentages of subjects achieving hSBA $\geq 1:8$ postvaccination with a prevaccination hSBA $< 1:4$ and the percentages of subjects achieving at least four-fold increases in hSBA from day 1 in subjects with a baseline hSBA $\geq 1:4$.

Analysis was done on Full Analysis Set (FAS).

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Day 29

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: there was no statistical analysis for this endpoint.

[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: there was no statistical analysis for this endpoint.

| End point values | Overall (≥ 2 years) | | | |
|----------------------------------|---------------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 193 ^[3] | | | |
| Units: Percentages of Subjects | | | | |
| number (confidence interval 95%) | | | | |
| Men A | 85 (79 to 90) | | | |
| Men C | 74 (67 to 80) | | | |
| Men W | 60 (53 to 67) | | | |
| Men Y | 83 (77 to 88) | | | |

Notes:

[3] - Men C, N= 192

Men W, N=192

Men Y, N= 191

Statistical analyses

No statistical analyses for this end point

Secondary: 2) Percentages of Subjects With Seroresponse After MenACWY-CRM Vaccination, by Age Group

| | |
|-----------------|---|
| End point title | 2) Percentages of Subjects With Seroresponse After MenACWY-CRM Vaccination, by Age Group ^[4] |
|-----------------|---|

End point description:

Immunogenicity was measured as the percentages of subjects stratified by age group with hSBA response, directed against N. meningitidis serogroups A, C, W and Y, 28 days after one vaccination of MenACWY-CRM.

Analysis was done on the FAS.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Day 29

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: there was no statistical analysis for this endpoint.

| End point values | ≥2 to ≤10 Years | ≥11 to ≤17 Years | ≥18 years | |
|----------------------------------|--------------------|---------------------|-----------------|--|
| Subject group type | Reporting group | Reporting group | Reporting group | |
| Number of subjects analysed | 63 ^[5] | 65 | 65 | |
| Units: Percentages of Subjects | | | | |
| number (confidence interval 95%) | | | | |
| Men A | 89 (78 to 95) | 89 (79 to 96) | 77 (65 to 86) | |
| Men C | 69 (56 to 80) | 82 (70 to 90) | 71 (58 to 81) | |
| Men W | 73 (60 to 83) | 51 (38 to 63) | 57 (44 to 69) | |
| Men Y | 77 (65 to 87) | 88 (77 to 95) | 85 (74 to 92) | |

Notes:

[5] - Men C, N= 62,65,65

Men W, N= 62,65,65

Men Y, N= 61,65,65

Statistical analyses

No statistical analyses for this end point

Secondary: 3) Geometric Mean Titers (GMTs) of Subjects at Baseline and After MenACWY-CRM Vaccination

| | |
|-----------------|---|
| End point title | 3) Geometric Mean Titers (GMTs) of Subjects at Baseline and After MenACWY-CRM Vaccination |
|-----------------|---|

End point description:

Immunogenicity was measured as hSBA GMTs, against N. meningitidis serogroups A, C, W and Y, at baseline (day 1) and 28 days after MenACWY-CRM vaccination (day 29), overall and by age group. Analysis was done on the FAS.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Day 29

| End point values | ≥2 to ≤10 Years | ≥11 to ≤17 Years | ≥18 years | Overall (≥2 years) |
|--|---------------------|---------------------|---------------------|-----------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 63 ^[6] | 65 | 65 | 193 |
| Units: Titers | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Men A (Day 1) | 2.17 (1.79 to 2.62) | 2.43 (2.01 to 2.93) | 2.61 (2.11 to 3.23) | 2.35 (2.17 to 2.55) |
| Men A (Day 29) | 67 (38 to 119) | 134 (77 to 233) | 76 (41 to 143) | 93 (73 to 119) |
| Men C (Day 1) | 3.16 (2.18 to 4.57) | 3.59 (2.5 to 5.15) | 6.68 (4.43 to 10) | 4.07 (3.45 to 4.8) |
| Men C (Day 29) | 28 (14 to 56) | 47 (24 to 92) | 112 (52 to 243) | 59 (43 to 81) |

| | | | | |
|----------------|---------------------|---------------------|---------------------|---------------------|
| Men W (Day 1) | 7.93 (4.69 to 13) | 21 (13 to 36) | 13 (7.16 to 23) | 12 (9.42 to 15) |
| Men W (Day 29) | 94 (56 to 155) | 117 (72 to 191) | 143 (83 to 248) | 111 (89 to 139) |
| Men Y (Day 1) | 3.02 (2.33 to 3.92) | 3.73 (2.89 to 4.82) | 2.74 (2.05 to 3.66) | 2.93 (2.61 to 3.28) |
| Men Y (Day 29) | 32 (18 to 56) | 67 (39 to 115) | 80 (43 to 147) | 58 (46 to 74) |

Notes:

[6] - Men C (Day 29), N=62,65,65,192

Men C (Day 29), N=62,65,65,192

Statistical analyses

No statistical analyses for this end point

Secondary: 4) Percentages of Subjects With hSBA Titer $\geq 1:8$ at Baseline and After MenACWY-CRM Vaccination

| | |
|-----------------|---|
| End point title | 4) Percentages of Subjects With hSBA Titer $\geq 1:8$ at Baseline and After MenACWY-CRM Vaccination |
|-----------------|---|

End point description:

Immunogenicity was measured as the percentages of subjects with hSBA titer $\geq 1:8$, at baseline (day 1) and 28 days after MenACWY-CRM vaccination (day 29), overall and by age group.

Analysis was done on the FAS.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Days 1 and 29

| End point values | ≥ 2 to ≤ 10 Years | ≥ 11 to ≤ 17 Years | ≥ 18 years | Overall (≥ 2 years) |
|----------------------------------|-----------------------------|------------------------------|-----------------|---------------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 63 ^[7] | 65 | 65 | 193 |
| Units: Percentages of Subjects | | | | |
| number (confidence interval 95%) | | | | |
| Men A (Day 1) | 2 (0.04 to 9) | 5 (1 to 13) | 11 (4 to 21) | 6 (3 to 10) |
| Men A (Day 29) | 89 (78 to 95) | 92 (83 to 97) | 85 (74 to 92) | 89 (83 to 93) |
| Men C (Day 1) | 13 (6 to 23) | 17 (9 to 28) | 49 (37 to 62) | 26 (20 to 33) |
| Men C (Day 29) | 76 (63 to 86) | 86 (75 to 93) | 89 (79 to 96) | 84 (78 to 89) |
| Men W (Day 1) | 30 (19 to 43) | 71 (58 to 81) | 69 (57 to 80) | 57 (50 to 64) |
| Men W (Day 29) | 95 (87 to 99) | 98 (92 to 100) | 97 (89 to 100) | 97 (93 to 99) |
| Men Y (Day 1) | 10 (4 to 20) | 15 (8 to 26) | 22 (12 to 33) | 16 (11 to 22) |
| Men Y (Day 29) | 79 (67 to 88) | 94 (85 to 98) | 89 (79 to 96) | 88 (82 to 92) |

Notes:

[7] - Day29

Men C,N=62,65,65,192

Men W,N=62,65,65,192

Men Y,N=62,65,65,192

Day 1

MenY,N= 62,65,65,192

Statistical analyses

No statistical analyses for this end point

Secondary: 5) Percentages of Subjects Reporting Solicited local and systemic Adverse Events (AEs) After MenACWY-CRM Vaccination

| | |
|-----------------|--|
| End point title | 5) Percentages of Subjects Reporting Solicited local and systemic Adverse Events (AEs) After MenACWY-CRM Vaccination |
|-----------------|--|

End point description:

Safety was assessed in terms of percentages of subjects who reported solicited local and systemic Adverse Events (AEs) after MenACWY-CRM vaccination, overall and by age group.
Analysis was done on safety set

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Within days 1 through 7 postvaccination

| End point values | Safety Set (>2 - <3 years of age) | Safety Set (>2 - <5 years of age) | | |
|-------------------------------------|------------------------------------|------------------------------------|--|--|
| Subject group type | Subject analysis set | Subject analysis set | | |
| Number of subjects analysed | 18 | 27 | | |
| Units: Percentages of Subjects | | | | |
| number (not applicable) | | | | |
| Tenderness | 7 | 11 | | |
| Erythema | 5 | 7 | | |
| Induration | 3 | 5 | | |
| Change in Eating Habits | 1 | 1 | | |
| Sleepiness | 5 | 9 | | |
| Irritability | 3 | 7 | | |
| Vomiting | 0 | 1 | | |
| Diarrhea | 2 | 3 | | |
| Rash | 1 | 1 | | |
| Fever ($\geq 38^{\circ}\text{C}$) | 1 | 1 | | |
| Use of analgesic/antipyretics | 0 | 2 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: 6) Percentages of Subjects Reporting Solicited local and systemic Adverse Events (AEs) After MenACWY-CRM Vaccination

| | |
|-----------------|---|
| End point title | 6) Percentages of Subjects Reporting Solicited local and systemic Adverse Events (AEs) After MenACWY-CRM Vaccination ^[8] |
|-----------------|---|

End point description:

Safety was assessed in terms of percentages of subjects who reported solicited local and systemic Adverse Events (AEs) after MenACWY-CRM vaccination, overall and by age group.
Analysis was done on safety set.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Within days 1 through 7 postvaccination

Notes:

[8] - 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: there was no statistical analysis for this endpoint.

| End point values | ≥11 to ≤17 Years | ≥18 years | Safety Set (>6 - <10 years of age) | Safety Set (>6 years of age) |
|--------------------------------|------------------|-----------------|-------------------------------------|-------------------------------|
| Subject group type | Reporting group | Reporting group | Subject analysis set | Subject analysis set |
| Number of subjects analysed | 66 | 66 | 38 | 170 |
| Units: Percentages of Subjects | | | | |
| number (not applicable) | | | | |
| Pain | 33 | 33 | 16 | 82 |
| Erythema | 12 | 11 | 7 | 30 |
| Induration | 11 | 8 | 4 | 23 |
| Chills | 5 | 8 | 3 | 16 |
| Nausea | 7 | 5 | 1 | 13 |
| Malaise | 15 | 13 | 6 | 34 |
| Myalgia | 11 | 9 | 5 | 33 |
| Arthralgia | 7 | 7 | 1 | 15 |
| Headache | 18 | 18 | 7 | 43 |
| Rash | 0 | 3 | 1 | 4 |
| Fever (≥38 °C) | 2 | 1 | 2 | 5 |
| Use of analgesic/antipyretics | 6 | 6 | 7 | 19 |

Statistical analyses

No statistical analyses for this end point

Secondary: 7) Percentages of Subjects Reporting Unsolicited Adverse Events (AEs) After MenACWY-CRM Vaccination

| | |
|-----------------|---|
| End point title | 7) Percentages of Subjects Reporting Unsolicited Adverse Events (AEs) After MenACWY-CRM Vaccination |
|-----------------|---|

End point description:

Safety was assessed in terms of percentages of subjects who reported all the adverse events (AEs) occurring from day 1 through 7, medically attended AEs, SAEs and AEs resulting in premature withdrawal, from day 1 through 29, after MenACWY-CRM vaccination, overall and by age group. Analysis was done on safety set.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

AEs occurring from day 1 through 7, medically attended AEs, SAEs and AEs resulting in premature withdrawal, from day 1 through 29

| End point values | ≥2 to ≤10 Years | ≥11 to ≤17 Years | ≥18 years | Overall (≥2 years) |
|---|--------------------|---------------------|-----------------|-----------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 65 | 66 | 66 | 197 |
| Units: Percentages of Subjects | | | | |
| number (not applicable) | | | | |
| Any AEs (days 1 through 7) | 13 | 8 | 12 | 33 |
| At least possibly related AEs (days 1 through 7) | 2 | 6 | 12 | 20 |
| Any SAE (days 1 through 29) | 0 | 0 | 0 | 0 |
| At least possibly related SAE (days 1 through 29) | 0 | 0 | 0 | 0 |
| Medically attended AE (days 1 through 29) | 5 | 1 | 2 | 8 |
| Premature withdrawal due to AE (days 1 through 29) | 0 | 0 | 0 | 0 |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

From day 1 through day 29

Adverse event reporting additional description:

Solicited local and systemic AEs were collected within days 1 through 7 postvaccination. All unsolicited AEs from days 1 through 7, SAEs from days 1 through 29.

| | |
|-----------------|------------|
| Assessment type | Systematic |
|-----------------|------------|

Dictionary used

| | |
|-----------------|--------|
| Dictionary name | MedDRA |
|-----------------|--------|

| | |
|--------------------|------|
| Dictionary version | 17.1 |
|--------------------|------|

Reporting groups

| | |
|-----------------------|-----------------|
| Reporting group title | ≥2 to ≤10 Years |
|-----------------------|-----------------|

Reporting group description:

Subjects ≥2 to ≤10 years of age who received one vaccination of MenACWY-CRM

| | |
|-----------------------|------------------|
| Reporting group title | ≥11 to ≤17 Years |
|-----------------------|------------------|

Reporting group description:

Subjects ≥11 to ≤17 years of age who received one vaccination of MenACWY-CRM

| | |
|-----------------------|-----------|
| Reporting group title | ≥18 years |
|-----------------------|-----------|

Reporting group description:

Subjects ≥18 years of age who received one vaccination of MenACWY-CRM

| | |
|-----------------------|--------------------|
| Reporting group title | Overall (≥2 years) |
|-----------------------|--------------------|

Reporting group description:

All subjects ≥2 years of age who received one vaccination of MenACWY-CRM

| Serious adverse events | ≥2 to ≤10 Years | ≥11 to ≤17 Years | ≥18 years |
|---|-----------------|------------------|----------------|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 0 / 65 (0.00%) | 0 / 66 (0.00%) | 0 / 66 (0.00%) |
| number of deaths (all causes) | 0 | 0 | 0 |
| number of deaths resulting from adverse events | 0 | 0 | 0 |

| Serious adverse events | Overall (≥2 years) | | |
|---|--------------------|--|--|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 0 / 197 (0.00%) | | |
| number of deaths (all causes) | 0 | | |
| number of deaths resulting from adverse events | 0 | | |

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

| Non-serious adverse events | ≥2 to ≤10 Years | ≥11 to ≤17 Years | ≥18 years |
|---|------------------------|-------------------------|------------------|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 42 / 65 (64.62%) | 42 / 66 (63.64%) | 44 / 66 (66.67%) |
| Nervous system disorders | | | |
| Headache | | | |
| subjects affected / exposed | 8 / 65 (12.31%) | 18 / 66 (27.27%) | 18 / 66 (27.27%) |
| occurrences (all) | 10 | 21 | 19 |
| Somnolence | | | |
| subjects affected / exposed | 9 / 65 (13.85%) | 1 / 66 (1.52%) | 0 / 66 (0.00%) |
| occurrences (all) | 9 | 1 | 0 |
| General disorders and administration site conditions | | | |
| Chills | | | |
| alternative assessment type: Non-systematic | | | |
| subjects affected / exposed | 3 / 65 (4.62%) | 5 / 66 (7.58%) | 8 / 66 (12.12%) |
| occurrences (all) | 3 | 6 | 8 |
| Injection site erythema | | | |
| subjects affected / exposed | 12 / 65 (18.46%) | 13 / 66 (19.70%) | 10 / 66 (15.15%) |
| occurrences (all) | 13 | 14 | 13 |
| Injection site induration | | | |
| subjects affected / exposed | 8 / 65 (12.31%) | 11 / 66 (16.67%) | 8 / 66 (12.12%) |
| occurrences (all) | 9 | 12 | 10 |
| Injection site pain | | | |
| subjects affected / exposed | 27 / 65 (41.54%) | 33 / 66 (50.00%) | 33 / 66 (50.00%) |
| occurrences (all) | 28 | 35 | 35 |
| Malaise | | | |
| subjects affected / exposed | 6 / 65 (9.23%) | 15 / 66 (22.73%) | 13 / 66 (19.70%) |
| occurrences (all) | 7 | 17 | 15 |
| Gastrointestinal disorders | | | |
| Nausea | | | |
| alternative assessment type: Non-systematic | | | |
| subjects affected / exposed | 1 / 65 (1.54%) | 7 / 66 (10.61%) | 5 / 66 (7.58%) |
| occurrences (all) | 2 | 7 | 5 |
| Psychiatric disorders | | | |
| Irritability | | | |
| subjects affected / exposed | 7 / 65 (10.77%) | 0 / 66 (0.00%) | 0 / 66 (0.00%) |
| occurrences (all) | 7 | 0 | 0 |
| Musculoskeletal and connective tissue | | | |

| | | | |
|-----------------------------|----------------|------------------|-----------------|
| disorders | | | |
| Arthralgia | | | |
| subjects affected / exposed | 1 / 65 (1.54%) | 7 / 66 (10.61%) | 7 / 66 (10.61%) |
| occurrences (all) | 1 | 8 | 7 |
| Myalgia | | | |
| subjects affected / exposed | 5 / 65 (7.69%) | 19 / 66 (28.79%) | 9 / 66 (13.64%) |
| occurrences (all) | 5 | 20 | 9 |
| Infections and infestations | | | |
| Rhinitis | | | |
| subjects affected / exposed | 6 / 65 (9.23%) | 0 / 66 (0.00%) | 1 / 66 (1.52%) |
| occurrences (all) | 6 | 0 | 1 |

| | | | |
|---|--------------------|--|--|
| Non-serious adverse events | Overall (≥2 years) | | |
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 128 / 197 (64.97%) | | |
| Nervous system disorders | | | |
| Headache | | | |
| subjects affected / exposed | 44 / 197 (22.34%) | | |
| occurrences (all) | 50 | | |
| Somnolence | | | |
| subjects affected / exposed | 10 / 197 (5.08%) | | |
| occurrences (all) | 10 | | |
| General disorders and administration site conditions | | | |
| Chills | | | |
| alternative assessment type: Non-systematic | | | |
| subjects affected / exposed | 16 / 197 (8.12%) | | |
| occurrences (all) | 17 | | |
| Injection site erythema | | | |
| subjects affected / exposed | 35 / 197 (17.77%) | | |
| occurrences (all) | 40 | | |
| Injection site induration | | | |
| subjects affected / exposed | 27 / 197 (13.71%) | | |
| occurrences (all) | 31 | | |
| Injection site pain | | | |
| subjects affected / exposed | 93 / 197 (47.21%) | | |
| occurrences (all) | 98 | | |
| Malaise | | | |

| | | | |
|---|-------------------|--|--|
| subjects affected / exposed | 34 / 197 (17.26%) | | |
| occurrences (all) | 39 | | |
| Gastrointestinal disorders | | | |
| Nausea | | | |
| alternative assessment type: Non-systematic | | | |
| subjects affected / exposed | 13 / 197 (6.60%) | | |
| occurrences (all) | 14 | | |
| Psychiatric disorders | | | |
| Irritability | | | |
| subjects affected / exposed | 7 / 197 (3.55%) | | |
| occurrences (all) | 7 | | |
| Musculoskeletal and connective tissue disorders | | | |
| Arthralgia | | | |
| subjects affected / exposed | 15 / 197 (7.61%) | | |
| occurrences (all) | 16 | | |
| Myalgia | | | |
| subjects affected / exposed | 33 / 197 (16.75%) | | |
| occurrences (all) | 34 | | |
| Infections and infestations | | | |
| Rhinitis | | | |
| subjects affected / exposed | 7 / 197 (3.55%) | | |
| occurrences (all) | 7 | | |

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

| Date | Amendment |
|--------------|---|
| 19 June 2012 | Indicate the number of children aged 2-3 y.o within the group of 66 children aged 2-10 y.o.; state vaccination timeframe in the section "Methodology"; state that the interval between blood draw is the same for all vaccinated subjects; list all contraindications listed in the annotation for use in the exclusion criteria; exclude possibility of IMP use which was stored in terms of temperature deviations; indicate the difference of systemic reactions amongst different age groups. |

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported