# **Clinical trial results:**

A phase III, open, randomized, controlled, primary vaccination study to demonstrate non-inferiority of GlaxoSmithKline (GSK) Biologicals' meningococcal serogroup ACWY conjugate vaccine compared to licensed MenC-CRM197 conjugate vaccine when administered to healthy subjects aged 2 through 10 years.

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

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## Summary

| EudraCT number                 | 2007-007837-38   |
|--------------------------------|--|
| Trial protocol                 | DE FR  |
| Global end of trial date       | 08 January 2009  |
| Results information            |  |
| Result version number          | v2   |
| This version publication date  | 08 June 2016   |
| First version publication date | 04 April 2015  |
| Version creation reason        | <ul> <li>Correction of full data set</li> <li>Data correction due to a system error in EudraCT – Results.</li> </ul> |

## **Trial information**

| Trial identification               |             |
|------------------------------------|-------------|
| Sponsor protocol code              | 111414      |
| Additional study identifiers       |             |
| ISRCTN number                      | -           |
| ClinicalTrials.gov id (NCT number) | NCT00674583 |
| WHO universal trial number (UTN)   | -           |
| Notes:                             |             |

## Sponsors

| Sponsor organisation name    | GlaxoSmithKline Biologicals  |
|------------------------------|--|
| Sponsor organisation address | Rue de l'Institut 89, Rixensart, Belgium, B-1330   |
| Public contact               | Clinical Trials Call Center, GlaxoSmithKline Biologicals , 044<br>2089904466, GSKClinicalSupportHD@gsk.com |
| Scientific contact           | Clinical Trials Call Center, GlaxoSmithKline Biologicals , 044<br>2089904466, GSKClinicalSupportHD@gsk.com |

Notes:

## **Paediatric regulatory details**

| Is trial part of an agreed paediatric investigation plan (PIP)       | Yes                   |
|--|-----------------------|
| EMA paediatric investigation plan number(s)                          | EMEA-000429-PI P01-01 |
| Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial? | No                    |
| Does article 46 of REGULATION (EC) No                                | Yes                   |

| 1901/2006 apply to this trial? |
|--------------------------------|
| Notes:                         |

#### Results analysis stage

| Analysis stage                                       | Final             |
|--|-------------------|
| Date of interim/final analysis                       | 14 May 2009       |
| Is this the analysis of the primary completion data? | Yes               |
| Primary completion date                              | 02 September 2008 |
| Global end of trial reached?                         | Yes               |
| Global end of trial date                             | 08 January 2009   |
| Was the trial ended prematurely?                     | No                |
|  |                   |

Notes:

### General information about the trial

Main objective of the trial:

One month after vaccination:

•To demonstrate non-inferiority of the MenACWY-TT conjugate vaccine compared to the licensed conjugate vaccine (MenC-CRM197) in terms of serum bactericidal antibody vaccine response to N. meningitidis serogroup C (MenC).

Criterion for assessment of non-inferiority for serogroup C:

The lower limit of the two-sided standardized asymptotic 95% confidence interval (CI) for the group difference (MenACWY-TT Group minus MenC-CRM Group) in the percentages of subjects with vaccine response to meningococcal polysaccharide C serum based on a bactericidal assay using baby rabbit complement (rSBA-MenC) is greater than or equal to the pre-defined clinical limit of -10%. The vaccine response to MenC is defined as post-vaccination rSBA-MenC titer 1:32 for initially seronegative subjects (i.e. rSBA-MenC titer < 1:8) and at least a 4-fold increase in rSBA-MenC titers from pre to post-vaccination for initially seropositive (i.e. rSBA-MenC titer 1:8) subjects.

Protection of trial subjects:

Written informed consent was obtained from each subject's parent/guardian prior to the performance of any study-specific procedures. The investigator was required to notify GSK Biologicals' Study Contact for Serious Adverse Event by fax, within 24 hours of his/her becoming aware of the SAE. After the initial AE/SAE report, the investigator was required to proactively follow each subject and provide further information to GSK Biologicals on the subject's condition.

All AEs and SAEs documented at a previous visit/contact and designated as not recovered/not resolved or recovering/resolving were reviewed at subsequent visits/contacts.

| Background therapy: -                                     |             |
|---|-------------|
| Evidence for comparator: -                                |             |
| Actual start date of recruitment                          | 09 May 2008 |
| Long term follow-up planned                               | No          |
| Independent data monitoring committee (IDMC) involvement? | No          |
| Notes <sup>.</sup>  |             |

Notes:

#### **Population of trial subjects**

#### Subjects enrolled per country

| Country: Number of subjects enrolled | Germany: 259 |
|--------------------------------------|--------------|
| Country: Number of subjects enrolled | France: 155  |
| Worldwide total number of subjects   | 414          |
| EEA total number of subjects         | 414          |

| Subjects | enrolled | per | age | group |
|----------|----------|-----|-----|-------|
|----------|----------|-----|-----|-------|

|   | 0   |
|---|-----|
| 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)                     | 414 |
| Adolescents (12-17 years)                 | 0   |
| Adults (18-64 years)                      | 0   |
| From 65 to 84 years                       | 0   |
| 85 years and over                         | 0   |

## Subject disposition

## Recruitment

Recruitment details: -

#### **Pre-assignment**

Screening details:

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

#### Period 1

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

#### Arms

| Are arms mutually exclusive? | Yes            |
|------------------------------|----------------|
| Arm title                    | Nimenrix Group |

#### Arm description:

Subjects received 1 dose of Nimenrix vaccine administered intramuscularly in the non-dominant deltoid/thigh region at Day 0.

| Arm type                               | Experimental                                  |
|--|---|
| Investigational medicinal product name | Nimenrix                                      |
| Investigational medicinal product code |   |
| Other name                             | MenACWY-TT, Meningococcal vaccine GSK134612   |
| Pharmaceutical forms                   | Powder and solvent for solution for injection |
| Routes of administration               | Intramuscular use                             |
| Decade and administration details      |   |

Dosage and administration details:

1 dose by intramuscular administration in the non-dominant deltoid/thigh region at Day 0.

| Arm title Menjug | ate Group |
|------------------|-----------|
|------------------|-----------|

Arm description:

Subjects received 1 dose of Menjugate vaccine administered intramuscularly in the non-dominant deltoid/thigh region at Day O.

| Arm type                               | Active comparator                             |
|--|---|
| Investigational medicinal product name | Menjugate                                     |
| Investigational medicinal product code |   |
| Other name                             | MenC-CRM197                                   |
| Pharmaceutical forms                   | Powder and solvent for solution for injection |
| Routes of administration               | Intramuscular use                             |

Dosage and administration details:

1 dose by intramuscular administration in the non-dominant deltoid/thigh region at Day 0.

| Number of subjects in period 1 | Nimenrix Group | Menjugate Group |
|--------------------------------|----------------|-----------------|
| Started                        | 311            | 103             |
| Completed                      | 311            | 103             |

## **Baseline characteristics**

| Reporting groups   |  |  |
|--|--|--|
| Reporting group title  | Nimenrix Group   |  |
| Reporting group description:   |  |  |
| Subjects received 1 dose of Nimenrix vac<br>deltoid/thigh region at Day 0. | ccine administered intramuscularly in the non-dominant           |  |
| Reporting group title  | Menjugate Group  |  |
| Reporting group description:   |  |  |
| Cultivete established 1 deserved Mandaurate                                | a some a deministered intromuse substitution the main deminister |  |

Subjects received 1 dose of Menjugate vaccine administered intramuscularly in the non-dominant deltoid/thigh region at Day 0.

| Reporting group values                                | Nimenrix Group | Menjugate Group | Total |
|---|----------------|-----------------|-------|
| Number of subjects                                    | 311            | 103             | 414   |
| Age categorical                                       |                |                 |       |
| Units: Subjects                                       |                |                 |       |
| In utero  |                |                 | 0     |
| Preterm newborn infants<br>(gestational age < 37 wks) |                |                 | 0     |
| Newborns (0-27 days)                                  |                |                 | 0     |
| Infants and toddlers (28 days-23 months)              |                |                 | 0     |
| Children (2-11 years)                                 |                |                 | 0     |
| Adolescents (12-17 years)                             |                |                 | 0     |
| Adults (18-64 years)                                  |                |                 | 0     |
| From 65-84 years                                      |                |                 | 0     |
| 85 years and over                                     |                |                 | 0     |
| Age continuous  |                |                 |       |
| Units: years  |                |                 |       |
| arithmetic mean                                       | 5.6            | 5.6             |       |
| standard deviation                                    | ± 2.52         | ± 2.32          | -     |
| Gender categorical                                    |                |                 |       |
| Units: Subjects                                       |                |                 |       |
| Female  | 163            | 51              | 214   |
| Male  | 148            | 52              | 200   |

# **End points**

| End points reporting groups   |                 |  |
|---|-----------------|--|
| Reporting group title   | Nimenrix Group  |  |
| Reporting group description:  |                 |  |
| Subjects received 1 dose of Nimenrix vaccine administered intramuscularly in the non-dominant deltoid/thigh region at Day 0.  |                 |  |
| Reporting group title   | Menjugate Group |  |
| Reporting group description:  |                 |  |
| Subjects received 1 dose of Menjugate vaccine administered intramuscularly in the non-dominant deltoid/thigh region at Day O. |                 |  |

## Primary: Number of subjects with vaccine response to rSBA-MenC antibody

End point title

Number of subjects with vaccine response to rSBA-MenC antibody

Vaccine response to MenC was defined as the number of subjects with post-vaccination rSBA-MenC titer

| Number of subjects included in analysis | 360                            |  |
|---|--------------------------------|--|
| Analysis specification                  | Pre-specified                  |  |
| Analysis type                           | non-inferiority <sup>[1]</sup> |  |
| Parameter estimate                      | Difference in percentage       |  |
| Point estimate                          | -0.88                          |  |
| Confidence interval                     |                                |  |
| level                                   | 95 %                           |  |
| sides                                   | 2-sided                        |  |
| lower limit                             | -5.25                          |  |
| upper limit                             | 5.75                           |  |

Notes:

 $\ensuremath{\left[1\right]}$  - For MenC serogroup, the two-sided standardized asymptotic 95% CI for the group difference (Nimenrix Group minus

Menjugate Group) in the percentages of subjects with bactericidal vaccine response was computed.

#### Secondary: Meningococcal serogroups rSBA antibody titers

| End point title   | Meningococcal serogroups rSBA antibody titers |  |
|---|---|--|
| End point description:  |   |  |
| Antibody titers were expressed as geometric mean titers (GMTs). |   |  |
| End point type  | Secondary                                     |  |
| End point timeframe:  |   |  |
|   |   |  |

Prior to and one month after vaccination

| End point values                             | Nimenrix<br>Group            | Menjugate<br>Group           |  |
|--|------------------------------|------------------------------|--|
| Subject group type                           | Reporting group              | Reporting group              |  |
| Number of subjects analysed                  | 296                          | 97                           |  |
| Units: Titers                                |                              |                              |  |
| geometric mean (confidence interval<br>95% ) |                              |                              |  |
| rSBA-MenA, Month 0 [N=227;76]                | 31.5 (23.3 to<br>42.5)       | 25.9 (15.6 to<br>43)         |  |
| rSBA-MenA, Month 1 [N=294;82]                | 6236.1 (5574.5<br>to 6976.3) | 27.2 (15.6 to<br>47.4)       |  |
| rSBA-MenC, Month O[N=270;94]                 | 22.7 (18.1 to<br>28.4)       | 19.4 (13.1 to<br>28.8)       |  |
| rSBA-MenC, Month 1 [N=293;97]                | 2794.8 (2393.5<br>to 3263.3) | 5291.6 (3814.6<br>to 7340.5) |  |
| rSBA-MenW-135, Month 0 [N=282;92]            | 83.2 (67.9 to<br>102)        | 70.2 (48.5 to<br>101.6)      |  |
| rSBA-MenW-135, Month 1 [N=296;95]            | 8549.5 (7618.5<br>to 9594.3) | 87.3 (58.5 to<br>130.4)      |  |
| rSBA-MenY, Month 0 [N=285;90]                | 153.6 (125.3<br>to 188.3)    | 107.4 (71.4 to<br>161.6)     |  |
| rSBA-MenY, Month 1 [N=295;95]                | 8360.7 (7447.3<br>to 9386.1) | 128.2 (83.8 to<br>196.2)     |  |

No statistical analyses for this end point

# Secondary: Anti-meningococcal serotype polysaccharide (anti-PS) antibody concentrations

| End point title   | Anti-meningococcal serotype polysaccharide (anti-PS) antibody concentrations |
|---|--|
| End point description:  |  |
| Antibody concentrations were expressed micrograms per milliliter ( $\mu g/mL).$ | as geometric mean concentrations (GMCs) and tabulated as                     |

| End point type       | Secondary |
|----------------------|-----------|
| End point timeframe: |           |

Prior to and one month after vaccination

| End point values                             | Nimenrix<br>Group         | Menjugate<br>Group        |  |
|--|---------------------------|---------------------------|--|
| Subject group type                           | Reporting group           | Reporting group           |  |
| Number of subjects analysed                  | 149                       | 52                        |  |
| Units: concentration                         |                           |                           |  |
| geometric mean (confidence interval<br>95% ) |                           |                           |  |
| Anti-PSA, Month 0 [N=148;52]                 | 0.2 (0.17 to<br>0.22)     | 0.22 (0.17 to<br>0.29)    |  |
| Anti-PSA, Month 1 [N=149;50]                 | 32.45 (26.57<br>to 39.63) | 0.31 (0.19 to<br>0.49)    |  |
| Anti-PSc, Month 0 [N=147;52]                 | 0.18 (0.16 to<br>0.2)     | 0.2 (0.16 to<br>0.25)     |  |
| Anti-PSC, Month 1 [N=149;52]                 | 14.95 (12.89<br>to 17.34) | 18.07 (13.88<br>to 23.51) |  |
| Anti-PSW-135, Month 0 [N=144;47]             | 0.17 (0.15 to<br>0.18)    | 0.17 (0.14 to<br>0.2)     |  |
| Anti-PSW-135, Month 1 [N=144;47]             | 6.96 (5.72 to<br>8.47)    | 0.18 (0.15 to<br>0.22)    |  |
| Anti-PSY, Month 0 [N=147;47]                 | 0.16 (0.15 to<br>0.17)    | 0.16 (0.15 to<br>0.17)    |  |
| Anti-PSY, Month 1 [N=144;47]                 | 14.15 (11.66<br>to 17.17) | 0.17 (0.15 to<br>0.19)    |  |

#### Statistical analyses

No statistical analyses for this end point

# Secondary: Number of subjects between 2 and 5 years of age with any solicited local symptoms

End point title Number of subjects between 2 and 5 years of age with any solicited local symptoms

End point description:

Solicited symptoms assessed were: pain, redness and swelling. Any = occurrence of any local symptom regardless of their intensity grade.

End point type

Secondary

| End point values            | Nimenrix<br>Group | Menjugate<br>Group |  |
|-----------------------------|-------------------|--------------------|--|
| Subject group type          | Reporting group   | Reporting group    |  |
| Number of subjects analysed | 162               | 53                 |  |
| Units: Subjects             |                   |                    |  |
| Pain                        | 45                | 15                 |  |
| Redness                     | 57                | 21                 |  |
| Swelling                    | 43                | 13                 |  |

### **Statistical analyses**

No statistical analyses for this end point

#### Secondary: Number of subjects between 6 and 10 years of age with any solicited local symptoms

| End point title        | Number of subjects between 6 and 10 years of age with any solicited local symptoms |
|------------------------|--|
| End point description: |  |

Solicited symptoms assessed were: pain, redness and swelling. Any = occurrence of any local symptom regardless of their intensity grade.

| End point type                                      | Secondary |  |
|---|-----------|--|
| End point timeframe:                                |           |  |
| During the 4-day (Days 0-3) post-vaccination period |           |  |

| End point values            | Nimenrix<br>Group | Menjugate<br>Group |  |
|-----------------------------|-------------------|--------------------|--|
| Subject group type          | Reporting group   | Reporting group    |  |
| Number of subjects analysed | 148               | 50                 |  |
| Units: Subjects             |                   |                    |  |
| Pain                        | 65                | 27                 |  |
| Redness                     | 58                | 19                 |  |
| Swelling                    | 44                | 15                 |  |

### **Statistical analyses**

No statistical analyses for this end point

### Secondary: Number of subjects between 2 and 5 years of age with any solicited general symptoms

| End point title | Number of subjects between 2 and 5 years of age with any |
|-----------------|--|
|                 |  |

#### solicited general symptoms

#### End point description:

Solicited general symptoms assessed were drowsiness, fever, irritability and loss of appetite. Any = occurrence of the general symptom regardless of intensity grade and relationship to vaccination. Any fever = oral temperature  $37.5^{\circ}$ C.

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

End point timeframe:

During the 4-day (Days 0-3) post-vaccination period

| End point values            | Nimenrix<br>Group | Menjugate<br>Group |  |
|-----------------------------|-------------------|--------------------|--|
| Subject group type          | Reporting group   | Reporting group    |  |
| Number of subjects analysed | 162               | 53                 |  |
| Units: Subjects             |                   |                    |  |
| Drowsiness                  | 23                | 6                  |  |
| Fever                       | 9                 | 3                  |  |
| Irritability                | 25                | 6                  |  |
| Loss of appetite            | 17                | 5                  |  |

### Statistical analyses

No statistical analyses for this end point

# Secondary: Number of subjects between 6 and 10 years of age with any solicited general symptoms

| End point title | Number of subjects between 6 and 10 years of age with any |
|-----------------|---|
|                 | solicited general symptoms                                |

End point description:

Solicited general symptoms assessed were fatigue, fever, gastrointestinal and headache. Any = occurrence of the general symptom regardless of intensity grade and relationship to vaccination. Any fever = oral temperature  $37.5^{\circ}$ C

| End point type                                      | Secondary |  |
|---|-----------|--|
| End point timeframe:                                |           |  |
| During the 4-day (Days 0-3) post-vaccination period |           |  |

| End point values            | Nimenrix<br>Group | Menjugate<br>Group |  |
|-----------------------------|-------------------|--------------------|--|
| Subject group type          | Reporting group   | Reporting group    |  |
| Number of subjects analysed | 148               | 50                 |  |
| Units: Subjects             |                   |                    |  |
| Fatigue                     | 33                | 11                 |  |
| Fever                       | 10                | 1                  |  |
| Gastrointestinal            | 22                | 4                  |  |
| Headache                    | 30                | 4                  |  |

#### **Statistical analyses**

No statistical analyses for this end point

### Secondary: Number of subjects reporting specific adverse events

| End point title   | Number of subjects reporting specific adverse events  |
|---|---|
| End point description:  |   |
| Specific AEs include:<br>- rash (hives, idiopathic thrombocytoper<br>- new onset of chronic illness(es) (NOCI<br>allergies),<br>and/or<br>- conditions prompting emergency room | nic purpura, petechiae),<br>) (e.g. autoimmune disorders, asthma, type I diabetes and<br>(ER) visits. |
| End point type  | Secondary   |
| End point timeframe:  |   |
| Up to 6 months after vaccination  |   |

| End point values            | Nimenrix<br>Group | Menjugate<br>Group |  |
|-----------------------------|-------------------|--------------------|--|
| Subject group type          | Reporting group   | Reporting group    |  |
| Number of subjects analysed | 311               | 103                |  |
| Units: Subjects             |                   |                    |  |
| Rash(es)                    | 8                 | 1                  |  |
| NOCI (s)                    | 1                 | 1                  |  |
| ER visit(s)                 | 11                | 1                  |  |

#### **Statistical analyses**

No statistical analyses for this end point

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

| End point title   | Number of subjects reporting any unsolicited adverse events (AEs)   |  |  |  |
|---|---|--|--|--|
| End point description:  |   |  |  |  |
| Unsolicited symptom covers any symptom<br>and any solicited symptom with onset ou | m reported in addition to those solicited during the clinical study<br>itside the specified period of follow-up for solicited symptoms. |  |  |  |
| End point type Secondary  |   |  |  |  |
| End point timeframe:  |   |  |  |  |
| Up to one month (Day O-Day 30) after v  | accination  |  |  |  |

| End point values            | Nimenrix<br>Group | Menjugate<br>Group |  |
|-----------------------------|-------------------|--------------------|--|
| Subject group type          | Reporting group   | Reporting group    |  |
| Number of subjects analysed | 311               | 103                |  |
| Units: Subjects             |                   |                    |  |
| Unsolicited symptom (s)     | 55                | 20                 |  |

#### Statistical analyses

No statistical analyses for this end point

#### Secondary: Number of subjects reporting any serious adverse events (SAEs)

| End point title | Number of subjects reporting any serious adverse events |
|-----------------|---|
|                 | (SAES)  |

End point description:

SAEs assessed include medical occurrences that result in death, are life threatening, require hospitalization or prolongation of hospitalization, result in disability/incapacity or are a congenital anomaly/birth defect in the offspring of a study subject.

| End point type                         | Secondary |
|--|-----------|
| End point timeframe:                   |           |
| From Day Qup to 6 months after vaccina | ation     |

| End point values            | Nimenrix<br>Group | Menjugate<br>Group |  |
|-----------------------------|-------------------|--------------------|--|
| Subject group type          | Reporting group   | Reporting group    |  |
| Number of subjects analysed | 311               | 103                |  |
| Units: Subjects             |                   |                    |  |
| SAE (s)                     | 6                 | 1                  |  |

#### **Statistical analyses**

No statistical analyses for this end point

#### Adverse events information

Timeframe for reporting adverse events:

Serious adverse events: from Day O up to 6 months after vaccination. Solicited symptoms: during the 4day (Day O-Day 3) follow-up period after vaccination. Unsolicited adverse events: Up to one month (Day O-Day 30) after vaccination.

| Assessment type                 | Non-systematic   |
|---------------------------------|--|
| Dictionary used                 |  |
| Dictionary name                 | MedDRA   |
| Dictionary version              | 11.1   |
| Reporting groups                |  |
| Reporting group title           | Menjugate Group  |
| Reporting group description:    |  |
| Subjects received 1 dose of Mer | njugate vaccine administered intramuscularly in the non-dominant |

| Departing group description. |                |
|------------------------------|----------------|
| Reporting group title        | Nimenrix Group |
|                              |                |

Reporting group description:

Subjects received 1 dose of Nimenrix vaccine administered intramuscularly in the non-dominant deltoid/thigh region at Day 0.

| Serious adverse events                            | Menjugate Group | Nimenrix Group  |  |
|---|-----------------|-----------------|--|
| Total subjects affected by serious adverse events |                 |                 |  |
| subjects affected / exposed                       | 1 / 103 (0.97%) | 6 / 311 (1.93%) |  |
| number of deaths (all causes)                     | 0               | 0               |  |
| number of deaths resulting from<br>adverse events | 0               | 0               |  |
| Injury, poisoning and procedural complications    |                 |                 |  |
| Abdominal injury                                  |                 |                 |  |
| subjects affected / exposed                       | 0 / 103 (0.00%) | 1 / 311 (0.32%) |  |
| occurrences causally related to treatment / all   | 0/0             | 0 / 1           |  |
| deaths causally related to treatment / all        | 0/0             | 0/0             |  |
| Accidental poisoning                              |                 |                 |  |
| subjects affected / exposed                       | 0 / 103 (0.00%) | 1 / 311 (0.32%) |  |
| occurrences causally related to treatment / all   | 0/0             | 0 / 1           |  |
| deaths causally related to treatment / all        | 0/0             | 0/0             |  |
| Head injury                                       |                 |                 |  |
| subjects affected / exposed                       | 0 / 103 (0.00%) | 1 / 311 (0.32%) |  |
| occurrences causally related to treatment / all   | 0/0             | 0 / 1           |  |
| deaths causally related to treatment / all        | 0 / 0           | 0 / 0           |  |

| Nervous system disorders                        |                 |                 |  |
|---|-----------------|-----------------|--|
| Convulsion                                      |                 |                 |  |
| subjects affected / exposed                     | 0 / 103 (0.00%) | 1 / 311 (0.32%) |  |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           |  |
| deaths causally related to treatment / all      | 0/0             | 0/0             |  |
| Gastrointestinal disorders                      |                 |                 |  |
| Gastrooesophageal reflux disease                |                 |                 |  |
| subjects affected / exposed                     | 0 / 103 (0.00%) | 1 / 311 (0.32%) |  |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           |  |
| deaths causally related to treatment / all      | 0 / 0           | 0/0             |  |
| Infections and infestations                     |                 |                 |  |
| Appendicitis                                    |                 |                 |  |
| subjects affected / exposed                     | 0 / 103 (0.00%) | 1 / 311 (0.32%) |  |
| occurrences causally related to treatment / all | 0/0             | 0 / 1           |  |
| deaths causally related to treatment / all      | 0/0             | 0/0             |  |
| Gastroenteritis                                 |                 |                 |  |
| subjects affected / exposed                     | 1 / 103 (0.97%) | 0 / 311 (0.00%) |  |
| occurrences causally related to treatment / all | 0 / 1           | 0/0             |  |
| deaths causally related to treatment / all      | 0/0             | 0/0             |  |
| Nasopharyngitis                                 |                 |                 |  |
| subjects affected / exposed                     | 0 / 103 (0.00%) | 1 / 311 (0.32%) |  |
| occurrences causally related to treatment / all | 0/0             | 0 / 1           |  |
| deaths causally related to treatment / all      | 0/0             | 0/0             |  |

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

| Non-serious adverse events                            | Menjugate Group  | Nimenrix Group    |  |
|---|--|-------------------|--|
| Total subjects affected by non-serious adverse events |  |                   |  |
| subjects affected / exposed                           | 27 / 103 (26.21%)  | 65 / 311 (20.90%) |  |
| General disorders and administration site conditions  |  |                   |  |
| Pain (1)  | Additional description: Assessed during the 4-day (Days 0-3) post-vaccination period in subjects 2-5 years of age  |                   |  |
| alternative assessment type:<br>Systematic            |  |                   |  |
| subjects affected / exposed <sup>[1]</sup>            | 15 / 53 (28.30%)   | 45 / 162 (27.78%) |  |
| occurrences (all)                                     | 53   | 162               |  |
| Redness (1)   | Additional description: Assessed during the 4-day (Days 0-3) post-vaccination period in subjects 2-5 years of age. |                   |  |

| alternative assessment type:<br>Systematic               |   |  |                            |
|--|---|--|----------------------------|
| subjects affected / exposed <sup>[2]</sup>               | 21 / 53 (39.62%)  | 57 / 162 (35.19%)                          |                            |
| occurrences (all)  | 53  | 162  |                            |
| Swelling (1)   | Additional description: Assessed during the 4-day (Days 0-3) post-vaccination period in subjects 2-5 years of age |  |                            |
| alternative assessment type:                             |   | [  |                            |
| Systematic<br>subjects affected / exposed <sup>[3]</sup> | 13/53(2453%)  | 43 / 162 (26 54%)                          |                            |
| occurrences (all)  | 53  | 162 (20.01%)                               |                            |
| Pain (2)   | Additional description: As  | sessed during the 4-day (Da                | ays 0-3) post-vaccination  |
| alternative assessment type:                             | period in subjects 6-10 ye  |  |                            |
| Systematic   |   |  |                            |
| subjects affected / exposed <sup>14</sup>                | 27 / 50 (54.00%)  | 65 / 148 (43.92%)                          |                            |
| occurrences (all)  | 50  | 148  |                            |
| Redness (2)  | Additional description: As period in subjects 6-10 ye   | Lsessed during the 4-day (Da<br>ars of age | Jays 0-3) post-vaccination |
| alternative assessment type:<br>Systematic               |   |  |                            |
| subjects affected / exposed <sup>[5]</sup>               | 19 / 50 (38.00%)  | 58 / 148 (39.19%)                          |                            |
| occurrences (all)  | 50  | 148  |                            |
| Swelling (2)   | Additional description: As period in subjects 6-10 ye   | sessed during the 4-day (Da<br>ars of age  | ays 0-3) post-vaccination  |
| alternative assessment type:                             |   |  |                            |
| subjects affected / exposed <sup>[6]</sup>               | 15 / 50 (30.00%)  | 44 / 148 (29.73%)                          |                            |
| occurrences (all)  | 50  | 148  |                            |
| Drowsiness   | Additional description: As period in subjects 2-5 yea   | sessed during the 4-day (Dars of age       | ays 0-3) post-vaccination  |
| alternative assessment type:                             |   | [  |                            |
| systematic<br>subjects affected / exposed <sup>[7]</sup> | 6 / 53 (11 32%)   | 23 / 162 (14 20%)                          |                            |
| occurrences (all)  | 53  | 162  |                            |
| Fever (Orally) (1)                                       | Additional description: As  | sessed during the 4-day (Da                | ays 0-3) post-vaccination  |
| alternative assessment type:                             | period in subjects 2-5 yea  | rs of age                                  | J                          |
| Systematic   |   |  |                            |
| subjects affected / exposed <sup>[8]</sup>               | 3 / 53 (5.66%)  | 9 / 162 (5.56%)                            |                            |
| occurrences (all)  | 53  | 162  |                            |
| Irritability   | Additional description: As period in subjects 2-5 yea   | Lsessed during the 4-day (Da<br>rs of age  | ays 0-3) post-vaccination  |
| alternative assessment type:<br>Systematic               |   |  |                            |
| subjects affected / exposed <sup>[9]</sup>               | 6 / 53 (11.32%)   | 25 / 162 (15.43%)                          |                            |
| occurrences (all)  | 53  | 162  |                            |
| Loss of appetite   | Additional description: As period in subjects 2-5 yea   | Lsessed during the 4-day (Dates of age     | Jays 0-3) post-vaccination |

| alternative assessment type:<br>Systematic  |  |                   |  |
|---|--|-------------------|--|
| subjects affected / exposed <sup>[10]</sup> | 5 / 53 (9.43%)   | 17 / 162 (10.49%) |  |
| occurrences (all)                           | 53   | 162               |  |
| Fatigue                                     | Additional description: Assessed during the 4-day (Days 0-3) post-vaccination period in subjects 6-10 years of age |                   |  |
| alternative assessment type:<br>Systematic  |  |                   |  |
| subjects affected / exposed <sup>[11]</sup> | 11 / 50 (22.00%)   | 33 / 148 (22.30%) |  |
| occurrences (all)                           | 50   | 148               |  |
| Fever (Orally) (2)                          | Additional description: Assessed during the 4-day (Days 0-3) post-vaccination period in subjects 6-10 years of age |                   |  |
| alternative assessment type:<br>Systematic  |  |                   |  |
| subjects affected / exposed <sup>[12]</sup> | 1 / 50 (2.00%)   | 10 / 148 (6.76%)  |  |
| occurrences (all)                           | 50   | 148               |  |
| Gastrointestinal                            | Additional description: Assessed during the 4-day (Days 0-3) post-vaccination period in subjects 6-10 years of age |                   |  |
| alternative assessment type:<br>Systematic  |  |                   |  |
| subjects affected / exposed <sup>[13]</sup> | 4 / 50 (8.00%)   | 22 / 148 (14.86%) |  |
| occurrences (all)                           | 50   | 148               |  |
| Headache                                    | Additional description: Assessed during the 4-day (Days 0-3) post-vaccination period in subjects 6-10 years of age |                   |  |
| alternative assessment type:<br>Systematic  |  |                   |  |
| subjects affected / exposed <sup>[14]</sup> | 4 / 50 (8.00%)   | 30 / 148 (20.27%) |  |
| occurrences (all)                           | 50   | 148               |  |

#### Notes:

[1] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.

Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[2] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.

Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[3] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.

Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[4] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.

Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[5] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.

Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[6] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.

Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[7] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.

Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[8] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.

Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[9] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.

Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[10] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.

Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[11] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.

Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[12] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.

Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[13] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.

Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

[14] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.

Justification: The analysis was performed on the Total vaccinated cohort, only on subjects with their symptom sheets completed.

# Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

# Interruptions (globally)

Were there any global interruptions to the trial? No

## Limitations and caveats

None reported