



## Clinical trial results:

**A Phase IIIb open-label, randomised, multi-centre primary immunization study to evaluate the immunogenicity and safety of GSK Biologicals' HPV-16/18 L1 VLP AS04 vaccine when administered intramuscularly according to alternative 2-dose schedules in 9 - 14 year old healthy females compared to the standard 3-dose schedule for GSK Biologicals' HPV-16/18 L1 VLP AS04 vaccine in 15 - 25 year old healthy females**

### Summary

|                          |                  |
|--------------------------|------------------|
| EudraCT number           | 2011-000757-22   |
| Trial protocol           | DE IT            |
| Global end of trial date | 13 November 2014 |

### Results information

|                                |              |
|--------------------------------|--------------|
| Result version number          | v3 (current) |
| This version publication date  | 04 June 2020 |
| First version publication date | 28 May 2015  |
| Version creation reason        |              |

### Trial information

#### Trial identification

|                       |        |
|-----------------------|--------|
| Sponsor protocol code | 114700 |
|-----------------------|--------|

#### Additional study identifiers

|                                    |             |
|------------------------------------|-------------|
| ISRCTN number                      | -           |
| ClinicalTrials.gov id (NCT number) | NCT01381575 |
| 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 2089-904466, GSKClinicalSupportHD@gsk.com |
| Scientific contact           | Clinical Trials Call Center, GlaxoSmithKline Biologicals, 044 2089-904466, GSKClinicalSupportHD@gsk.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                       | 07 August 2015   |
| Is this the analysis of the primary completion data? | Yes              |
| Primary completion date                              | 28 June 2012     |
| Global end of trial reached?                         | Yes              |
| Global end of trial date                             | 13 November 2014 |
| Was the trial ended prematurely?                     | No               |

Notes:

## General information about the trial

Main objective of the trial:

To demonstrate that the immunogenicity (as determined by [enzyme-linked immunosorbent assay] ELISA) of GSK Biologicals' HPV-16/18 L1 VLP AS04 vaccine administered according to a 2-dose schedule of 0,6 months in 9-14-year old females is non-inferior to that administered according to the standard 3-dose schedule of 0,1,6 months in 15-25-year old females, 1 month after the last dose of study vaccine.

Protection of trial subjects:

As with all injectable vaccines, appropriate medical treatment was always readily available in case of anaphylactic reactions following the administration of the vaccine. For this reason, the vaccinee remained under medical supervision for 30 minutes after vaccination.

Background therapy: -

Evidence for comparator: -

|   |              |
|---|--------------|
| Actual start date of recruitment                          | 29 June 2011 |
| Long term follow-up planned                               | Yes          |
| Long term follow-up rationale                             | Safety       |
| Long term follow-up duration                              | 24 Months    |
| Independent data monitoring committee (IDMC) involvement? | No           |

Notes:

## Population of trial subjects

### Subjects enrolled per country

|                                      |               |
|--------------------------------------|---------------|
| Country: Number of subjects enrolled | Canada: 190   |
| Country: Number of subjects enrolled | Taiwan: 318   |
| Country: Number of subjects enrolled | Thailand: 314 |
| Country: Number of subjects enrolled | Germany: 325  |
| Country: Number of subjects enrolled | Italy: 300    |
| Worldwide total number of subjects   | 1447          |
| EEA total number of subjects         | 625           |

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          | 0 |

|                           |     |
|---------------------------|-----|
| months)                   |     |
| Children (2-11 years)     | 476 |
| Adolescents (12-17 years) | 628 |
| Adults (18-64 years)      | 343 |
| From 65 to 84 years       | 0   |
| 85 years and over         | 0   |

## Subject disposition

### Recruitment

Recruitment details:

This study was conducted by 33 principal investigators in five countries (Canada, Germany, Italy, Taiwan and Thailand).

### Pre-assignment

Screening details:

All 1447 subjects enrolled in the study were vaccinated and included in the Total vaccinated cohort (TVC).

### Period 1

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

### Arms

|                              |                  |
|------------------------------|------------------|
| Are arms mutually exclusive? | Yes              |
| <b>Arm title</b>             | Cervarix 1 Group |

Arm description:

Female subjects aged 9 to 14 years at the time of the first vaccination, who received 2 doses of the Cervarix vaccine at Day 0 and at Month 6, respectively. The vaccine was administered intramuscularly into the deltoid muscle of the non-dominant arm.

|  |                                     |
|--|-------------------------------------|
| Arm type                               | Experimental                        |
| Investigational medicinal product name | GSK Biologicals' HPV vaccine 580299 |
| Investigational medicinal product code |                                     |
| Other name                             | Cervarix                            |
| Pharmaceutical forms                   | Suspension for injection            |
| Routes of administration               | Intramuscular use                   |

Dosage and administration details:

Subjects received 2 doses of HPV vaccine administered intramuscularly.

|                  |                  |
|------------------|------------------|
| <b>Arm title</b> | Cervarix 2 Group |
|------------------|------------------|

Arm description:

Female subjects aged 15 to 25 years at the time of the first vaccination, who received 3 doses of the Cervarix vaccine at Day 0, at Month 1 and at Month 6, respectively. The vaccine was administered intramuscularly into the deltoid muscle of the non-dominant arm.

|  |                                     |
|--|-------------------------------------|
| Arm type                               | Active comparator                   |
| Investigational medicinal product name | GSK Biologicals' HPV vaccine 580299 |
| Investigational medicinal product code |                                     |
| Other name                             | Cervarix                            |
| Pharmaceutical forms                   | Suspension for injection            |
| Routes of administration               | Intramuscular use                   |

Dosage and administration details:

Subjects received 3 doses of HPV vaccine administered intramuscularly.

|                  |                  |
|------------------|------------------|
| <b>Arm title</b> | Cervarix 3 Group |
|------------------|------------------|

Arm description:

Female subjects aged 9 to 14 years at the time of the first vaccination, who received 2 doses of the Cervarix vaccine at Day 0 and at Month 12, respectively. The vaccine was administered intramuscularly into the deltoid muscle of the non-dominant arm.

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

|  |                                     |
|--|-------------------------------------|
| Investigational medicinal product name | GSK Biologicals' HPV vaccine 580299 |
| Investigational medicinal product code |                                     |
| Other name                             | Cervarix                            |
| Pharmaceutical forms                   | Suspension for injection            |
| Routes of administration               | Intramuscular use                   |

Dosage and administration details:

Subjects received 2 doses of HPV vaccine administered intramuscularly.

| <b>Number of subjects in period 1</b> | Cervarix 1 Group | Cervarix 2 Group | Cervarix 3 Group |
|---------------------------------------|------------------|------------------|------------------|
| Started                               | 550              | 482              | 415              |
| Completed                             | 524              | 443              | 395              |
| Not completed                         | 26               | 39               | 20               |
| Consent withdrawn by subject          | 15               | 9                | 7                |
| Non-Serious Adverse Event             | -                | -                | 1                |
| Migrated/moved from study area        | 2                | 12               | 2                |
| Lost to follow-up                     | 8                | 17               | 9                |
| Serious Adverse Event                 | 1                | -                | -                |
| Protocol deviation                    | -                | 1                | 1                |

## Baseline characteristics

### Reporting groups

|   |                  |
|---|------------------|
| Reporting group title   | Cervarix 1 Group |
| Reporting group description:<br>Female subjects aged 9 to 14 years at the time of the first vaccination, who received 2 doses of the Cervarix vaccine at Day 0 and at Month 6, respectively. The vaccine was administered intramuscularly into the deltoid muscle of the non-dominant arm.              |                  |
| Reporting group title   | Cervarix 2 Group |
| Reporting group description:<br>Female subjects aged 15 to 25 years at the time of the first vaccination, who received 3 doses of the Cervarix vaccine at Day 0, at Month 1 and at Month 6, respectively. The vaccine was administered intramuscularly into the deltoid muscle of the non-dominant arm. |                  |
| Reporting group title   | Cervarix 3 Group |
| Reporting group description:<br>Female subjects aged 9 to 14 years at the time of the first vaccination, who received 2 doses of the Cervarix vaccine at Day 0 and at Month 12, respectively. The vaccine was administered intramuscularly into the deltoid muscle of the non-dominant arm.             |                  |

| Reporting group values                                | Cervarix 1 Group | Cervarix 2 Group | Cervarix 3 Group |
|---|------------------|------------------|------------------|
| Number of subjects                                    | 550              | 482              | 415              |
| Age categorical<br>Units: Subjects                    |                  |                  |                  |
| In utero  | 0                | 0                | 0                |
| Preterm newborn infants<br>(gestational age < 37 wks) | 0                | 0                | 0                |
| Newborns (0-27 days)                                  | 0                | 0                | 0                |
| Infants and toddlers (28 days-23 months)              | 0                | 0                | 0                |
| Children (2-11 years)                                 | 264              | 0                | 212              |
| Adolescents (12-17 years)                             | 286              | 139              | 203              |
| Adults (18-64 years)                                  | 0                | 343              | 0                |
| From 65-84 years                                      | 0                | 0                | 0                |
| 85 years and over                                     | 0                | 0                | 0                |
| Age Continuous<br>Units: Years                        |                  |                  |                  |
| arithmetic mean                                       | 11.6             | 19.6             | 11.4             |
| standard deviation                                    | ± 1.59           | ± 3.05           | ± 1.55           |
| Sex: Female, Male<br>Units: Subjects                  |                  |                  |                  |
| Female  | 550              | 482              | 415              |
| Male  | 0                | 0                | 0                |
| Race/Ethnicity, Customized<br>Units: Subjects         |                  |                  |                  |
| African Heritage / African American                   | 6                | 3                | 6                |
| Asian - Central/South Asian Heritage                  | 1                | 1                | 4                |
| Asian - East Asian Heritage                           | 141              | 105              | 74               |
| Asian - South East Asian Heritage                     | 108              | 106              | 104              |
| White - Arabic / North African Heritage               | 1                | 0                | 1                |

|                                       |     |     |     |
|---------------------------------------|-----|-----|-----|
| White - Caucasian / European Heritage | 288 | 263 | 223 |
| Mixed origin                          | 5   | 4   | 3   |

| Reporting group values                             | Total |  |  |
|--|-------|--|--|
| Number of subjects                                 | 1447  |  |  |
| Age categorical<br>Units: Subjects                 |       |  |  |
| In utero   | 0     |  |  |
| Preterm newborn infants (gestational age < 37 wks) | 0     |  |  |
| Newborns (0-27 days)                               | 0     |  |  |
| Infants and toddlers (28 days-23 months)           | 0     |  |  |
| Children (2-11 years)                              | 476   |  |  |
| Adolescents (12-17 years)                          | 628   |  |  |
| Adults (18-64 years)                               | 343   |  |  |
| From 65-84 years                                   | 0     |  |  |
| 85 years and over                                  | 0     |  |  |
| Age Continuous<br>Units: Years                     |       |  |  |
| arithmetic mean                                    |       |  |  |
| standard deviation                                 | -     |  |  |
| Sex: Female, Male<br>Units: Subjects               |       |  |  |
| Female   | 1447  |  |  |
| Male   | 0     |  |  |
| Race/Ethnicity, Customized<br>Units: Subjects      |       |  |  |
| African Heritage / African American                | 15    |  |  |
| Asian - Central/South Asian Heritage               | 6     |  |  |
| Asian - East Asian Heritage                        | 320   |  |  |
| Asian - South East Asian Heritage                  | 318   |  |  |
| White - Arabic / North African Heritage            | 2     |  |  |
| White - Caucasian / European Heritage              | 774   |  |  |
| Mixed origin                                       | 12    |  |  |

## End points

### End points reporting groups

|   |                  |
|---|------------------|
| Reporting group title   | Cervarix 1 Group |
| Reporting group description:<br>Female subjects aged 9 to 14 years at the time of the first vaccination, who received 2 doses of the Cervarix vaccine at Day 0 and at Month 6, respectively. The vaccine was administered intramuscularly into the deltoid muscle of the non-dominant arm.              |                  |
| Reporting group title   | Cervarix 2 Group |
| Reporting group description:<br>Female subjects aged 15 to 25 years at the time of the first vaccination, who received 3 doses of the Cervarix vaccine at Day 0, at Month 1 and at Month 6, respectively. The vaccine was administered intramuscularly into the deltoid muscle of the non-dominant arm. |                  |
| Reporting group title   | Cervarix 3 Group |
| Reporting group description:<br>Female subjects aged 9 to 14 years at the time of the first vaccination, who received 2 doses of the Cervarix vaccine at Day 0 and at Month 12, respectively. The vaccine was administered intramuscularly into the deltoid muscle of the non-dominant arm.             |                  |

### Primary: Number of seroconverted subjects for Anti- Human Papilloma virus 16 (Anti-HPV-16) and Anti-Human Papilloma Virus 18 (Anti-HPV-18) antibodies in Cervarix 1 Group and Cervarix 2 Group at Month 7

|  |   |
|--|---|
| End point title  | Number of seroconverted subjects for Anti- Human Papilloma virus 16 (Anti-HPV-16) and Anti-Human Papilloma Virus 18 (Anti-HPV-18) antibodies in Cervarix 1 Group and Cervarix 2 Group at Month 7 <sup>[1]</sup> |
| End point description:<br>Seroconversion was defined as the appearance of antibodies (anti-HPV-16 concentrations greater than or equal to ( $\geq$ ) 8 enzyme-linked immunosorbent assay (ELISA) units per milliliter (EL.U/mL) and anti-HPV-18 concentrations $\geq$ 7 EL.U/mL) in the serum of subjects seronegative before vaccination. A seronegative subject was a subject with anti-HPV-16/18 antibody concentration lower than ( $<$ ) 8/7 EL.U/mL, respectively. |   |
| End point type   | Primary   |
| End point timeframe:<br>At Month 7 (i.e. one month after the last dose of study vaccine)   |   |

Notes:

[1] - 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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values            | Cervarix 1 Group | Cervarix 2 Group |  |  |
|-----------------------------|------------------|------------------|--|--|
| Subject group type          | Reporting group  | Reporting group  |  |  |
| Number of subjects analysed | 493              | 382              |  |  |
| Units: Subjects             |                  |                  |  |  |
| Anti-HPV-16 (N=488, 352)    | 488              | 352              |  |  |
| Anti-HPV-18 (N=493, 382)    | 493              | 382              |  |  |

## Statistical analyses

|  |  |
|--|--|
| <b>Statistical analysis title</b>  | Immune response to anti-HPV-16 in terms of SCR |
| Statistical analysis description:  |  |
| Immune response to anti-HPV-16 in terms of seroconversion (SCR) rates: To evaluate sequentially if the immunogenicity (as determined by ELISA) of Cervarix vaccine administered according to a 2-dose schedule of 0,6 months in 9-14 year old females was non-inferior to that administered according to the standard 3-dose schedule of 0,1,6 months in 15-25 year old females, 1 month after the last dose of study vaccine, in initially seronegative subjects. |  |
| Comparison groups  | Cervarix 1 Group v Cervarix 2 Group            |
| Number of subjects included in analysis  | 875  |
| Analysis specification   | Pre-specified                                  |
| Analysis type  | non-inferiority <sup>[2]</sup>                 |
| Parameter estimate   | Difference in SCR                              |
| Point estimate   | 0  |
| Confidence interval  |  |
| level  | 95 %   |
| sides  | 2-sided  |
| lower limit  | -1.08  |
| upper limit  | 0.78   |

Notes:

[2] - Non-inferiority with respect to seroconversion was demonstrated if, 1 month after the last dose, for both anti-HPV-16 and anti-HPV-18, the upper limit of the 95% Confidence Interval (CI) for the difference (Cervarix 2 Group minus Cervarix 1 Group) was below 5%.

|  |  |
|--|--|
| <b>Statistical analysis title</b>  | Immune response to anti-HPV-18 in terms of SCR |
| Statistical analysis description:  |  |
| Immune response to anti-HPV-18 in terms of seroconversion (SCR) rates: To evaluate sequentially if the immunogenicity (as determined by ELISA) of Cervarix vaccine administered according to a 2-dose schedule of 0,6 months in 9-14 year old females was non-inferior to that administered according to the standard 3-dose schedule of 0,1,6 months in 15-25 year old females, 1 month after the last dose of study vaccine, in initially seronegative subjects. |  |
| Comparison groups  | Cervarix 1 Group v Cervarix 2 Group            |
| Number of subjects included in analysis  | 875  |
| Analysis specification   | Pre-specified                                  |
| Analysis type  | non-inferiority <sup>[3]</sup>                 |
| Parameter estimate   | Difference in SCR                              |
| Point estimate   | 0  |
| Confidence interval  |  |
| level  | 95 %   |
| sides  | 2-sided  |
| lower limit  | -1   |
| upper limit  | 0.77   |

Notes:

[3] - Non-inferiority with respect to seroconversion was demonstrated if, 1 month after the last dose, for both anti-HPV-16 and anti-HPV-18, the upper limit of the 95% Confidence Interval (CI) for the difference (Cervarix 2 Group minus Cervarix 1 Group) was below 5%.

### **Primary: Anti-HPV-16 and anti-HPV-18 antibody concentrations (by ELISA) in Cervarix 1 Group and Cervarix 2 Group at Month 7**

|  |   |
|--|---|
| End point title  | Anti-HPV-16 and anti-HPV-18 antibody concentrations (by ELISA) in Cervarix 1 Group and Cervarix 2 Group at Month 7 <sup>[4]</sup> |
| End point description:   |   |
| Antibody concentrations were assessed by ELISA and expressed as geometric mean concentrations (GMCs) in EL.U/mL. |   |
| End point type   | Primary   |
| End point timeframe:   |   |
| At Month 7 (i.e. one month after the last dose of study vaccine)   |   |

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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values                         | Cervarix 1 Group           | Cervarix 2 Group            |  |  |
|--|----------------------------|-----------------------------|--|--|
| Subject group type                       | Reporting group            | Reporting group             |  |  |
| Number of subjects analysed              | 493                        | 382                         |  |  |
| Units: EL.U/mL                           |                            |                             |  |  |
| geometric mean (confidence interval 95%) |                            |                             |  |  |
| Anti-HPV-16 (N=488, 352)                 | 9400.1 (8818.3 to 10020.4) | 10234.5 (9258.3 to 11313.6) |  |  |
| Anti-HPV-18 (N=493, 382)                 | 5909.1 (5508.9 to 6338.4)  | 5002.6 (4572.6 to 5473.1)   |  |  |

## Statistical analyses

| Statistical analysis title  | Immune response to anti-HPV-16 in terms of GMCs |
|---|---|
| Statistical analysis description:   |   |
| Immune response to anti-HPV-16 in terms of Geometric Mean Concentrations (GMCs): To evaluate sequentially if the immunogenicity (as determined by ELISA) of Cervarix vaccine administered according to a 2-dose schedule at 0, 6 months in 9-14 year old females was non-inferior to that administered according to the standard 3-dose schedule of 0,1,6 months in 15-25 year old females, 1 month after the last dose of study vaccine, in initially seronegative subjects. |   |
| Comparison groups   | Cervarix 1 Group v Cervarix 2 Group             |
| Number of subjects included in analysis   | 875   |
| Analysis specification  | Pre-specified                                   |
| Analysis type   | non-inferiority <sup>[5]</sup>                  |
| Parameter estimate  | Geometric mean ratio                            |
| Point estimate  | 1.09  |
| Confidence interval   |   |
| level   | 95 %  |
| sides   | 2-sided   |
| lower limit   | 0.97  |
| upper limit   | 1.22  |

Notes:

[5] - Non-inferiority with respect to Geometric Mean Concentrations (GMCs) was demonstrated if, 1 month after the last dose, for both anti-HPV-16 and anti-HPV-18, the upper limit of 95% CI for the GMT ratio (Cervarix 2 Group divided by Cervarix 1 Group) was below 2.

| Statistical analysis title  | Immune response to anti-HPV-18 in terms of GMCs |
|---|---|
| Statistical analysis description:   |   |
| Immune response to anti-HPV-18 in terms of Geometric Mean Concentrations (GMCs): To evaluate sequentially if the immunogenicity (as determined by ELISA) of Cervarix vaccine administered according to a 2-dose schedule at 0, 6 months in 9-14 year old females was non-inferior to that administered according to the standard 3-dose schedule of 0,1,6 months in 15-25 year old females, 1 month after the last dose of study vaccine, in initially seronegative subjects. |   |
| Comparison groups   | Cervarix 1 Group v Cervarix 2 Group             |

|   |                                |
|---|--------------------------------|
| Number of subjects included in analysis | 875                            |
| Analysis specification                  | Pre-specified                  |
| Analysis type                           | non-inferiority <sup>[6]</sup> |
| Parameter estimate                      | Geometric mean ratio           |
| Point estimate                          | 0.85                           |
| Confidence interval                     |                                |
| level                                   | 95 %                           |
| sides                                   | 2-sided                        |
| lower limit                             | 0.76                           |
| upper limit                             | 0.95                           |

Notes:

[6] - Non-inferiority with respect to Geometric Mean Concentrations (GMCs) was demonstrated if, 1 month after the last dose, for both anti-HPV-16 and anti-HPV-18, the upper limit of 95% CI for the GMT ratio (Cervarix 2 Group divided by Cervarix 1 Group) was below 2.

### **Secondary: Number of Seroconverted Subjects for Anti-HPV-16 and Anti-HPV-18 Antibodies in Cervarix 1 Group and Cervarix 2 Group at Day 0 and at Months 7, 12, 18, 24 and 36**

|                 |   |
|-----------------|---|
| End point title | Number of Seroconverted Subjects for Anti-HPV-16 and Anti-HPV-18 Antibodies in Cervarix 1 Group and Cervarix 2 Group at Day 0 and at Months 7, 12, 18, 24 and 36 <sup>[7]</sup> |
|-----------------|---|

End point description:

Seroconversion was defined as the appearance of antibodies (anti-HPV-16 concentrations  $\geq$  8 EL.U/mL and anti-HPV-18 concentrations  $\geq$  7 EL.U/mL [applicable for Day 0, Month 7 and Month 12 time points] and anti-HPV-16 concentrations  $\geq$  19 EL.U/mL and anti-HPV-18 concentrations  $\geq$  18 EL.U/mL [applicable for Month 18, Month 24 and Month 36 timepoints]) in the serum of subjects seronegative before vaccination.

A seronegative subject was a subject with an anti-HPV-16/18 antibody concentration below (<) the aforementioned cut-offs.

Note: In order to increase the ELISA precision, the assay cut-off value was changed from 8 EL.U/mL to 19 EL.U/mL for HPV-16 and from 7 EL.U/mL to 18 EL.U/mL for HPV-18 from Month 18 onwards.

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

End point timeframe:

At Day 0 and at Months 7, 12, 18, 24 and 36

Notes:

[7] - 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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| <b>End point values</b>            | Cervarix 1 Group | Cervarix 2 Group |  |  |
|------------------------------------|------------------|------------------|--|--|
| Subject group type                 | Reporting group  | Reporting group  |  |  |
| Number of subjects analysed        | 462              | 356              |  |  |
| Units: Subjects                    |                  |                  |  |  |
| Anti-HPV-16, Day 0 (N=455, 330)    | 0                | 0                |  |  |
| Anti-HPV-16, Month 7 (N=455, 330)  | 455              | 330              |  |  |
| Anti-HPV-16, Month 12 (N=455, 330) | 455              | 330              |  |  |
| Anti-HPV-16, Month 18 (N=453, 329) | 453              | 329              |  |  |
| Anti-HPV-16, Month 24 (N=454, 326) | 454              | 326              |  |  |
| Anti-HPV-16, Month 36 (N=455, 330) | 455              | 330              |  |  |
| Anti-HPV-18, Day 0 (N=462, 356)    | 0                | 0                |  |  |
| Anti-HPV-18, Month 7 (N=462, 356)  | 462              | 356              |  |  |
| Anti-HPV-18, Month 12 (N=462, 356) | 462              | 356              |  |  |
| Anti-HPV-18, Month 18 (N=459, 355) | 458              | 355              |  |  |
| Anti-HPV-18, Month 24 (N=460, 352) | 459              | 352              |  |  |
| Anti-HPV-18, Month 36 (N=462, 356) | 461              | 355              |  |  |

## Statistical analyses

No statistical analyses for this end point

### Secondary: Anti-HPV-16 and Anti-HPV-18 Antibody Concentrations (by ELISA) in Cervarix 1 Group and Cervarix 2 Group at Day 0 and at Months 7, 12, 18, 24 and 36

|                 |  |
|-----------------|--|
| End point title | Anti-HPV-16 and Anti-HPV-18 Antibody Concentrations (by ELISA) in Cervarix 1 Group and Cervarix 2 Group at Day 0 and at Months 7, 12, 18, 24 and 36 <sup>[8]</sup> |
|-----------------|--|

End point description:

Antibody concentrations were assessed by ELISA and expressed as geometric mean concentrations (GMCs) in EL.U/mL.

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

End point timeframe:

At Day 0 and at Months 7, 12, 18, 24 and 36

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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values                         | Cervarix 1 Group           | Cervarix 2 Group            |  |  |
|--|----------------------------|-----------------------------|--|--|
| Subject group type                       | Reporting group            | Reporting group             |  |  |
| Number of subjects analysed              | 462                        | 356                         |  |  |
| Units: EL.U/mL                           |                            |                             |  |  |
| geometric mean (confidence interval 95%) |                            |                             |  |  |
| Anti-HPV-16, Day 0 (N=455, 330)          | 4.0 (4.0 to 4.0)           | 4.0 (4.0 to 4.0)            |  |  |
| Anti-HPV-16, Month 7 (N=455, 330)        | 9402.9 (8792.4 to 10055.8) | 10120.2 (9162.7 to 11177.9) |  |  |
| Anti-HPV-16, Month 12 (N=455, 330)       | 2653.5 (2473.5 to 2846.6)  | 3290.4 (2956.5 to 3662.0)   |  |  |
| Anti-HPV-16, Month 18 (N=453, 329)       | 1730.7 (1608.6 to 1862.0)  | 1931.2 (1735.4 to 2149.1)   |  |  |
| Anti-HPV-16, Month 24 (N=454, 326)       | 1483.8 (1382.1 to 1592.9)  | 1575.9 (1418.2 to 1751.2)   |  |  |
| Anti-HPV-16, Month 36 (N=455, 330)       | 1210.2 (1124.8 to 1302.1)  | 1326.4 (1193.9 to 1473.5)   |  |  |
| Anti-HPV-18, Day 0 (N=462, 356)          | 3.5 (3.5 to 3.5)           | 3.5 (3.5 to 3.5)            |  |  |
| Anti-HPV-18, Month 7 (N=462, 356)        | 5935.6 (5519.4 to 6383.3)  | 4984.2 (4543.9 to 5467.1)   |  |  |
| Anti-HPV-18, Month 12 (N=462, 356)       | 1523.6 (1403.7 to 1653.7)  | 1491.5 (1339.0 to 1661.4)   |  |  |

|                                    |                        |                        |  |  |
|------------------------------------|------------------------|------------------------|--|--|
| Anti-HPV-18, Month 18 (N=459, 355) | 864.6 (793.1 to 942.7) | 830.6 (742.9 to 928.5) |  |  |
| Anti-HPV-18, Month 24 (N=460, 352) | 715.5 (658.1 to 777.9) | 654.3 (582.9 to 734.5) |  |  |
| Anti-HPV-18, Month 36 (N=462, 356) | 562.8 (516.4 to 613.4) | 552.6 (494.1 to 618.0) |  |  |

## Statistical analyses

No statistical analyses for this end point

## Secondary: Number of Seroconverted Subjects for Anti-HPV-16 and Anti-HPV-18 Antibodies in Cervarix 3 Group

|                 |  |
|-----------------|--|
| End point title | Number of Seroconverted Subjects for Anti-HPV-16 and Anti-HPV-18 Antibodies in Cervarix 3 Group <sup>[9]</sup> |
|-----------------|--|

End point description:

Seroconversion was defined as the appearance of antibodies (anti-HPV-16 concentrations  $\geq$  8 EL.U/mL and anti-HPV-18 concentrations  $\geq$  7 EL.U/mL [applicable for Day 0 and Month 13 time points] and anti-HPV-16 concentrations  $\geq$  19 EL.U/mL and anti-HPV-18 concentrations  $\geq$  18 EL.U/mL [applicable for Month 18, Month 24 and Month 36 timepoints]) in the serum of subjects seronegative before vaccination.

A seronegative subject was a subject with an anti-HPV-16/18 antibody concentration below (<) the aforementioned cut-offs.

Note: In order to increase the ELISA precision, the assay cut-off value was changed from 8 EL.U/mL to 19 EL.U/mL for HPV-16 and from 7 EL.U/mL to 18 EL.U/mL for HPV-18 from Month 18 onwards.

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

End point timeframe:

At Day 0 and at Months 13, 18, 24 and 36

Notes:

[9] - 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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values              | Cervarix 3 Group |  |  |  |
|-------------------------------|------------------|--|--|--|
| Subject group type            | Reporting group  |  |  |  |
| Number of subjects analysed   | 355              |  |  |  |
| Units: Subjects               |                  |  |  |  |
| Anti-HPV-16, Day 0 (N=339)    | 0                |  |  |  |
| Anti-HPV-16, Month 13 (N=339) | 339              |  |  |  |
| Anti-HPV-16, Month 18 (N=339) | 339              |  |  |  |
| Anti-HPV-16, Month 24 (N=337) | 337              |  |  |  |
| Anti-HPV-16, Month 36 (N=339) | 339              |  |  |  |
| Anti-HPV-18, Day 0 (N=355)    | 0                |  |  |  |
| Anti-HPV-18, Month 13 (N=355) | 355              |  |  |  |
| Anti-HPV-18, Month 18 (N=355) | 355              |  |  |  |
| Anti-HPV-18, Month 24 (N=353) | 353              |  |  |  |
| Anti-HPV-18, Month 36 (N=355) | 355              |  |  |  |

## Statistical analyses

No statistical analyses for this end point

## Secondary: Anti-HPV-16 and Anti-HPV-18 Antibody Concentrations (by ELISA) in Cervarix 3 Group

|                 |  |
|-----------------|--|
| End point title | Anti-HPV-16 and Anti-HPV-18 Antibody Concentrations (by ELISA) in Cervarix 3 Group <sup>[10]</sup> |
|-----------------|--|

End point description:

Antibody concentrations were assessed by ELISA and expressed as geometric mean concentrations (GMCs) in EL.U/mL.

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

End point timeframe:

At Day 0 and at Months 13, 18, 24 and 36

Notes:

[10] - 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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values                         | Cervarix 3 Group             |  |  |  |
|--|------------------------------|--|--|--|
| Subject group type                       | Reporting group              |  |  |  |
| Number of subjects analysed              | 355                          |  |  |  |
| Units: EL.U/mL                           |                              |  |  |  |
| geometric mean (confidence interval 95%) |                              |  |  |  |
| Anti-HPV-16, Day 0 (N=339)               | 4.0 (4.0 to 4.0)             |  |  |  |
| Anti-HPV-16, Month 13 (N=339)            | 11329.4 (10509.3 to 12213.5) |  |  |  |
| Anti-HPV-16, Month 18 (N=339)            | 3248.2 (2974.2 to 3547.4)    |  |  |  |
| Anti-HPV-16, Month 24 (N=337)            | 2191.0 (2003.9 to 2395.5)    |  |  |  |
| Anti-HPV-16, Month 36 (N=339)            | 1559.3 (1431.2 to 1699.0)    |  |  |  |
| Anti-HPV-18, Day 0 (N=355)               | 3.5 (3.5 to 3.5)             |  |  |  |
| Anti-HPV-18, Month 13 (N=355)            | 6580.0 (6075.8 to 7126.0)    |  |  |  |
| Anti-HPV-18, Month 18 (N=355)            | 1860.3 (1699.4 to 2036.4)    |  |  |  |
| Anti-HPV-18, Month 24 (N=353)            | 1174.7 (1067.1 to 1293.2)    |  |  |  |
| Anti-HPV-18, Month 36 (N=355)            | 804.0 (731.8 to 883.4)       |  |  |  |

## Statistical analyses

No statistical analyses for this end point

## Secondary: Anti-HPV-16 and Anti-HPV-18 antibody Titers [by Pseudovirion-Based Neutralisation Assay (PBNA)] in a subset of subjects from Cervarix 3 Group

|                 |   |
|-----------------|---|
| End point title | Anti-HPV-16 and Anti-HPV-18 antibody Titers [by Pseudovirion-Based Neutralisation Assay (PBNA)] in a subset of subjects from Cervarix 3 Group <sup>[11]</sup> |
|-----------------|---|

End point description:

Antibody titers were expressed as geometric mean titers (GMTs). The cut-off of the assay was 40 ED50 for both anti-HPV-16 and anti-HPV-18. The assay was performed on a subset of 100 subjects from Cervarix 3 Group.

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

End point timeframe:

At Day 0 and at Months 13, 18, 24 and 36

Notes:

[11] - 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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values                         | Cervarix 3 Group             |  |  |  |
|--|------------------------------|--|--|--|
| Subject group type                       | Reporting group              |  |  |  |
| Number of subjects analysed              | 88                           |  |  |  |
| Units: Titers                            |                              |  |  |  |
| geometric mean (confidence interval 95%) |                              |  |  |  |
| Anti-HPV-16, Day 0 (N=88)                | 20.0 (20.0 to 20.0)          |  |  |  |
| Anti-HPV-16, Month 13 (N=88)             | 74848.0 (60521.9 to 92565.1) |  |  |  |
| Anti-HPV-16, Month 18 (N=88)             | 16576.6 (13127.4 to 20932.0) |  |  |  |
| Anti-HPV-16, Month 24 (N=87)             | 10003.7 (8114.1 to 12333.4)  |  |  |  |
| Anti-HPV-16, Month 36 (N=88)             | 9214.3 (7112.3 to 11937.5)   |  |  |  |
| Anti-HPV-18, Day 0 (N=88)                | 20.0 (20.0 to 20.0)          |  |  |  |
| Anti-HPV-18, Month 13 (N=88)             | 39994.7 (33327.2 to 47996.1) |  |  |  |
| Anti-HPV-18, Month 18 (N=88)             | 9495.4 (7744.4 to 11642.2)   |  |  |  |
| Anti-HPV-18, Month 24 (N=87)             | 5464.1 (4377.8 to 6819.8)    |  |  |  |
| Anti-HPV-18, Month 36 (N=88)             | 4046.4 (3278.0 to 4994.8)    |  |  |  |

## Statistical analyses

## Secondary: Anti-HPV-16 and Anti-HPV-18 Antibody Titers (by PBNA) in a Subset of Subjects From Cervarix 1 Group and Cervarix 2 Group

|   |  |
|---|--|
| End point title   | Anti-HPV-16 and Anti-HPV-18 Antibody Titers (by PBNA) in a Subset of Subjects From Cervarix 1 Group and Cervarix 2 Group <sup>[12]</sup> |
| End point description:  |  |
| Antibody titers were expressed as GMTs. The cut-off of the assay was 40 ED50 for both anti-HPV-16 and anti-HPV-18. The assay was performed on a subset of 100 subjects per study group. |  |
| End point type  | Secondary  |
| End point timeframe:  |  |
| At Day 0 and Months 7, 12, 18, 24 and 36  |  |

Notes:

[12] - 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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values                         | Cervarix 1 Group              | Cervarix 2 Group             |  |  |
|--|-------------------------------|------------------------------|--|--|
| Subject group type                       | Reporting group               | Reporting group              |  |  |
| Number of subjects analysed              | 96                            | 92                           |  |  |
| Units: Titers                            |                               |                              |  |  |
| geometric mean (confidence interval 95%) |                               |                              |  |  |
| Anti-HPV-16, Day 0 (N=96, 92)            | 21.3 (18.8 to 24.2)           | 23.5 (20.7 to 26.6)          |  |  |
| Anti-HPV-16, Month 7 (N=96, 92)          | 82975.9 (67377.4 to 102185.6) | 31407.6 (24181.5 to 40793.0) |  |  |
| Anti-HPV-16, Month 12 (N=96, 92)         | 14872.1 (12025.5 to 18392.4)  | 15801.8 (12069.8 to 20687.8) |  |  |
| Anti-HPV-16, Month 18 (N=95, 92)         | 7393.6 (5986.6 to 9131.1)     | 8246.4 (6224.6 to 10925.0)   |  |  |
| Anti-HPV-16, Month 24 (N=96, 92)         | 6216.5 (5111.0 to 7561.1)     | 7267.5 (5423.4 to 9738.6)    |  |  |
| Anti-HPV-16, Month 36 (N=96, 92)         | 7762.7 (6218.6 to 9690.1)     | 5063.7 (3800.4 to 6746.9)    |  |  |
| Anti-HPV-18, Day 0 (N=96, 92)            | 21.0 (19.0 to 23.5)           | 22.4 (20.4 to 24.5)          |  |  |
| Anti-HPV-18, Month 7 (N=96, 92)          | 24833.1 (20777.0 to 29681.1)  | 13935.6 (10991.0 to 17669.0) |  |  |
| Anti-HPV-18, Month 12 (N=96, 92)         | 5914.5 (4756.0 to 7355.4)     | 5066.5 (3818.9 to 6721.7)    |  |  |
| Anti-HPV-18, Month 18 (N=95, 92)         | 3961.2 (3153.8 to 4975.4)     | 2958.2 (2213.9 to 3952.6)    |  |  |
| Anti-HPV-18, Month 24 (N=96, 92)         | 2849.4 (2276.0 to 3567.2)     | 2524.3 (1860.4 to 3425.2)    |  |  |
| Anti-HPV-18, Month 36 (N=95, 92)         | 2416.4 (1905.9 to 3063.5)     | 1956.2 (1488.5 to 2570.7)    |  |  |

## Statistical analyses

No statistical analyses for this end point

### Secondary: Cell-mediated immunogenicity related to anti-HPV-16 specific T cell-mediated immune response (CMI) for Cervarix 1 Group and Cervarix 2 Group in a sub-cohort of subjects

|                 |  |
|-----------------|--|
| End point title | Cell-mediated immunogenicity related to anti-HPV-16 specific T cell-mediated immune response (CMI) for Cervarix 1 Group and Cervarix 2 Group in a sub-cohort of subjects <sup>[13]</sup> |
|-----------------|--|

#### End point description:

The CMI response represents the measure of the cytokines production [i.e. interleukin-2 (IL-2), interferon gamma (IFN-γ), tumor necrosis factor alpha (TNF-α) and the cluster of differentiation 40 Ligand (CD40L)] by HPV-antigen specific T lymphocytes and measured by intracellular cytokine staining (ICS) assay for HPV-16. The frequency was presented as number of cytokine-positive cluster of differentiation (CD)4 i.e. CD4+/CD8+ cells per million CD4+/CD8+ cells. All doubles = T cell expressing at least 2 cytokines. Results were tabulated by the pre-vaccination status of the subjects, where S- = seronegative subjects (antibody concentration < cut-off value) prior to vaccination. S+ = seropositive subjects (antibody concentration ≥ cut-off value) prior to vaccination. The assay was performed on a subset of 100 subjects per study group.

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

#### End point timeframe:

At Day 0 and Months 7, 12, 24 and 36

#### Notes:

[13] - 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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values                                   | Cervarix 1 Group          | Cervarix 2 Group          |  |  |
|--|---------------------------|---------------------------|--|--|
| Subject group type                                 | Reporting group           | Reporting group           |  |  |
| Number of subjects analysed                        | 84                        | 70                        |  |  |
| Units: cells/million T cells                       |                           |                           |  |  |
| median (inter-quartile range (Q1-Q3))              |                           |                           |  |  |
| Anti-HPV-16, CD4 all doubles, S-, Day 0 (N=81, 68) | 88.0 (62.0 to 152.0)      | 120.0 (67.0 to 185.5)     |  |  |
| Anti-HPV-16, CD4 all doubles, S-, Mth 7 (N=69, 50) | 3953.0 (1866.0 to 7025.0) | 3426.0 (1889.0 to 5214.0) |  |  |
| Anti-HPV-16,CD4 all doubles, S-, Mth 12 (N=84, 70) | 2491.0 (1387.5 to 5543.5) | 2278.5 (1225.0 to 3363.0) |  |  |
| Anti-HPV-16,CD4 all doubles, S-, Mth 24 (N=78, 67) | 2698.0 (1231.0 to 5147.0) | 2401 (1231.0 to 3641.0)   |  |  |
| Anti-HPV-16,CD4 all doubles, S-, Mth 36 (N=75, 57) | 1951.0 (1085.0 to 5130.0) | 2073.0 (1012.0 to 2836.0) |  |  |
| Anti-HPV-16, CD4 all doubles, S+, Day 0 (N=8, 14)  | 77.5 (57.0 to 192.0)      | 100.0 (60.0 to 269.0)     |  |  |

|   |                           |                           |  |  |
|---|---------------------------|---------------------------|--|--|
| Anti-HPV-16, CD4 all doubles, S+, Mth 7 (N=8, 13)         | 5019.5 (1353.0 to 7343.0) | 1820.0 (1311.0 to 3021.0) |  |  |
| Anti-HPV-16, CD4 all doubles, S+, Mth 12 (N=9, 14)        | 2603.0 (1003.0 to 3350.0) | 1423.5 (876.0 to 3747.0)  |  |  |
| Anti-HPV-16, CD4 all doubles, S+, Mth 24 (N=9, 12)        | 2552.0 (1156.0 to 3963.0) | 1404.0 (1050.0 to 2856.5) |  |  |
| Anti-HPV-16, CD4 all doubles, S+, Mth 36 (N=7, 12)        | 2180.0 (1293.0 to 3383.0) | 1310.0 (939.0 to 2614.5)  |  |  |
| Anti-HPV-16, CD4-d-CD40L, S-, Day 0 (N=81, 68)            | 70.0 (42.0 to 130.0)      | 97.0 (49.0 to 144.0)      |  |  |
| Anti-HPV-16, CD4-d-CD40L, S-, Month 7 (N=69, 50)          | 3531.0 (1676.0 to 6528.0) | 3196.0 (1692.0 to 4771.0) |  |  |
| Anti-HPV-16, CD4-d-CD40L, S-, Month 12 (N=84, 70)         | 2439.5 (1342.5 to 5376.0) | 2255.5 (1185.0 to 3290.0) |  |  |
| Anti-HPV-16, CD4-d-CD40L, S-, Month 24 (N=78, 67)         | 2443.0 (1111.0 to 4922.0) | 2344.0 (1031.0 to 3323.0) |  |  |
| Anti-HPV-16, CD4-d-CD40L, S-, Month 36 (N=75, 57)         | 1935.0 (1048.0 to 5061.0) | 2027.0 (978.0 to 2806.0)  |  |  |
| Anti-HPV-16, CD4-d-CD40L, S+, Day 0 (N=8, 14)             | 57.5 (39.5 to 162.0)      | 72.5 (40.0 to 186.0)      |  |  |
| Anti-HPV-16, CD4-d-CD40L, S+, Month 7 (N=8, 13)           | 4979.5 (1290.5 to 7001.5) | 1655.0 (1050.0 to 2440.0) |  |  |
| Anti-HPV-16, CD4-d-CD40L, S+, Month 12 (N=9, 14)          | 2587.0 (975.0 to 3305.0)  | 1412.5 (832.0 to 3677.0)  |  |  |
| Anti-HPV-16, CD4-d-CD40L, S+, Month 24 (N=9, 12)          | 2456.0 (945.0 to 3931.0)  | 1285.0 (962.5 to 1953.5)  |  |  |
| Anti-HPV-16, CD4-d-CD40L, S+, Month 36 (N=7, 12)          | 2109.0 (1178.0 to 3343.0) | 1279.0 (928.0 to 2496.5)  |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S-, Day 0 (N=81, 68)    | 44.0 (19.0 to 67.0)       | 39.5 (19.5 to 72.0)       |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S-, Month 7 (N=69, 50)  | 840.0 (503.0 to 1538.0)   | 657.0 (474.0 to 1185.0)   |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S-, Month 12 (N=84, 70) | 546.0 (176.5 to 1007.5)   | 362.0 (202.0 to 644.0)    |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S-, Month 24 (N=78, 67) | 644.5 (294.0 to 1318.0)   | 449.0 (204.0 to 884.0)    |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S-, Month 36 (N=75, 57) | 562.0 (273.0 to 1334.0)   | 391.0 (215.0 to 824.0)    |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S+, Day 0 (N=8, 14)     | 38.5 (26.5 to 86.0)       | 50.5 (31.0 to 75.0)       |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S+, Month 7 (N=8, 13)   | 881.5 (462.5 to 2704.0)   | 489.0 (244.0 to 814.0)    |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S+, Month 12 (N=9, 14)  | 533.0 (336.0 to 827.0)    | 329.0 (183.0 to 481.0)    |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S+, Month 24 (N=9, 12)  | 579.0 (398.0 to 897.0)    | 310.5 (221.5 to 595.5)    |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S+, Month 36 (N=7, 12)  | 651.0 (520.0 to 998.0)    | 564.0 (185.5 to 714.5)    |  |  |
| Anti-HPV-16, CD4-d-IL-2, S-, Day 0 (N=81, 68)             | 59.0 (35.0 to 103.0)      | 85.5 (43.5 to 143.0)      |  |  |
| Anti-HPV-16, CD4-d-IL-2, S-, Month 7 (N=69, 50)           | 3808.0 (1728.0 to 6787.0) | 3212.5 (1788.0 to 5010.0) |  |  |

|  |                              |                              |  |  |
|--|------------------------------|------------------------------|--|--|
| Anti-HPV-16, CD4-d-IL-2, S-, Month 12<br>(N=84, 70)    | 2402.5 (1308.5<br>to 5242.0) | 2184.5 (1156.0<br>to 3238.0) |  |  |
| Anti-HPV-16, CD4-d-IL-2, S-, Month 24<br>(N=78, 67)    | 2477.0 (1140.0<br>to 4680.0) | 2282.0 (1138.0<br>to 3392.0) |  |  |
| Anti-HPV-16, CD4-d-IL-2, S-, Month 36<br>(N=75, 57)    | 1881.0 (958.0<br>to 4912.0)  | 1922.0 (892.0<br>to 2708.0)  |  |  |
| Anti-HPV-16, CD4-d-IL-2, S+, Day 0<br>(N=8, 14)        | 68.0 (23.0 to<br>147.5)      | 77.5 (39.0 to<br>229.0)      |  |  |
| Anti-HPV-16, CD4-d-IL-2, S+, Month 7<br>(N=8, 13)      | 4886.0 (1162.5<br>to 6906.0) | 1573.0 (1202.0<br>to 2924.0) |  |  |
| Anti-HPV-16, CD4-d-IL-2, S+, Month 12<br>(N=9, 14)     | 2339.0 (877.0<br>to 3166.0)  | 1372.0 (868.0<br>to 3692.0)  |  |  |
| Anti-HPV-16, CD4-d-IL-2, S+, Month 24<br>(N=9, 12)     | 2454.0 (1026.0<br>to 3931.0) | 1226.5 (969.0<br>to 2392.5)  |  |  |
| Anti-HPV-16, CD4-d-IL-2, S+, Month 36<br>(N=7, 12)     | 2135.0 (1221.0<br>to 3291.0) | 1243.0 (910.5<br>to 2382.5)  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S-, Day 0<br>(N=81, 68)       | 59.0 (37.0 to<br>93.0)       | 68.0 (29.5 to<br>110.5)      |  |  |
| Anti-HPV-16, CD4-d-TNFα, S-, Month 7<br>(N=69, 50)     | 2474.0 (1311.0<br>to 4800.0) | 2575.5 (1224.0<br>to 3675.0) |  |  |
| Anti-HPV-16, CD4-d-TNFα, S-, Month 12<br>(N=84, 70)    | 1944.0 (814.5<br>to 4150.0)  | 1726.0 (919.0<br>to 2481.0)  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S-, Month 24<br>(N=78, 67)    | 2181.5 (886.0<br>to 4177.0)  | 1970.0 (773.0<br>to 2758.0)  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S-, Month 36<br>(N=75, 57)    | 1595.0 (700.0<br>to 3836.0)  | 1390.0 (672.0<br>to 2092.0)  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S+, Day 0<br>(N=8, 14)        | 47.0 (32.0 to<br>131.0)      | 64.0 (49.0 to<br>120.0)      |  |  |
| Anti-HPV-16, CD4-d-TNFα, S+, Month 7<br>(N=8, 13)      | 2058.5 (1047.0<br>to 3933.0) | 1273.0 (949.0<br>to 2372.0)  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S+, Month<br>12 (N=9, 14)     | 1826.0 (875.0<br>to 2703.0)  | 1171.0 (733.0<br>to 2828.0)  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S+, Month<br>24 (N=9, 12)     | 1851.0 (1039.0<br>to 2259.0) | 1061.5 (878.5<br>to 2421.5)  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S+, Month<br>36 (N=7, 12)     | 1138.0 (1031.0<br>to 2506.0) | 1057.0 (732.0<br>to 2009.0)  |  |  |
| Anti-HPV-16, CD8-all doubles, S-, Day 0<br>(N=81, 68)  | 11.0 (11.0 to<br>41.0)       | 11.0 (11.0 to<br>44.0)       |  |  |
| Anti-HPV-16, CD8-all doubles, S-, Mth 7<br>(N=69, 50)  | 11.0 (11.0 to<br>41.0)       | 11.0 (11.0 to<br>36.0)       |  |  |
| Anti-HPV-16, CD8 all doubles, S-, Mth 12<br>(N=84, 70) | 30.5 (11.0 to<br>45.5)       | 29.5 (11.0 to<br>50.0)       |  |  |
| Anti-HPV-16, CD8-all doubles, S-, Mth 24<br>(N=78, 67) | 11.0 (11.0 to<br>53.0)       | 11.0 (11.0 to<br>54.0)       |  |  |
| Anti-HPV-16, CD8-all doubles, S-, Mth 36<br>(N=75, 57) | 37.0 (11.0 to<br>72.0)       | 35.0 (11.0 to<br>59.0)       |  |  |
| Anti-HPV-16, CD8-all doubles, S+, Day<br>0 (N=8, 14)   | 11.0 (11.0 to<br>49.0)       | 35.5 (26.0 to<br>41.0)       |  |  |
| Anti-HPV-16, CD8-all doubles, S+, Mth<br>7 (N=8, 13)   | 11.0 (11.0 to<br>30.5)       | 33.0 (11.0 to<br>43.0)       |  |  |
| Anti-HPV-16, CD8 all doubles, S+, Mth<br>12 (N=9, 14)  | 52.0 (49.0 to<br>77.0)       | 29.0 (11.0 to<br>57.0)       |  |  |
| Anti-HPV-16, CD8-all doubles, S+, Mth<br>24 (N=9, 12)  | 49.0 (12.0 to<br>63.0)       | 11.0 (11.0 to<br>56.0)       |  |  |

|   |                      |                     |  |  |
|---|----------------------|---------------------|--|--|
| Anti-HPV-16, CD8-all doubles, S+, Mth 36 (N=7, 12)        | 27.0 (11.0 to 123.0) | 11.0 (11.0 to 49.0) |  |  |
| Anti-HPV-16, CD8-d-CD40L, S-, Day 0 (N=81, 68)            | 7.0 (7.0 to 7.0)     | 7.0 (7.0 to 7.0)    |  |  |
| Anti-HPV-16, CD8-d-CD40L, S-, Month 7 (N=69, 50)          | 7.0 (7.0 to 7.0)     | 7.0 (7.0 to 7.0)    |  |  |
| Anti-HPV-16, CD8-d-CD40L, S-, Month 12 (N=84, 70)         | 7.0 (7.0 to 32.0)    | 7.0 (7.0 to 37.0)   |  |  |
| Anti-HPV-16, CD8-d-CD40L, S-, Month 24 (N=78, 68)         | 7.0 (7.0 to 7.0)     | 7.0 (7.0 to 31.0)   |  |  |
| Anti-HPV-16, CD8-d-CD40L, S-, Month 36 (N=75, 57)         | 11.0 (7.0 to 52.0)   | 7.0 (7.0 to 32.0)   |  |  |
| Anti-HPV-16, CD8-d-CD40L, S+, Day 0 (N=8, 14)             | 7.0 (7.0 to 7.0)     | 7.0 (7.0 to 7.0)    |  |  |
| Anti-HPV-16, CD8-d-CD40L, S+, Month 7 (N=8, 13)           | 7.0 (7.0 to 7.0)     | 7.0 (7.0 to 22.0)   |  |  |
| Anti-HPV-16, CD8-d-CD40L, S+, Month 12 (N=9, 14)          | 45.0 (7.0 to 48.0)   | 15.0 (7.0 to 37.0)  |  |  |
| Anti-HPV-16, CD8-d-CD40L, S+, Month 24 (N=9, 12)          | 7.0 (7.0 to 46.0)    | 7.0 (7.0 to 17.0)   |  |  |
| Anti-HPV-16, CD8-d-CD40L, S+, Month 36 (N=7, 12)          | 7.0 (7.0 to 27.0)    | 7.0 (7.0 to 15.0)   |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S-, Day 0 (N=81, 68)    | 7.0 (7.0 to 32.0)    | 7.0 (7.0 to 37.0)   |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S-, Month 7 (N=69, 50)  | 7.0 (7.0 to 35.0)    | 7.0 (7.0 to 26.0)   |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S-, Month 12 (N=84, 70) | 7.0 (7.0 to 38.0)    | 7.0 (7.0 to 46.0)   |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S-, Month 24 (N=78, 67) | 7.0 (7.0 to 37.0)    | 7.0 (7.0 to 42.0)   |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S-, Month 36 (N=75, 57) | 11.0 (7.0 to 44.0)   | 25.0 (7.0 to 44.0)  |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S+, Day 0 (N=8, 14)     | 7.0 (7.0 to 45.0)    | 31.5 (22.0 to 37.0) |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S+, Month 7 (N=8, 13)   | 7.0 (7.0 to 7.0)     | 22.0 (7.0 to 30.0)  |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S+, Month 12 (N=9, 14)  | 46.0 (31.0 to 54.0)  | 15.0 (7.0 to 40.0)  |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S+, Month 24 (N=9, 12)  | 8.0 (7.0 to 46.0)    | 7.0 (7.0 to 23.0)   |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S+, Month 36 (N=7, 12)  | 7.0 (7.0 to 63.0)    | 7.0 (7.0 to 45.0)   |  |  |
| Anti-HPV-16, CD8-d-IL-2, S-, Day 0 (N=81, 68)             | 7.0 (7.0 to 7.0)     | 7.0 (7.0 to 7.0)    |  |  |
| Anti-HPV-16, CD8-d-IL-2, S-, Month 7 (N=69, 50)           | 7.0 (7.0 to 7.0)     | 7.0 (7.0 to 7.0)    |  |  |
| Anti-HPV-16, CD8-d-IL-2, S-, Month 12 (N=84, 70)          | 7.0 (7.0 to 7.0)     | 7.0 (7.0 to 7.0)    |  |  |
| Anti-HPV-16, CD8-d-IL-2, S-, Month 24 (N=78, 67)          | 7.0 (7.0 to 30.0)    | 7.0 (7.0 to 30.0)   |  |  |
| Anti-HPV-16, CD8-d-IL-2, S-, Month 36 (N=75, 57)          | 7.0 (7.0 to 7.0)     | 7.0 (7.0 to 7.0)    |  |  |
| Anti-HPV-16, CD8-d-IL-2, S+, Day 0 (N=8, 14)              | 7.0 (7.0 to 7.0)     | 7.0 (7.0 to 7.0)    |  |  |
| Anti-HPV-16, CD8-d-IL-2, S+, Month 7 (N=8, 13)            | 7.0 (7.0 to 7.0)     | 7.0 (7.0 to 28.0)   |  |  |
| Anti-HPV-16, CD8-d-IL-2, S+, Month 12 (N=9, 14)           | 7.0 (7.0 to 31.0)    | 7.0 (7.0 to 23.0)   |  |  |
| Anti-HPV-16, CD8-d-IL-2, S+, Month 24 (N=9, 12)           | 7.0 (7.0 to 45.0)    | 7.0 (7.0 to 13.0)   |  |  |
| Anti-HPV-16, CD8-d-IL-2, S+, Month 36 (N=7, 12)           | 7 (7.0 to 23.0)      | 7 (7.0 to 7.0)      |  |  |

|  |                    |                    |  |  |
|--|--------------------|--------------------|--|--|
| Anti-HPV-16, CD8-d-TNFα, S-, Day 0 (N=81, 68)    | 7.0 (7.0 to 29.0)  | 7.0 (7.0 to 28.5)  |  |  |
| Anti-HPV-16, CD8-d-TNFα, S-, Month 7 (N=69, 50)  | 7.0 (7.0 to 33.0)  | 7.0 (7.0 to 32.0)  |  |  |
| Anti-HPV-16, CD8-d-TNFα, S-, Month 12 (N=84, 70) | 7.0 (7.0 to 38.0)  | 7.0 (7.0 to 33.0)  |  |  |
| Anti-HPV-16, CD8-d-TNFα, S-, Month 24 (N=78, 67) | 7.0 (7.0 to 37.0)  | 7.0 (7.0 to 24.0)  |  |  |
| Anti-HPV-16, CD8-d-TNFα, S-, Month 36 (N=75, 57) | 7 (7.0 to 36.0)    | 7 (7.0 to 32.0)    |  |  |
| Anti-HPV-16, CD8-d-TNFα, S+, Day 0 (N=8, 14)     | 7.0 (7.0 to 30.5)  | 14.5 (7.0 to 31.0) |  |  |
| Anti-HPV-16, CD8-d-TNFα, S+, Month 7 (N=8, 13)   | 7.0 (7.0 to 26.5)  | 22.0 (7.0 to 30.0) |  |  |
| Anti-HPV-16, CD8-d-TNFα, S+, Month 12 (N=9, 14)  | 8.0 (7.0 to 54.0)  | 23.0 (7.0 to 30.0) |  |  |
| Anti-HPV-16, CD8-d-TNFα, S+, Month 24 (N=9, 12)  | 8.0 (7.0 to 42.0)  | 7.0 (7.0 to 7.0)   |  |  |
| Anti-HPV-16, CD8-d-TNFα, S+, Month 36 (N=7, 12)  | 7.0 (7.0 to 119.0) | 7.0 (7.0 to 7.0)   |  |  |

## Statistical analyses

No statistical analyses for this end point

## Secondary: Cell-mediated immunogenicity related to anti-HPV-18 specific T CMI response for Cervarix 1 Group and Cervarix 2 Group in a sub-cohort of subjects

|                 |   |
|-----------------|---|
| End point title | Cell-mediated immunogenicity related to anti-HPV-18 specific T CMI response for Cervarix 1 Group and Cervarix 2 Group in a sub-cohort of subjects <sup>[14]</sup> |
|-----------------|---|

End point description:

The CMI response represents the measure of the cytokines production [IL-2, IFN-γ, TNF-α, and CD40L] by HPV-antigen specific T lymphocytes and measured by ICS assay for HPV-18. The frequency was presented as a number of cytokine-producing CD4+/CD8+ cells per million CD4+/CD8+ cells. All doubles = T cell expressing at least 2 cytokines. Results were tabulated by the pre-vaccination status of the subjects, where S- = seronegative subjects (antibody concentration < the cut-off value) prior to vaccination. S+ = seropositive subjects (antibody concentration ≥ cut-off value) prior to vaccination. The assay was performed on a subset of 100 subjects per study group.

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

End point timeframe:

At Day 0 and Months 7, 12, 24 and 36

Notes:

[14] - 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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values                                   | Cervarix 1 Group     | Cervarix 2 Group    |  |  |
|--|----------------------|---------------------|--|--|
| Subject group type                                 | Reporting group      | Reporting group     |  |  |
| Number of subjects analysed                        | 83                   | 72                  |  |  |
| Units: cells/million T cells                       |                      |                     |  |  |
| median (inter-quartile range (Q1-Q3))              |                      |                     |  |  |
| Anti-HPV-18, CD4 all doubles, S-, Day 0 (N=77, 69) | 86.0 (61.0 to 129.0) | 112.0 (75.0 to 177) |  |  |

|   |                           |                           |  |  |
|---|---------------------------|---------------------------|--|--|
| Anti-HPV-18, CD4 all doubles, S-, Mth 7 (N=65, 53)        | 2780.0 (1606.0 to 4289.0) | 1864.0 (1158.0 to 2565.0) |  |  |
| Anti-HPV-18, CD4 all doubles, S-, Mth 12 (N=83, 72)       | 2039.0 (1053.0 to 3481.0) | 1246.5 (814.0 to 2045.5)  |  |  |
| Anti-HPV-18, CD4 all doubles, S-, Mth 24 (N=76, 68)       | 1815.5 (877.5 to 3193.0)  | 1355.0 (638.5 to 2106.0)  |  |  |
| Anti-HPV-18, CD4 all doubles, S-, Mth 36 (N=72, 56)       | 1609.0 (716.0 to 3322.0)  | 1246.0 (676.5 to 1751.0)  |  |  |
| Anti-HPV-18, CD4 all doubles, S+, Day 0 (N=11, 14)        | 125.0 (61.0 to 227.0)     | 128.0 (71.0 to 153.0)     |  |  |
| Anti-HPV-18, CD4 all doubles, S+, Mth 7 (N=11, 11)        | 1593.0 (786.0 to 4012.0)  | 1498.0 (808.0 to 2727.0)  |  |  |
| Anti-HPV-18, CD4 all doubles, S+, Mth 12 (N=10, 13)       | 868.0 (576.0 to 2069.0)   | 787.0 (597.0 to 1771.0)   |  |  |
| Anti-HPV-18, CD4 all doubles, S+, Mth 24 (N=10, 12)       | 710.5 (523.0 to 2329.0)   | 885.0 (475.5 to 2147.5)   |  |  |
| Anti-HPV-18, CD4 all doubles, S+, Mth 36 (N=10, 13)       | 808.5 (624.0 to 1764.0)   | 598.0 (367.0 to 1414.0)   |  |  |
| Anti-HPV-18, CD4-d-CD40L, S-, Day 0 (N=77, 69)            | 62.0 (35.0 to 105.0)      | 88.0 (49.0 to 155.0)      |  |  |
| Anti-HPV-18, CD4-d-CD40L, S-, Month 7 (N=65, 53)          | 2634.0 (1331.0 to 3748.0) | 1700.0 (993.0 to 2324.0)  |  |  |
| Anti-HPV-18, CD4-d-CD40L, S-, Month 12 (N=83, 72)         | 1967.0 (1019.0 to 3362.0) | 1206.5 (797.5 to 2006.0)  |  |  |
| Anti-HPV-18, CD4-d-CD40L, S-, Month 24 (N=76, 68)         | 1632.0 (807.0 to 3133.0)  | 1290.5 (600.5 to 1911.0)  |  |  |
| Anti-HPV-18, CD4-d-CD40L, S-, Month 36 (N=72, 56)         | 1543.0 (686.0 to 3258.0)  | 1222.0 (670.0 to 1665.0)  |  |  |
| Anti-HPV-18, CD4-d-CD40L, S+, Day 0 (N=11, 14)            | 121.0 (50.0 to 223.0)     | 110.5 (44.0 to 142.0)     |  |  |
| Anti-HPV-18, CD4-d-CD40L, S+, Month 7 (N=11, 11)          | 1419.0 (729.0 to 3704.0)  | 1377.0 (703.0 to 2511.0)  |  |  |
| Anti-HPV-18, CD4-d-CD40L, S+, Month 12 (N=10, 13)         | 830.0 (572.0 to 2008.0)   | 767.0 (539.0 to 1724.0)   |  |  |
| Anti-HPV-18, CD4-d-CD40L, S+, Month 24 (N=10, 12)         | 652.0 (475.0 to 2151.0)   | 867.0 (431.0 to 1963.5)   |  |  |
| Anti-HPV-18, CD4-d-CD40L, S+, Month 36 (N=10, 13)         | 794.0 (604.0 to 1721.0)   | 594.0 (350.0 to 1356.0)   |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S-, Day 0 (N=77, 69)    | 32.0 (19.0 to 55.0)       | 32.0 (19.0 to 68.0)       |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S-, Month 7 (N=65, 53)  | 562.0 (220.0 to 952.0)    | 350.0 (192.0 to 554.0)    |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S-, Month 12 (N=83, 72) | 354.0 (132.0 to 669.0)    | 216.5 (111.5 to 390.0)    |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S-, Month 24 (N=76, 68) | 326.5 (166.5 to 799.5)    | 205.5 (108.5 to 538.0)    |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S-, Month 36 (N=72, 56) | 304.5 (168.5 to 757.0)    | 233.5 (114.5 to 485.5)    |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S+, Day 0 (N=11, 14)    | 55.0 (19.0 to 70.0)       | 28.0 (19.0 to 48.0)       |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S+, Month 7 (N=11, 11)  | 628.0 (186.0 to 1186.0)   | 376.0 (234.0 to 580.0)    |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S+, Month 12 (N=10, 13) | 244.5 (120.0 to 535.0)    | 161.0 (85.0 to 344.0)     |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S+, Month 24 (N=10, 12) | 295.5 (108.0 to 636.0)    | 270.5 (94.5 to 455.5)     |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S+, Month 36 (N=10, 13) | 356.0 (278.0 to 417.0)    | 239.0 (102.0 to 422.0)    |  |  |

|   |                           |                           |  |  |
|---|---------------------------|---------------------------|--|--|
| Anti-HPV-18, CD4-d-IL-2, S-, Day 0 (N=77, 69)       | 57.0 (30.0 to 96.0)       | 81.0 (36.0 to 127.0)      |  |  |
| Anti-HPV-18, CD4-d-IL-2, S-, Month 7 (N=65, 53)     | 2611.0 (1452.0 to 3953.0) | 1725.0 (1026.0 to 2329.0) |  |  |
| Anti-HPV-18, CD4-d-IL-2, S-, Month 12 (N=83, 72)    | 1959.0 (1009.0 to 3269.0) | 1172.5 (755.5 to 1916.0)  |  |  |
| Anti-HPV-18, CD4-d-IL-2, S-, Month 24 (N=76, 68)    | 1638.5 (851.5 to 3084.0)  | 1306.0 (589.0 to 1977.5)  |  |  |
| Anti-HPV-18, CD4-d-IL-2, S-, Month 36 (N=72, 56)    | 1495.0 (661.0 to 3065.0)  | 1183.5 (586.5 to 1684.5)  |  |  |
| Anti-HPV-18, CD4-d-IL-2, S+, Day 0 (N=11, 14)       | 65.0 (31.0 to 137.0)      | 96.5 (48.0 to 102.0)      |  |  |
| Anti-HPV-18, CD4-d-IL-2, S+, Month 7 (N=11, 11)     | 1470.0 (691.0 to 3887.0)  | 1231.0 (690.0 to 2313.0)  |  |  |
| Anti-HPV-18, CD4-d-IL-2, S+, Month 12 (N=10, 13)    | 847.5 (556.0 to 2022.0)   | 783.0 (514.0 to 1650.0)   |  |  |
| Anti-HPV-18, CD4-d-IL-2, S+, Month 24 (N=10, 12)    | 652.5 (448.0 to 2269.0)   | 705.5 (433.0 to 2041.5)   |  |  |
| Anti-HPV-18, CD4-d-IL-2, S+, Month 36 (N=10, 13)    | 777.0 (589.0 to 1669.0)   | 554.0 (333.0 to 1370.0)   |  |  |
| Anti-HPV-18, CD4-d-TNFα, S-, Day 0 (N=77, 69)       | 49.0 (31.0 to 72.0)       | 73.0 (27.0 to 138.0)      |  |  |
| Anti-HPV-18, CD4-d-TNFα, S-, Month 7 (N=65, 53)     | 1699.0 (979.0 to 2832.0)  | 1394.0 (824.0 to 2060.0)  |  |  |
| Anti-HPV-18, CD4-d-TNFα, S-, Month 12 (N=83, 72)    | 1573.0 (715.0 to 2662.0)  | 991.0 (599.0 to 1617.0)   |  |  |
| Anti-HPV-18, CD4-d-TNFα, S-, Month 24 (N=76, 68)    | 1434.0 (637.5 to 2506.0)  | 1102.5 (543.0 to 1580.0)  |  |  |
| Anti-HPV-18, CD4-d-TNFα, S-, Month 36 (N=72, 56)    | 1268.0 (473.5 to 2130.0)  | 868.5 (520.0 to 1296.5)   |  |  |
| Anti-HPV-18, CD4-d-TNFα, S+, Day 0 (N=11, 14)       | 51.0 (44.0 to 159.0)      | 68.0 (32.0 to 137.0)      |  |  |
| Anti-HPV-18, CD4-d-TNFα, S+, Month 7 (N=11, 11)     | 1337.0 (437.0 to 3141.0)  | 1137.0 (648.0 to 2211.0)  |  |  |
| Anti-HPV-18, CD4-d-TNFα, S+, Month 12 (N=10, 13)    | 604.0 (391.0 to 1696.0)   | 684.0 (443.0 to 1284.0)   |  |  |
| Anti-HPV-18, CD4-d-TNFα, S+, Month 24 (N=10, 12)    | 601.0 (462.0 to 2122.0)   | 768.5 (370.5 to 1673.0)   |  |  |
| Anti-HPV-18, CD4-d-TNFα, S+, Month 36 (N=10, 13)    | 652.5 (489.0 to 1590.0)   | 444.0 (294.0 to 996.0)    |  |  |
| Anti-HPV-18, CD8-all doubles, S-, Day 0 (N=77, 69)  | 11.0 (11.0 to 36.0)       | 11.0 (11.0 to 33.0)       |  |  |
| Anti-HPV-18, CD8-all doubles, S-, Mth 7 (N=65, 53)  | 11.0 (11.0 to 37.0)       | 11.0 (11.0 to 32.0)       |  |  |
| Anti-HPV-18, CD8 all doubles, S-, Mth 12 (N=83, 72) | 28.0 (11.0 to 47.0)       | 37.0 (11.0 to 51.5)       |  |  |
| Anti-HPV-18, CD8-all doubles, S-, Mth 24 (N=76, 68) | 11.0 (11.0 to 51.0)       | 11.0 (11.0 to 43.0)       |  |  |
| Anti-HPV-18, CD8-all doubles, S-, Mth 36 (N=72, 56) | 32.0 (11.0 to 45.5)       | 29.0 (11.0 to 51.0)       |  |  |
| Anti-HPV-18, CD8-all doubles, S+, Day 0 (N=11, 14)  | 11.0 (11.0 to 27.0)       | 11.0 (11.0 to 34.0)       |  |  |
| Anti-HPV-18, CD8-all doubles, S+, Mth 7 (N=11, 11)  | 11.0 (11.0 to 78.0)       | 11.0 (11.0 to 73.0)       |  |  |
| Anti-HPV-18, CD8 all doubles, S+, Mth 12 (N=10, 13) | 44.0 (11.0 to 73.0)       | 11.0 (11.0 to 33.0)       |  |  |
| Anti-HPV-18, CD8-all doubles, S+, Mth 24 (N=10, 12) | 19.5 (11.0 to 47.0)       | 11.0 (11.0 to 36.0)       |  |  |
| Anti-HPV-18, CD8-all doubles, S+, Mth 36 (N=10, 13) | 45.0 (11.0 to 85.0)       | 34.0 (11.0 to 50.0)       |  |  |

|   |                    |                   |  |  |
|---|--------------------|-------------------|--|--|
| Anti-HPV-18, CD8-d-CD40L, S-, Day 0 (N=77, 69)            | 7.0 (7.0 to 7.0)   | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-CD40L, S-, Month 7 (N=65, 53)          | 7.0 (7.0 to 7.0)   | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-CD40L, S-, Month 12 (N=83, 72)         | 7.0 (7.0 to 32.0)  | 7.0 (7.0 to 36.5) |  |  |
| Anti-HPV-18, CD8-d-CD40L, S-, Month 24 (N=76, 68)         | 7.0 (7.0 to 7.0)   | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-CD40L, S-, Month 36 (N=72, 56)         | 7.0 (7.0 to 35.5)  | 7.0 (7.0 to 37.5) |  |  |
| Anti-HPV-18, CD8-d-CD40L, S+, Day 0 (N=11, 14)            | 7.0 (7.0 to 7.0)   | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-CD40L, S+, Month 7 (N=11, 11)          | 7.0 (7.0 to 7.0)   | 7.0 (7.0 to 27.0) |  |  |
| Anti-HPV-18, CD8-d-CD40L, S+, Month 12 (N=10, 13)         | 34.5 (7.0 to 48.0) | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-CD40L, S+, Month 24 (N=10, 12)         | 7.0 (7.0 to 7.0)   | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-CD40L, S+, Month 36 (N=10, 13)         | 25.0 (7.0 to 61.0) | 7.0 (7.0 to 30.0) |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S-, Day 0 (N=77, 69)    | 7.0 (7.0 to 29.0)  | 7.0 (7.0 to 24.0) |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S-, Month 7 (N=65, 53)  | 7.0 (7.0 to 26.0)  | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S-, Month 12 (N=83, 72) | 7.0 (7.0 to 34.0)  | 7.0 (7.0 to 39.5) |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S-, Month 24 (N=76, 68) | 7.0 (7.0 to 29.5)  | 7.0 (7.0 to 33.5) |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S-, Month 36 (N=72, 56) | 7.0 (7.0 to 40.5)  | 7.0 (7.0 to 34.5) |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S+, Day 0 (N=11, 14)    | 7.0 (7.0 to 23.0)  | 7.0 (7.0 to 30.0) |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S+, Month 7 (N=11, 11)  | 7.0 (7.0 to 74.0)  | 7.0 (7.0 to 39.0) |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S+, Month 12 (N=10, 13) | 16.0 (7.0 to 38.0) | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S+, Month 24 (N=10, 12) | 7.0 (7.0 to 9.0)   | 7.0 (7.0 to 32.0) |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S+, Month 36 (N=10, 13) | 7.0 (7.0 to 39.0)  | 7.0 (7.0 to 40.0) |  |  |
| Anti-HPV-18, CD8-d-IL-2, S-, Day 0 (N=77, 69)             | 7.0 (7.0 to 7.0)   | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-IL-2, S-, Month 7 (N=65, 53)           | 7.0 (7.0 to 7.0)   | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-IL-2, S-, Month 12 (N=83, 72)          | 7.0 (7.0 to 26.0)  | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-IL-2, S-, Month 24 (N=76, 68)          | 7.0 (7.0 to 27.0)  | 7.0 (7.0 to 14.5) |  |  |
| Anti-HPV-18, CD8-d-IL-2, S-, Month 36 (N=72, 56)          | 7.0 (7.0 to 7.0)   | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-IL-2, S+, Day 0 (N=11, 14)             | 7.0 (7.0 to 7.0)   | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-IL-2, S+, Month 7 (N=11, 11)           | 7.0 (7.0 to 24.0)  | 7.0 (7.0 to 34.0) |  |  |
| Anti-HPV-18, CD8-d-IL-2, S+, Month 12 (N=10, 13)          | 7.0 (7.0 to 7.0)   | 7.0 (7.0 to 23.0) |  |  |
| Anti-HPV-18, CD8-d-IL-2, S+, Month 24 (N=10, 12)          | 7.0 (7.0 to 24.0)  | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-IL-2, S+, Month 36 (N=10, 13)          | 7.0 (7.0 to 39.0)  | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-TNF $\alpha$ , S-, Day 0 (N=77, 69)    | 7.0 (7.0 to 7.0)   | 7.0 (7.0 to 8.0)  |  |  |

|  |                    |                   |  |  |
|--|--------------------|-------------------|--|--|
| Anti-HPV-18, CD8-d-TNFα, S-, Month 7 (N=65, 53)  | 7.0 (7.0 to 31.0)  | 7.0 (7.0 to 27.0) |  |  |
| Anti-HPV-18, CD8-d-TNFα, S-, Month 12 (N=83, 72) | 7.0 (7.0 to 31.0)  | 7.0 (7.0 to 35.0) |  |  |
| Anti-HPV-18, CD8-d-TNFα, S-, Month 24 (N=76, 68) | 7.0 (7.0 to 32.5)  | 7.0 (7.0 to 33.0) |  |  |
| Anti-HPV-18, CD8-d-TNFα, S-, Month 36 (N=72, 56) | 7.0 (7.0 to 32.0)  | 7.0 (7.0 to 35.0) |  |  |
| Anti-HPV-18, CD8-d-TNFα, S+, Day 0 (N=11, 14)    | 7.0 (7.0 to 23.0)  | 7.0 (7.0 to 30.0) |  |  |
| Anti-HPV-18, CD8-d-TNFα, S+, Month 7 (N=11, 11)  | 7.0 (7.0 to 74.0)  | 7.0 (7.0 to 62.0) |  |  |
| Anti-HPV-18, CD8-d-TNFα, S+, Month 12 (N=10, 13) | 7.0 (7.0 to 38.0)  | 7.0 (7.0 to 7.0)  |  |  |
| Anti-HPV-18, CD8-d-TNFα, S+, Month 24 (N=10, 12) | 7.0 (7.0 to 31.0)  | 7.0 (7.0 to 16.5) |  |  |
| Anti-HPV-18, CD8-d-TNFα, S+, Month 36 (N=10, 13) | 17.0 (7.0 to 57.0) | 7.0 (7.0 to 29.0) |  |  |

## Statistical analyses

No statistical analyses for this end point

## Secondary: Cell-mediated immunogenicity related to anti-HPV-16 specific T CMI response for Cervarix 3 Group in a sub-cohort of subjects

|                 |  |
|-----------------|--|
| End point title | Cell-mediated immunogenicity related to anti-HPV-16 specific T CMI response for Cervarix 3 Group in a sub-cohort of subjects <sup>[15]</sup> |
|-----------------|--|

End point description:

The CMI response was the measure of the cytokines production (IL-2, IFN-γ, TNF-α, and CD40L) by HPV-antigen specific T lymphocytes and measured by ICS assay for HPV-16. The frequency was presented as a number of cytokine-positive cluster of differentiation (CD)4 i.e. CD4+/CD8+ cells per million CD4+/CD8+ cells. All doubles= T cell expressing at least 2 cytokines. Results were tabulated by the pre-vaccination status of the subjects, where S- = seronegative subjects (antibody concentration < cut-off value) prior to vaccination. S+ = seropositive subjects (antibody concentration ≥ cut-off value) prior to vaccination. The assay was performed on a subset of 100 subjects from Cervarix 3 Group.

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

End point timeframe:

At Day 0 and at Months 13, 18 and 36

Notes:

[15] - 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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values                                  | Cervarix 3 Group          |  |  |  |
|---|---------------------------|--|--|--|
| Subject group type                                | Reporting group           |  |  |  |
| Number of subjects analysed                       | 77                        |  |  |  |
| Units: cells/million T cells                      |                           |  |  |  |
| median (inter-quartile range (Q1-Q3))             |                           |  |  |  |
| Anti-HPV-16, CD4 all doubles, S-, Day 0 (N=77)    | 96.0 (61.0 to 170.0)      |  |  |  |
| Anti-HPV-16, CD4 all doubles, S-, Month 13 (N=73) | 2399.0 (1514.0 to 4223.0) |  |  |  |

|   |                           |  |  |  |
|---|---------------------------|--|--|--|
| Anti-HPV-16, CD4 all doubles, S-, Month 18 (N=73)     | 1879.0 (1124.0 to 3449.0) |  |  |  |
| Anti-HPV-16, CD4 all doubles, S-, Month 36 (N=70)     | 1786.5 (1064.0 to 3285.0) |  |  |  |
| Anti-HPV-16, CD4 all doubles, S+, Day 0 (N=7)         | 169.0 (77.0 to 277.0)     |  |  |  |
| Anti-HPV-16, CD4 all doubles, S+, Month 13 (N=6)      | 2507.5 (1067.0 to 4212.0) |  |  |  |
| Anti-HPV-16, CD4 all doubles, S+, Month 18 (N=6)      | 2717.5 (1597.0 to 4103.0) |  |  |  |
| Anti-HPV-16, CD4 all doubles, S+, Month 36 (N=7)      | 1521.0 (297.0 to 3794.0)  |  |  |  |
| Anti-HPV-16, CD4-d-CD40L, S-, Day 0 (N=77)            | 89.0 (48.0 to 133.0)      |  |  |  |
| Anti-HPV-16, CD4-d-CD40L, S-, Month 13 (N=73)         | 2356.0 (1510.0 to 4165.0) |  |  |  |
| Anti-HPV-16, CD4-d-CD40L, S-, Month 18 (N=73)         | 1831.0 (1070.0 to 3272.0) |  |  |  |
| Anti-HPV-16, CD4-d-CD40L, S-, Month 36 (N=70)         | 1763.0 (1048.0 to 3239.0) |  |  |  |
| Anti-HPV-16, CD4-d-CD40L, S+, Day 0 (N=7)             | 141.0 (73.0 to 261.0)     |  |  |  |
| Anti-HPV-16, CD4-d-CD40L, S+, Month 13 (N=6)          | 2450.5 (1036.0 to 4139.0) |  |  |  |
| Anti-HPV-16, CD4-d-CD40L, S+, Month 18 (N=6)          | 2614.5 (1580.0 to 3862.0) |  |  |  |
| Anti-HPV-16, CD4-d-CD40L, S+, Month 36 (N=7)          | 1426.0 (280.0 to 3697.0)  |  |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S-, Day 0 (N=77)    | 35.0 (20.0 to 60.0)       |  |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S-, Month 13 (N=73) | 651.0 (328.0 to 1356.0)   |  |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S-, Month 18 (N=73) | 405.0 (208.0 to 821.0)    |  |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S-, Month 36 (N=70) | 646.0 (276.0 to 1282.0)   |  |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S+, Day 0 (N=7)     | 68.0 (33.0 to 203.0)      |  |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S+, Month 13 (N=6)  | 644.0 (204.0 to 1163.0)   |  |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S+, Month 18 (N=6)  | 708.5 (361.0 to 1218.0)   |  |  |  |
| Anti-HPV-16, CD4-d-IFN $\gamma$ , S+, Month 36 (N=7)  | 310.0 (72.0 to 1783.0)    |  |  |  |
| Anti-HPV-16, CD4-d-IL-2, S-, Day 0 (N=77)             | 63.0 (34.0 to 111.0)      |  |  |  |
| Anti-HPV-16, CD4-d-IL-2, S-, Month 13 (N=73)          | 2220.0 (1406.0 to 4107.0) |  |  |  |
| Anti-HPV-16, CD4-d-IL-2, S-, Month 18 (N=73)          | 1830.0 (1084.0 to 3221.0) |  |  |  |

|   |                           |  |  |  |
|---|---------------------------|--|--|--|
| Anti-HPV-16, CD4-d-IL-2, S-, Month 36 (N=70)      | 1670.5 (1009.0 to 3169.0) |  |  |  |
| Anti-HPV-16, CD4-d-IL-2, S+, Day 0 (N=7)          | 121.0 (47.0 to 191.0)     |  |  |  |
| Anti-HPV-16, CD4-d-IL-2, S+, Month 13 (N=6)       | 2442.0 (835.0 to 4006.0)  |  |  |  |
| Anti-HPV-16, CD4-d-IL-2, S+, Month 18 (N=6)       | 2659.5 (1510.0 to 3870.0) |  |  |  |
| Anti-HPV-16, CD4-d-IL-2, S+, Month 36 (N=7)       | 1028.0 (267.0 to 3629.0)  |  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S-, Day 0 (N=77)         | 63.0 (37.0 to 99.0)       |  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S-, Month 13 (N=73)      | 1643.0 (907.0 to 2988.0)  |  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S-, Month 18 (N=73)      | 1326.0 (807.0 to 2627.0)  |  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S-, Month 36 (N=70)      | 1300.5 (693.0 to 2267.0)  |  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S+, Day 0 (N=7)          | 140.0 (32.0 to 164.0)     |  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S+, Month 13 (N=6)       | 1843.0 (584.0 to 2657.0)  |  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S+, Month 18 (N=6)       | 2085.0 (1380.0 to 2700.0) |  |  |  |
| Anti-HPV-16, CD4-d-TNFα, S+, Month 36 (N=7)       | 1202.0 (169.0 to 2745.0)  |  |  |  |
| Anti-HPV-16, CD8-all doubles, S-, Day 0 (N=77)    | 27.0 (11.0 to 54.0)       |  |  |  |
| Anti-HPV-16, CD8-all doubles, S-, Month 13 (N=73) | 11.0 (11.0 to 43.0)       |  |  |  |
| Anti-HPV-16, CD8-all doubles, S-, Month 18 (N=73) | 11.0 (11.0 to 53.0)       |  |  |  |
| Anti-HPV-16, CD8-all doubles, S-, Month 36 (N=70) | 21.5 (11.0 to 52.0)       |  |  |  |
| Anti-HPV-16, CD8-all doubles, S+, Day 0 (N=7)     | 33.0 (11.0 to 59.0)       |  |  |  |
| Anti-HPV-16, CD8-all doubles, S+, Month 13 (N=6)  | 43.0 (11.0 to 57.0)       |  |  |  |
| Anti-HPV-16, CD8-all doubles, S+, Month 18 (N=6)  | 27.0 (11.0 to 52.0)       |  |  |  |
| Anti-HPV-16, CD8-all doubles, S+, Month 36 (N=7)  | 11.0 (11.0 to 89.0)       |  |  |  |
| Anti-HPV-16, CD8-d-CD40L, S-, Day 0 (N=77)        | 7.0 (7.0 to 35.0)         |  |  |  |
| Anti-HPV-16, CD8-d-CD40L, S-, Month 13 (N=73)     | 7.0 (7.0 to 29.0)         |  |  |  |
| Anti-HPV-16, CD8-d-CD40L, S-, Month 18 (N=73)     | 7.0 (7.0 to 34.0)         |  |  |  |
| Anti-HPV-16, CD8-d-CD40L, S-, Month 36 (N=70)     | 7.0 (7.0 to 30.0)         |  |  |  |
| Anti-HPV-16, CD8-d-CD40L, S+, Day 0 (N=7)         | 7.0 (7.0 to 35.0)         |  |  |  |
| Anti-HPV-16, CD8-d-CD40L, S+, Month 13 (N=6)      | 7.0 (7.0 to 34.0)         |  |  |  |
| Anti-HPV-16, CD8-d-CD40L, S+, Month 18 (N=6)      | 7.0 (7.0 to 7.0)          |  |  |  |
| Anti-HPV-16, CD8-d-CD40L, S+, Month 36 (N=7)      | 7.0 (7.0 to 46.0)         |  |  |  |

|   |                    |  |  |  |
|---|--------------------|--|--|--|
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S-, Day 0 (N=77)    | 7.0 (7.0 to 44.0)  |  |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S-, Month 13 (N=73) | 7.0 (7.0 to 35.0)  |  |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S-, Month 18 (N=73) | 7.0 (7.0 to 37.0)  |  |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S-, Month 36 (N=70) | 7.0 (7.0 to 38.0)  |  |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S+, Day 0 (N=7)     | 29.0 (7.0 to 55.0) |  |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S+, Month 13 (N=6)  | 25.5 (7.0 to 53.0) |  |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S+, Month 18 (N=6)  | 7.0 (7.0 to 33.0)  |  |  |  |
| Anti-HPV-16, CD8-d-IFN $\gamma$ , S+, Month 36 (N=7)  | 7.0 (7.0 to 46.0)  |  |  |  |
| Anti-HPV-16, CD8-d-IL-2, S-, Day 0 (N=77)             | 7.0 (7.0 to 7.0)   |  |  |  |
| Anti-HPV-16, CD8-d-IL-2, S-, Month 13 (N=73)          | 7.0 (7.0 to 7.0)   |  |  |  |
| Anti-HPV-16, CD8-d-IL-2, S-, Month 18 (N=73)          | 7.0 (7.0 to 29.0)  |  |  |  |
| Anti-HPV-16, CD8-d-IL-2, S-, Month 36 (N=70)          | 7.0 (7.0 to 7.0)   |  |  |  |
| Anti-HPV-16, CD8-d-IL-2, S+, Day 0 (N=7)              | 7.0 (7.0 to 7.0)   |  |  |  |
| Anti-HPV-16, CD8-d-IL-2, S+, Month 13 (N=6)           | 7.0 (7.0 to 7.0)   |  |  |  |
| Anti-HPV-16, CD8-d-IL-2, S+, Month 18 (N=6)           | 7.0 (7.0 to 7.0)   |  |  |  |
| Anti-HPV-16, CD8-d-IL-2, S+, Month 36 (N=7)           | 7.0 (7.0 to 46.0)  |  |  |  |
| Anti-HPV-16, CD8-d-TNF $\alpha$ , S-, Day 0 (N=77)    | 7.0 (7.0 to 27.0)  |  |  |  |
| Anti-HPV-16, CD8-d-TNF $\alpha$ , S-, Month 13 (N=73) | 7.0 (7.0 to 29.0)  |  |  |  |
| Anti-HPV-16, CD8-d-TNF $\alpha$ , S-, Month 18 (N=73) | 7.0 (7.0 to 41.0)  |  |  |  |
| Anti-HPV-16, CD8-d-TNF $\alpha$ , S-, Month 36 (N=70) | 7.0 (7.0 to 38.0)  |  |  |  |
| Anti-HPV-16, CD8-d-TNF $\alpha$ , S+, Day 0 (N=7)     | 7.0 (7.0 to 7.0)   |  |  |  |
| Anti-HPV-16, CD8-d-TNF $\alpha$ , S+, Month 13 (N=6)  | 20.5 (7.0 to 44.0) |  |  |  |
| Anti-HPV-16, CD8-d-TNF $\alpha$ , S+, Month 18 (N=6)  | 20.0 (7.0 to 39.0) |  |  |  |
| Anti-HPV-16, CD8-d-TNF $\alpha$ , S+, Month 36 (N=7)  | 7.0 (7.0 to 7.0)   |  |  |  |

## Statistical analyses

No statistical analyses for this end point

## Secondary: Cell-mediated immunogenicity related to anti-HPV-18 specific T CMI response for Cervarix 3 Group in a sub-cohort of subjects

|                 |  |
|-----------------|--|
| End point title | Cell-mediated immunogenicity related to anti-HPV-18 specific T CMI response for Cervarix 3 Group in a sub-cohort of subjects <sup>[16]</sup> |
|-----------------|--|

## End point description:

The CMI response was the measure of the cytokines production (IL-2, IFN- $\gamma$ , TNF- $\alpha$ , and CD40L) by HPV-antigen specific T lymphocytes and measured by ICS assay for HPV-18. The frequency was presented as a number of cytokine-producing CD4+/CD8+ cells per million CD4+/CD8+ cells. All doubles= T cell expressing at least 2 cytokines. Results were tabulated by the pre-vaccination status of the subjects, where S- = seronegative subjects (antibody concentration < cut-off value) prior to vaccination. S+ = seropositive subjects (antibody concentration  $\geq$  cut-off value) prior to vaccination. The assay was performed on a subset of 100 subjects from Cervarix 3 Group.

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

## End point timeframe:

At Day 0 and at Months 13, 18 and 36

## Notes:

[16] - 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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values                                  | Cervarix 3 Group          |  |  |  |
|---|---------------------------|--|--|--|
| Subject group type                                | Reporting group           |  |  |  |
| Number of subjects analysed                       | 82                        |  |  |  |
| Units: cells/million T-cells                      |                           |  |  |  |
| median (inter-quartile range (Q1-Q3))             |                           |  |  |  |
| Anti-HPV-18, CD4 all doubles, S-, Day 0 (N=82)    | 99.0 (61.0 to 149.0)      |  |  |  |
| Anti-HPV-18, CD4 all doubles, S-, Month 13 (N=77) | 1499.0 (1033.0 to 2928.0) |  |  |  |
| Anti-HPV-18, CD4 all doubles, S-, Month 18 (N=77) | 1222.0 (796.0 to 2116.0)  |  |  |  |
| Anti-HPV-18, CD4 all doubles, S-, Month 36 (N=75) | 1158.0 (606.0 to 2185.0)  |  |  |  |
| Anti-HPV-18, CD4 all doubles, S+, Day 0 (N=2)     | 107.5 (69.0 to 146.0)     |  |  |  |
| Anti-HPV-18, CD4 all doubles, S+, Month 13 (N=2)  | 1968.5 (1753.0 to 2184.0) |  |  |  |
| Anti-HPV-18, CD4 all doubles, S+, Month 18 (N=2)  | 1250.0 (1156.0 to 1344.0) |  |  |  |
| Anti-HPV-18, CD4 all doubles, S+, Month 36 (N=2)  | 1399.5 (1004.0 to 1795.0) |  |  |  |
| Anti-HPV-18, CD4-d-CD40L, S-, Day 0 (N=82)        | 82.5 (42.0 to 125.0)      |  |  |  |
| Anti-HPV-18, CD4-d-CD40L, S-, Month 13 (N=77)     | 1472.0 (1003.0 to 2880.0) |  |  |  |
| Anti-HPV-18, CD4-d-CD40L, S-, Month 18 (N=77)     | 1199.0 (748.0 to 2098.0)  |  |  |  |
| Anti-HPV-18, CD4-d-CD40L, S-, Month 36 (N=75)     | 1154.0 (563.0 to 2157.0)  |  |  |  |
| Anti-HPV-18, CD4-d-CD40L, S+, Day 0 (N=2)         | 103.5 (65.0 to 142.0)     |  |  |  |
| Anti-HPV-18, CD4-d-CD40L, S+, Month 13 (N=2)      | 1904.5 (1656.0 to 2153.0) |  |  |  |
| Anti-HPV-18, CD4-d-CD40L, S+, Month 18 (N=2)      | 1174.5 (1110.0 to 1239.0) |  |  |  |

|   |                           |  |  |  |
|---|---------------------------|--|--|--|
| Anti-HPV-18, CD4-d-CD40L, S+, Month 36 (N=2)          | 1320.0 (918.0 to 1722.0)  |  |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S-, Day 0 (N=82)    | 35.0 (23.0 to 61.0)       |  |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S-, Month 13 (N=77) | 349.0 (173.0 to 1221.0)   |  |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S-, Month 18 (N=77) | 226.0 (108.0 to 575.0)    |  |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S-, Month 36 (N=75) | 318.0 (140.0 to 766.0)    |  |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S+, Day 0 (N=2)     | 33.5 (24.0 to 43.0)       |  |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S+, Month 13 (N=2)  | 378.0 (307.0 to 449.0)    |  |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S+, Month 18 (N=2)  | 157.5 (136.0 to 179.0)    |  |  |  |
| Anti-HPV-18, CD4-d-IFN $\gamma$ , S+, Month 36 (N=2)  | 389.0 (231.0 to 547.0)    |  |  |  |
| Anti-HPV-18, CD4-d-IL-2, S-, Day 0 (N=82)             | 58.5 (32.0 to 98.0)       |  |  |  |
| Anti-HPV-18, CD4-d-IL-2, S-, Month 13 (N=77)          | 1398.0 (812.0 to 2743.0)  |  |  |  |
| Anti-HPV-18, CD4-d-IL-2, S-, Month 18 (N=77)          | 1102.0 (719.0 to 1924.0)  |  |  |  |
| Anti-HPV-18, CD4-d-IL-2, S-, Month 36 (N=75)          | 1086.0 (535.0 to 1974.0)  |  |  |  |
| Anti-HPV-18, CD4-d-IL-2, S+, Day 0 (N=2)              | 46.5 (33.0 to 60.0)       |  |  |  |
| Anti-HPV-18, CD4-d-IL-2, S+, Month 13 (N=2)           | 1845.0 (1544.0 to 2146.0) |  |  |  |
| Anti-HPV-18, CD4-d-IL-2, S+, Month 18 (N=2)           | 1151.0 (1078.0 to 1224.0) |  |  |  |
| Anti-HPV-18, CD4-d-IL-2, S+, Month 36 (N=2)           | 1160.0 (827.0 to 1493.0)  |  |  |  |
| Anti-HPV-18, CD4-d-TNF $\alpha$ , S-, Day 0 (N=82)    | 60.5 (34.0 to 97.0)       |  |  |  |
| Anti-HPV-18, CD4-d-TNF $\alpha$ , S-, Month 13 (N=77) | 1029.0 (649.0 to 2051.0)  |  |  |  |
| Anti-HPV-18, CD4-d-TNF $\alpha$ , S-, Month 18 (N=77) | 921.0 (539.0 to 1783.0)   |  |  |  |
| Anti-HPV-18, CD4-d-TNF $\alpha$ , S-, Month 36 (N=75) | 812.0 (384.0 to 1545.0)   |  |  |  |
| Anti-HPV-18, CD4-d-TNF $\alpha$ , S+, Day 0 (N=2)     | 66.5 (29.0 to 104.0)      |  |  |  |
| Anti-HPV-18, CD4-d-TNF $\alpha$ , S+, Month 13 (N=2)  | 1449.5 (1317.0 to 1582.0) |  |  |  |
| Anti-HPV-18, CD4-d-TNF $\alpha$ , S+, Month 18 (N=2)  | 954.5 (873.0 to 1036.0)   |  |  |  |
| Anti-HPV-18, CD4-d-TNF $\alpha$ , S+, Month 36 (N=2)  | 1127.0 (847.0 to 1407.0)  |  |  |  |
| Anti-HPV-18, CD8-all doubles, S-, Day 0 (N=82)        | 11.0 (11.0 to 47.0)       |  |  |  |
| Anti-HPV-18, CD8-all doubles, S-, Month 13 (N=77)     | 32.0 (11.0 to 49.0)       |  |  |  |
| Anti-HPV-18, CD8-all doubles, S-, Month 18 (N=77)     | 34.0 (11.0 to 50.0)       |  |  |  |
| Anti-HPV-18, CD8-all doubles, S-, Month 36 (N=75)     | 33.0 (11.0 to 56.0)       |  |  |  |

|   |                     |  |  |  |
|---|---------------------|--|--|--|
| Anti-HPV-18, CD8-all doubles, S+, Day 0 (N=2)         | 29.0 (11.0 to 47.0) |  |  |  |
| Anti-HPV-18, CD8-all doubles, S+, Month 13 (N=2)      | 63.5 (39.0 to 88.0) |  |  |  |
| Anti-HPV-18, CD8-all doubles, S+, Month 18 (N=2)      | 11.0 (11.0 to 11.0) |  |  |  |
| Anti-HPV-18, CD8-all doubles, S+, Month 36 (N=2)      | 45.0 (11.0 to 79.0) |  |  |  |
| Anti-HPV-18, CD8-d-CD40L, S-, Day 0 (N=82)            | 7.0 (7.0 to 30.0)   |  |  |  |
| Anti-HPV-18, CD8-d-CD40L, S-, Month 13 (N=77)         | 7.0 (7.0 to 38.0)   |  |  |  |
| Anti-HPV-18, CD8-d-CD40L, S-, Month 18 (N=77)         | 7.0 (7.0 to 34.0)   |  |  |  |
| Anti-HPV-18, CD8-d-CD40L, S-, Month 36 (N=75)         | 7.0 (7.0 to 38.0)   |  |  |  |
| Anti-HPV-18, CD8-d-CD40L, S+, Day 0 (N=82)            | 25.0 (7.0 to 43.0)  |  |  |  |
| Anti-HPV-18, CD8-d-CD40L, S+, Month 13 (N=2)          | 21.0 (7.0 to 35.0)  |  |  |  |
| Anti-HPV-18, CD8-d-CD40L, S+, Month 18 (N=2)          | 7.0 (7.0 to 7.0)    |  |  |  |
| Anti-HPV-18, CD8-d-CD40L, S+, Month 36 (N=2)          | 41.0 (7.0 to 75.0)  |  |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S-, Day 0 (N=82)    | 7.0 (7.0 to 41.0)   |  |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S-, Month 13 (N=77) | 7.0 (7.0 to 40.0)   |  |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S-, Month 18 (N=77) | 7.0 (7.0 to 37.0)   |  |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S-, Month 36 (N=75) | 7.0 (7.0 to 44.0)   |  |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S+, Day 0 (N=2)     | 25.0 (7.0 to 43.0)  |  |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S+, Month 13 (N=2)  | 59.5 (35.0 to 84.0) |  |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S+, Month 18 (N=2)  | 7.0 (7.0 to 7.0)    |  |  |  |
| Anti-HPV-18, CD8-d-IFN $\gamma$ , S+, Month 36 (N=2)  | 41.0 (7.0 to 75.0)  |  |  |  |
| Anti-HPV-18, CD8-d-IL-2, S-, Day 0 (N=82)             | 7.0 (7.0 to 7.0)    |  |  |  |
| Anti-HPV-18, CD8-d-IL-2, S-, Month 13 (N=77)          | 7.0 (7.0 to 7.0)    |  |  |  |
| Anti-HPV-18, CD8-d-IL-2, S-, Month 18 (N=77)          | 7.0 (7.0 to 7.0)    |  |  |  |
| Anti-HPV-18, CD8-d-IL-2, S-, Month 36 (N=75)          | 7.0 (7.0 to 7.0)    |  |  |  |
| Anti-HPV-18, CD8-d-IL-2, S+, Day 0 (N=2)              | 7.0 (7.0 to 7.0)    |  |  |  |
| Anti-HPV-18, CD8-d-IL-2, S+, Month 13 (N=2)           | 45.5 (7.0 to 84.0)  |  |  |  |
| Anti-HPV-18, CD8-d-IL-2, S+, Month 18 (N=2)           | 7.0 (7.0 to 7.0)    |  |  |  |
| Anti-HPV-18, CD8-d-IL-2, S+, Month 36 (N=2)           | 7.0 (7.0 to 7.0)    |  |  |  |
| Anti-HPV-18, CD8-d-TNF $\alpha$ , S-, Day 0 (N=72)    | 7.0 (7.0 to 38.0)   |  |  |  |
| Anti-HPV-18, CD8-d-TNF $\alpha$ , S-, Month 13 (N=77) | 7.0 (7.0 to 30.0)   |  |  |  |
| Anti-HPV-18, CD8-d-TNF $\alpha$ , S-, Month 18 (N=77) | 7.0 (7.0 to 40.0)   |  |  |  |

|  |                   |  |  |  |
|--|-------------------|--|--|--|
| Anti-HPV-18, CD8-d-TNFα, S-, Month 36 (N=75) | 7.0 (7.0 to 35.0) |  |  |  |
| Anti-HPV-18, CD8-d-TNFα, S+, Day 0 (N=2)     | 7.0 (7.0 to 7.0)  |  |  |  |
| Anti-HPV-18, CD8-d-TNFα, S+, Month 13 (N=2)  | 7.0 (7.0 to 7.0)  |  |  |  |
| Anti-HPV-18, CD8-d-TNFα, S+, Month 18 (N=2)  | 7.0 (7.0 to 7.0)  |  |  |  |
| Anti-HPV-18, CD8-d-TNFα, S+, Month 36 (N=2)  | 7.0 (7.0 to 7.0)  |  |  |  |

## Statistical analyses

No statistical analyses for this end point

### Secondary: Cell-mediated immunogenicity related to anti-HPV-16 specific B CMI response for Cervarix 1 Group and Cervarix 2 Group in a sub-cohort of subjects

|                 |   |
|-----------------|---|
| End point title | Cell-mediated immunogenicity related to anti-HPV-16 specific B CMI response for Cervarix 1 Group and Cervarix 2 Group in a sub-cohort of subjects <sup>[17]</sup> |
|-----------------|---|

End point description:

The CMI response was assessed as being the frequency of B-cell memory of HPV-16 antigen-specific memory B-cells per million memory B-cells in subjects with detectable B-cells. The results are presented by pre-vaccination status, where S- = seronegative subjects (antibody concentration < cut-off value) prior to vaccination and S+ = seropositive subjects (antibody concentration ≥ cut-off value) prior to vaccination. The assay was performed on a subset of 100 subjects per study group.

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

End point timeframe:

At Day 0 and Months 7, 12, 24 and 36

Notes:

[17] - 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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values                      | Cervarix 1 Group           | Cervarix 2 Group         |  |  |
|---------------------------------------|----------------------------|--------------------------|--|--|
| Subject group type                    | Reporting group            | Reporting group          |  |  |
| Number of subjects analysed           | 75                         | 63                       |  |  |
| Units: cells/million B-cells          |                            |                          |  |  |
| median (inter-quartile range (Q1-Q3)) |                            |                          |  |  |
| Anti-HPV-16, S-, Day 0 (N=74, 63)     | 1.0 (1.0 to 1.0)           | 1.0 (1.0 to 1.0)         |  |  |
| Anti-HPV-16, S-, Month 7 (N=70, 46)   | 2155.0 (886.0 to 5421.0)   | 1510.0 (799.0 to 3114.0) |  |  |
| Anti-HPV-16, S-, Month 12 (N=55, 42)  | 801.0 (361.0 to 2648.0)    | 1145.0 (371.0 to 3215.0) |  |  |
| Anti-HPV-16, S-, Month 24 (N=75, 60)  | 318.0 (95.0 to 697.0)      | 594.5 (147.5 to 1133.5)  |  |  |
| Anti-HPV-16, S-, Month 36 (N=70, 53)  | 560.5 (157.0 to 1012.0)    | 448.0 (219.0 to 821.0)   |  |  |
| Anti-HPV-16, S+, Day 0 (N=8, 13)      | 1.0 (1.0 to 16.0)          | 1.0 (1.0 to 51.0)        |  |  |
| Anti-HPV-16, S+, Month 7 (N=7, 11)    | 4838.0 (1513.0 to 11824.0) | 477.0 (139.0 to 4928.0)  |  |  |

|                                     |                           |                         |  |  |
|-------------------------------------|---------------------------|-------------------------|--|--|
| Anti-HPV-16, S+, Month 12 (N=2, 9)  | 5056.0 (5018.0 to 5094.0) | 539.0 (340.0 to 2111.0) |  |  |
| Anti-HPV-16, S+, Month 24 (N=8, 12) | 621.0 (324.5 to 1751.5)   | 568.5 (50.0 to 1955.0)  |  |  |
| Anti-HPV-16, S+, Month 36 (N=6, 13) | 475.0 (414.0 to 822.0)    | 107.0 (1.0 to 1275.0)   |  |  |

## Statistical analyses

No statistical analyses for this end point

### Secondary: Cell-mediated immunogenicity related to anti-HPV-18 specific B CMI response for Cervarix 1 Group and Cervarix 2 Group in a sub-cohort of subjects

|                 |   |
|-----------------|---|
| End point title | Cell-mediated immunogenicity related to anti-HPV-18 specific B CMI response for Cervarix 1 Group and Cervarix 2 Group in a sub-cohort of subjects <sup>[18]</sup> |
|-----------------|---|

End point description:

The cell-mediated immune response was assessed as being the frequency of B-cell memory of HPV-18 antigen-specific memory B-cells per million memory B-cells in subjects with detectable B-cells. The results are presented by pre-vaccination status, where S- = seronegative subjects (antibody concentration < cut-off value) prior to vaccination and S+ = seropositive subjects (antibody concentration ≥ cut-off value) prior to vaccination. The assay was performed on a subset of 100 subjects per study group.

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

End point timeframe:

At Day 0 and at Months 7, 12, 24 and 36

Notes:

[18] - 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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values                      | Cervarix 1 Group         | Cervarix 2 Group        |  |  |
|---------------------------------------|--------------------------|-------------------------|--|--|
| Subject group type                    | Reporting group          | Reporting group         |  |  |
| Number of subjects analysed           | 72                       | 63                      |  |  |
| Units: cells/million B-cells          |                          |                         |  |  |
| median (inter-quartile range (Q1-Q3)) |                          |                         |  |  |
| Anti-HPV-18, S-, Day 0 (N=72, 63)     | 1.0 (1.0 to 1.0)         | 1.0 (1.0 to 1.0)        |  |  |
| Anti-HPV-18, S-, Month 7 (N=67, 48)   | 958.0 (386.0 to 2500.0)  | 817.5 (368.0 to 1894.5) |  |  |
| Anti-HPV-18, S-, Month 24 (N=72, 61)  | 236.0 (61.5 to 710.0)    | 274.0 (71.0 to 829.0)   |  |  |
| Anti-HPV-18, S-, Month 36 (N=67, 54)  | 269.0 (62.0 to 732.0)    | 284.5 (90.0 to 582.0)   |  |  |
| Anti-HPV-18, S+, Day 0 (N=10, 14)     | 1.0 (1.0 to 44.0)        | 1.0 (1.0 to 22.0)       |  |  |
| Anti-HPV-18, S+, Month 7 (N=10, 10)   | 2016.5 (423.0 to 2797.0) | 439.5 (31.0 to 1779.0)  |  |  |
| Anti-HPV-18, S+, Month 24 (N=11, 12)  | 299.0 (117.0 to 643.0)   | 338.5 (174.0 to 786.0)  |  |  |
| Anti-HPV-18, S+, Month 36 (N=9, 12)   | 154.0 (141.0 to 427.0)   | 93.0 (18.0 to 762.0)    |  |  |

## Statistical analyses

No statistical analyses for this end point

### Secondary: Cell-mediated immunogenicity related to anti-HPV-16 specific B CMI response for Cervarix 3 Group in a sub-cohort of subjects

|                 |  |
|-----------------|--|
| End point title | Cell-mediated immunogenicity related to anti-HPV-16 specific B CMI response for Cervarix 3 Group in a sub-cohort of subjects <sup>[19]</sup> |
|-----------------|--|

End point description:

The cell-mediated immune response was assessed as being the frequency of B-cell memory of HPV-16 antigen-specific memory B-cells per million memory B-cells in subjects with detectable B-cells. The results are presented by pre-vaccination status, where S- = seronegative subjects (antibody concentration < cut-off value) prior to vaccination and S+ = seropositive subjects (antibody concentration ≥ cut-off value) prior to vaccination. The assay was performed on a subset of 100 subjects from Cervarix 3 Group.

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

End point timeframe:

At Day 0 and at Months 13, 18 and 36

Notes:

[19] - 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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values                      | Cervarix 3 Group          |  |  |  |
|---------------------------------------|---------------------------|--|--|--|
| Subject group type                    | Reporting group           |  |  |  |
| Number of subjects analysed           | 68                        |  |  |  |
| Units: cells/million B-cells          |                           |  |  |  |
| median (inter-quartile range (Q1-Q3)) |                           |  |  |  |
| Anti-HPV-16, S-, Day 0 (N=66)         | 1.0 (1.0 to 7.0)          |  |  |  |
| Anti-HPV-16, S-, Month 13 (N=68)      | 2809.5 (1402.5 to 5045.5) |  |  |  |
| Anti-HPV-16, S-, Month 18 (N=60)      | 766.0 (412.0 to 1946.5)   |  |  |  |
| Anti-HPV-16, S-, Month 36 (N=67)      | 613.0 (322.0 to 1301.0)   |  |  |  |
| Anti-HPV-16, S+, Day 0 (N=5)          | 1.0 (1.0 to 20.0)         |  |  |  |
| Anti-HPV-16, S+, Month 13 (N=5)       | 5996.0 (919.0 to 7353.0)  |  |  |  |
| Anti-HPV-16, S+, Month 18 (N=5)       | 2130.0 (808.0 to 2271.0)  |  |  |  |
| Anti-HPV-16, S+, Month 36 (N=6)       | 425.0 (102.0 to 714.0)    |  |  |  |

## Statistical analyses

No statistical analyses for this end point

### Secondary: Cell-mediated immunogenicity related to anti-HPV-18 specific B CMI response for Cervarix 3 Group in a sub-cohort of subjects

|                 |  |
|-----------------|--|
| End point title | Cell-mediated immunogenicity related to anti-HPV-18 specific B CMI response for Cervarix 3 Group in a sub-cohort of subjects <sup>[20]</sup> |
|-----------------|--|

End point description:

The cell-mediated immune response was assessed as being the frequency of B-cell memory of HPV-18 antigen-specific memory B-cells per million memory B-cells in subjects with detectable B-cells. The results are presented by pre-vaccination status, where S- = seronegative subjects (antibody concentration < cut-off value) prior to vaccination and S+ = seropositive subjects (antibody concentration ≥ cut-off value) prior to vaccination. The assay was performed on a subset of 100 subjects from Cervarix 3 Group.

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

End point timeframe:

At Day 0 and at Months 13, 18 and 36

Notes:

[20] - 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: As Group Cervarix 3 received the last vaccination dose at Month 12, results were presented separately for Groups Cervarix 3 and for Cervarix 1 and 2.

| End point values                      | Cervarix 3 Group          |  |  |  |
|---------------------------------------|---------------------------|--|--|--|
| Subject group type                    | Reporting group           |  |  |  |
| Number of subjects analysed           | 72                        |  |  |  |
| Units: cells/million B-cells          |                           |  |  |  |
| median (inter-quartile range (Q1-Q3)) |                           |  |  |  |
| Anti-HPV-18, S-, Day 0 (N=70)         | 1.0 (1.0 to 1.0)          |  |  |  |
| Anti-HPV-18, S-, Month 13 (N=71)      | 1165.0 (602.0 to 1660.0)  |  |  |  |
| Anti-HPV-18, S-, Month 18 (N=64)      | 561.5 (132.0 to 1213.5)   |  |  |  |
| Anti-HPV-18, S-, Month 36 (N=72)      | 361.0 (112.0 to 724.0)    |  |  |  |
| Anti-HPV-18, S+, Day 0 (N=1)          | 48.0 (48.0 to 48.0)       |  |  |  |
| Anti-HPV-18, S+, Month 13 (N=2)       | 758.0 (114.0 to 1402.0)   |  |  |  |
| Anti-HPV-18, S+, Month 18 (N=1)       | 938.0 (938.0 to 938.0)    |  |  |  |
| Anti-HPV-18, S+, Month 36 (N=1)       | 1231.0 (1231.0 to 1231.0) |  |  |  |

## Statistical analyses

No statistical analyses for this end point

### Secondary: Number of subjects with any and grade 3 solicited local symptoms

|                 |  |
|-----------------|--|
| End point title | Number of subjects with any and grade 3 solicited local symptoms |
|-----------------|--|

End point description:

Assessed solicited local symptoms were pain, redness and swelling. Any = occurrence of any solicited local symptom regardless of their intensity grade. Grade 3 pain = significant pain at rest, that prevented normal every day activity. Grade 3 redness/swelling = redness/swelling above 50 millimeters (mm). Subjects from Cervarix 1 and Cervarix 3 Groups received only 2 doses of vaccine, therefore data are presented up to Dose 2.

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

End point timeframe:

During the 7 day period (Days 0-6) after each vaccine dose and across doses

| End point values                                 | Cervarix 1 Group | Cervarix 2 Group | Cervarix 3 Group |  |
|--|------------------|------------------|------------------|--|
| Subject group type                               | Reporting group  | Reporting group  | Reporting group  |  |
| Number of subjects analysed                      | 550              | 480              | 413              |  |
| Units: Subjects                                  |                  |                  |                  |  |
| Any Pain - Dose 1 (N=549, 480, 411)              | 461              | 439              | 354              |  |
| Grade 3 Pain - Dose 1 (N=549, 480, 411)          | 24               | 21               | 21               |  |
| Any Pain - Dose 2 (N=544, 470, 404)              | 446              | 377              | 323              |  |
| Grade 3 Pain - Dose 2 (N=544, 470, 404)          | 33               | 25               | 31               |  |
| Any Pain - Dose 3 (N=0, 464, 0)                  | 0                | 358              | 0                |  |
| Grade 3 Pain - Dose 3 (N=0, 464, 0)              | 0                | 20               | 0                |  |
| Any Pain - Across doses (N=550, 480, 413)        | 499              | 461              | 381              |  |
| Grade 3 Pain - Across doses (N=550, 480, 413)    | 50               | 53               | 48               |  |
| Any Redness - Dose 1 (N=549, 480, 411)           | 167              | 135              | 126              |  |
| Grade 3 Redness - Dose 1 (N=549, 480, 411)       | 0                | 2                | 2                |  |
| Any Redness - Dose 2 (N=544, 470, 404)           | 180              | 143              | 153              |  |
| Grade 3 Redness - Dose 2 (N=544, 470, 404)       | 4                | 5                | 1                |  |
| Any Redness - Dose 3 (N=0, 464, 0)               | 0                | 142              | 0                |  |
| Grade 3 Redness - Dose 3 (N=0, 464, 0)           | 0                | 5                | 0                |  |
| Any Redness - Across doses (N=550, 480, 413)     | 247              | 212              | 197              |  |
| Grade 3 Redness - Across doses (N=550, 480, 413) | 4                | 10               | 3                |  |
| Any Swelling - Dose 1 (N=549, 480, 411)          | 141              | 105              | 101              |  |
| Grade 3 Swelling - Dose 1 (N=549, 480, 411)      | 3                | 1                | 4                |  |
| Any Swelling - Dose 2 (N=544, 470, 404)          | 166              | 131              | 135              |  |
| Grade 3 Swelling - Dose 2 (N=544, 470, 404)      | 2                | 4                | 2                |  |
| Any Swelling - Dose 3 (N=0, 464, 0)              | 0                | 136              | 0                |  |
| Grade 3 Swelling - Dose 3 (N=0, 464, 0)          | 0                | 3                | 0                |  |
| Any Swelling - Across doses (N=550, 480, 413)    | 225              | 204              | 171              |  |

|  |   |   |   |  |
|--|---|---|---|--|
| Grade 3 Swelling - Across doses<br>(N=550, 480, 413) | 5 | 6 | 6 |  |
|--|---|---|---|--|

## Statistical analyses

No statistical analyses for this end point

## Secondary: Number of subjects with any, grade 3 and related solicited general symptoms

|                 |   |
|-----------------|---|
| End point title | Number of subjects with any, grade 3 and related solicited general symptoms |
|-----------------|---|

End point description:

Assessed solicited general symptoms were arthralgia, fatigue, gastrointestinal symptoms, headache, myalgia, rash, fever and urticaria. Any = occurrence of any solicited general symptom regardless of intensity grade or relationship to vaccination. Any Fever = axillary temperature  $\geq 37.5$  degrees Celsius ( $^{\circ}\text{C}$ ). Grade 3 symptom = symptom that prevented normal activity. Grade 3 fever = fever greater than ( $>$ )  $39.0^{\circ}\text{C}$ . Related = general symptom assessed by the investigator as causally related to the vaccination. Subjects from Cervarix 1 and Cervarix 3 Groups received only 2 doses of vaccine, therefore data are presented up to Dose 2.

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

End point timeframe:

During the 7-day period (Days 0-6) after each vaccine dose and across doses

| End point values                                   | Cervarix 1 Group | Cervarix 2 Group | Cervarix 3 Group |  |
|--|------------------|------------------|------------------|--|
| Subject group type                                 | Reporting group  | Reporting group  | Reporting group  |  |
| Number of subjects analysed                        | 550              | 480              | 413              |  |
| Units: Subjects                                    |                  |                  |                  |  |
| Any Arthralgia - Dose 1 (N=549, 480, 411)          | 61               | 53               | 52               |  |
| Grade 3 Arthralgia - Dose 1 (N=549, 480, 411)      | 8                | 3                | 3                |  |
| Related Arthralgia - Dose 1 (N=549, 480, 411)      | 56               | 50               | 45               |  |
| Any Arthralgia - Dose 2 (N=544, 470, 404)          | 71               | 56               | 64               |  |
| Grade 3 Arthralgia - Dose 2 (N=544, 470, 404)      | 2                | 1                | 3                |  |
| Related Arthralgia - Dose 2 (N=544, 470, 404)      | 64               | 50               | 57               |  |
| Any Arthralgia - Dose 3 (N=0, 464, 0)              | 0                | 49               | 0                |  |
| Grade 3 Arthralgia - Dose 3 (N=0, 464, 0)          | 0                | 3                | 0                |  |
| Related Arthralgia - Dose 3 (N=0, 464, 0)          | 0                | 42               | 0                |  |
| Any Arthralgia - Across doses (N=550, 480, 413)    | 111              | 107              | 93               |  |
| Grade 3 Arthralgia -Across doses (N=550, 480, 413) | 9                | 6                | 6                |  |
| Related Arthralgia -Across doses (N=550, 480, 413) | 105              | 102              | 83               |  |

|  |     |     |     |  |
|--|-----|-----|-----|--|
| Any Fatigue - Dose 1 (N=549, 480, 411)             | 181 | 238 | 156 |  |
| Grade 3 Fatigue - Dose 1 (N=549, 480, 411)         | 7   | 9   | 10  |  |
| Related Fatigue - Dose 1 (N=549, 480, 411)         | 153 | 205 | 129 |  |
| Any Fatigue - Dose 2 (N=544, 470, 404)             | 167 | 168 | 144 |  |
| Grade 3 Fatigue - Dose 2 (N=544, 470, 404)         | 9   | 11  | 14  |  |
| Related Fatigue - Dose 2 (N=544, 470, 404)         | 149 | 142 | 119 |  |
| Any Fatigue - Dose 3 (N=0, 464, 0)                 | 0   | 177 | 0   |  |
| Grade 3 Fatigue - Dose 3 (N=0, 464, 0)             | 0   | 12  | 0   |  |
| Related Fatigue - Dose 3 (N=0, 464, 0)             | 0   | 161 | 0   |  |
| Any Fatigue - Across doses (N=550, 480, 413)       | 247 | 310 | 215 |  |
| Grade 3 Fatigue - Across doses (N=550, 480, 413)   | 14  | 25  | 21  |  |
| Related Fatigue - Across doses (N=550, 480, 413)   | 221 | 294 | 185 |  |
| Any Gastrointestinal - Dose 1 (N=549, 480, 411)    | 59  | 88  | 44  |  |
| Grade 3 Gastrointestinal -Dose 1 (N=549, 480, 411) | 1   | 2   | 3   |  |
| Related Gastrointestinal -Dose 1 (N=549, 480, 411) | 49  | 67  | 32  |  |
| Any Gastrointestinal - Dose 2 (N=544, 470, 404)    | 51  | 50  | 48  |  |
| Grade 3 Gastrointestinal -Dose 2 (N=544, 470, 404) | 6   | 2   | 4   |  |
| Related Gastrointestinal -Dose 2 (N=544, 470, 404) | 34  | 36  | 40  |  |
| Any Gastrointestinal - Dose 3 (N=0, 464, 0)        | 0   | 45  | 0   |  |
| Grade 3 Gastrointestinal -Dose 3 (N=0, 464, 0)     | 0   | 7   | 0   |  |
| Related Gastrointestinal -Dose 3 (N=0, 464, 0)     | 0   | 35  | 0   |  |
| Any Gastrointestinal -Across doses (N=550,480,413) | 98  | 134 | 77  |  |
| Grade 3 Gastroint. -Across doses (N=550, 480, 413) | 7   | 11  | 7   |  |
| Related Gastroint. -Across doses (N=550, 480, 413) | 77  | 106 | 62  |  |
| Any Headache - Dose 1 (N=549, 480, 411)            | 133 | 161 | 128 |  |
| Grade 3 Headache - Dose 1 (N=549, 480, 411)        | 9   | 10  | 10  |  |
| Related Headache - Dose 1 (N=549, 480, 411)        | 104 | 136 | 104 |  |
| Any Headache - Dose 2 (N=544, 470, 404)            | 128 | 129 | 130 |  |
| Grade 3 Headache - Dose 2 (N=544, 470, 404)        | 14  | 5   | 6   |  |
| Related Headache - Dose 2 (N=544, 470, 404)        | 107 | 108 | 100 |  |
| Any Headache - Dose 3 (N=0, 464, 0)                | 0   | 124 | 0   |  |
| Grade 3 Headache - Dose 3 (N=0, 464, 0)            | 0   | 11  | 0   |  |

|   |     |     |     |  |
|---|-----|-----|-----|--|
| Related Headache - Dose 3 (N=0, 464, 0)           | 0   | 106 | 0   |  |
| Any Headache - Across doses (N=550, 480, 413)     | 204 | 246 | 185 |  |
| Grade 3 Headache - Across doses (N=550, 480, 413) | 19  | 26  | 16  |  |
| Related Headache - Across doses (N=550, 480, 413) | 176 | 219 | 148 |  |
| Any Myalgia - Dose 1 (N=549, 480, 411)            | 206 | 236 | 160 |  |
| Grade 3 Myalgia - Dose 1 (N=549, 480, 411)        | 16  | 12  | 8   |  |
| Related Myalgia - Dose 1 (N=549, 480, 411)        | 191 | 223 | 140 |  |
| Any Myalgia - Dose 2 (N=544, 470, 404)            | 196 | 182 | 150 |  |
| Grade 3 Myalgia - Dose 2 (N=544, 470, 404)        | 13  | 11  | 10  |  |
| Related Myalgia - Dose 2 (N=544, 470, 404)        | 182 | 171 | 136 |  |
| Any Myalgia - Dose 3 (N=0, 464, 0)                | 0   | 158 | 0   |  |
| Grade 3 Myalgia - Dose 3 (N=0, 464, 0)            | 0   | 8   | 0   |  |
| Related Myalgia - Dose 3 (N=0, 464, 0)            | 0   | 150 | 0   |  |
| Any Myalgia - Across doses (N=550, 480, 413)      | 278 | 295 | 221 |  |
| Grade 3 Myalgia - Across doses (N=550, 480, 413)  | 24  | 25  | 15  |  |
| Related Myalgia - Across doses (N=550, 480, 413)  | 265 | 285 | 201 |  |
| Any Rash - Dose 1 (N=549, 480, 411)               | 17  | 8   | 15  |  |
| Grade 3 Rash - Dose 1 (N=549, 480, 411)           | 1   | 0   | 0   |  |
| Related Rash - Dose 1 (N=549, 480, 411)           | 13  | 5   | 13  |  |
| Any Rash - Dose 2 (N=544, 470, 404)               | 17  | 11  | 16  |  |
| Grade 3 Rash - Dose 2 (N=544, 470, 404)           | 1   | 0   | 0   |  |
| Related Rash - Dose 2 (N=544, 470, 404)           | 13  | 10  | 16  |  |
| Any Rash - Dose 3 (N=0, 464, 0)                   | 0   | 8   | 0   |  |
| Grade 3 Rash - Dose 3 (N=0, 464, 0)               | 0   | 0   | 0   |  |
| Related Rash - Dose 3 (N=0, 464, 0)               | 0   | 5   | 0   |  |
| Any Rash - Across doses (N=550, 480, 413)         | 33  | 25  | 29  |  |
| Grade 3 Rash - Across doses (N=550, 480, 413)     | 2   | 0   | 0   |  |
| Related Rash - Across doses (N=550, 480, 413)     | 26  | 18  | 28  |  |
| Any Fever - Dose 1 (N=549, 480, 411)              | 24  | 17  | 18  |  |
| Grade 3 Fever - Dose 1 (N=549, 480, 411)          | 1   | 0   | 0   |  |
| Related Fever - Dose 1 (N=549, 480, 411)          | 15  | 12  | 15  |  |
| Any Fever - Dose 2 (N=544, 470, 404)              | 21  | 15  | 25  |  |
| Grade 3 Fever - Dose 2 (N=544, 470, 404)          | 1   | 3   | 1   |  |
| Related Fever - Dose 2 (N=544, 470, 404)          | 17  | 12  | 18  |  |
| Any Fever - Dose 3 (N=0, 464, 0)                  | 0   | 29  | 0   |  |
| Grade 3 Fever - Dose 3 (N=0, 464, 0)              | 0   | 0   | 0   |  |

|  |    |    |    |  |
|--|----|----|----|--|
| Related Fever - Dose 3 (N=0, 464, 0)               | 0  | 25 | 0  |  |
| Any Fever - Across doses (N=550, 480, 413)         | 41 | 48 | 42 |  |
| Grade 3 Fever - Across doses (N=550, 480, 413)     | 2  | 3  | 1  |  |
| Related Fever - Across doses (N=550, 480, 413)     | 29 | 39 | 32 |  |
| Any Urticaria - Dose 1 (N=549, 480, 411)           | 9  | 7  | 4  |  |
| Grade 3 Urticaria - Dose 1 (N=549, 480, 411)       | 1  | 1  | 0  |  |
| Related Urticaria - Dose 1 (N=549, 480, 411)       | 7  | 3  | 4  |  |
| Any Urticaria - Dose 2 (N=544, 470, 404)           | 7  | 9  | 9  |  |
| Grade 3 Urticaria - Dose 2 (N=544, 470, 404)       | 0  | 0  | 0  |  |
| Related Urticaria - Dose 2 (N=544, 470, 404)       | 6  | 7  | 8  |  |
| Any Urticaria - Dose 3 (N=0, 464, 0)               | 0  | 5  | 0  |  |
| Grade 3 Urticaria - Dose 3 (N=0, 464, 0)           | 0  | 0  | 0  |  |
| Related Urticaria - Dose 3 (N=0, 464, 0)           | 0  | 3  | 0  |  |
| Any Urticaria - Across doses (N=550, 480, 413)     | 15 | 15 | 13 |  |
| Grade 3 Urticaria - Across doses (N=550, 480, 413) | 1  | 1  | 0  |  |
| Related Urticaria - Across doses (N=550, 480, 413) | 13 | 11 | 12 |  |

## Statistical analyses

No statistical analyses for this end point

## Secondary: Number of subjects with any, grade 3 and related unsolicited adverse events (AEs)

|                 |   |
|-----------------|---|
| End point title | Number of subjects with any, grade 3 and related unsolicited adverse events (AEs) |
|-----------------|---|

End point description:

An unsolicited AE covers any untoward medical occurrence in a clinical investigation subject temporally associated with the use of a medicinal product, whether or not considered related to the medicinal product and reported in addition to those solicited during the clinical study and any solicited symptom with onset outside the specified period of follow-up for solicited symptoms. Any = any unsolicited AE regardless of intensity grade or relation to vaccination. Grade 3 = unsolicited AE preventing normal activity. Related = unsolicited AE assessed by the investigator as causally related to the study vaccination.

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

End point timeframe:

During the 30-day (Days 0-29) post-vaccination period

| End point values            | Cervarix 1 Group | Cervarix 2 Group | Cervarix 3 Group |  |
|-----------------------------|------------------|------------------|------------------|--|
| Subject group type          | Reporting group  | Reporting group  | Reporting group  |  |
| Number of subjects analysed | 550              | 482              | 415              |  |
| Units: Subjects             |                  |                  |                  |  |
| Any unsolicited AEs         | 97               | 167              | 74               |  |
| Grade 3 unsolicited AEs     | 2                | 17               | 6                |  |
| Related unsolicited AEs     | 11               | 24               | 13               |  |

## Statistical analyses

No statistical analyses for this end point

## Secondary: Number of subjects with any potential Immune-Mediated Diseases (pIMDs)

|                 |  |
|-----------------|--|
| End point title | Number of subjects with any potential Immune-Mediated Diseases (pIMDs) |
|-----------------|--|

End point description:

pIMDs are a subset of AEs that include both clearly autoimmune diseases and also other inflammatory and/or neurologic disorders which may or may not have an autoimmune etiology. The data for Cervarix 1 and 2 Groups are only presented up to Month 13, as the data were only collected up to Month 13 for those 2 groups.

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

End point timeframe:

From Day 0 up to Month 13 (for Cervarix 1 Group and Cervarix 2 Group) and from Day 0 up to Month 18 (for Cervarix 3 Group)

| End point values                                       | Cervarix 1 Group | Cervarix 2 Group | Cervarix 3 Group |  |
|--|------------------|------------------|------------------|--|
| Subject group type                                     | Reporting group  | Reporting group  | Reporting group  |  |
| Number of subjects analysed                            | 550              | 482              | 415              |  |
| Units: Subjects  |                  |                  |                  |  |
| Any pIMDs, from Day 0 up to Month 13 (N=550, 482, 415) | 2                | 2                | 2                |  |
| Any pIMDs, from Day 0 up to Month 18 (N=0, 0, 415)     | 0                | 0                | 2                |  |

## Statistical analyses

No statistical analyses for this end point

## Secondary: Number of subjects with Medically Significant Conditions (MSCs)

|                 |   |
|-----------------|---|
| End point title | Number of subjects with Medically Significant Conditions (MSCs) |
|-----------------|---|

End point description:

MSC include AEs prompting emergency room or physician visits that are not related to common diseases or routine visits for physical examination or vaccination, or serious adverse events (SAEs) that are not related to common diseases. Common diseases include upper respiratory infections, sinusitis,

pharyngitis, gastroenteritis, urinary tract infections, cervico-vaginal yeast infections, menstrual cycle abnormalities and injury.

|   |           |
|---|-----------|
| End point type  | Secondary |
| End point timeframe:                                    |           |
| From Day 0 up to Month 36 (throughout the study period) |           |

| End point values            | Cervarix 1 Group | Cervarix 2 Group | Cervarix 3 Group |  |
|-----------------------------|------------------|------------------|------------------|--|
| Subject group type          | Reporting group  | Reporting group  | Reporting group  |  |
| Number of subjects analysed | 550              | 482              | 415              |  |
| Units: Subjects             | 134              | 153              | 87               |  |

### Statistical analyses

No statistical analyses for this end point

### Secondary: Number of subjects with any, related and fatal serious adverse events (SAEs)

|                 |  |
|-----------------|--|
| End point title | Number of subjects with any, related and fatal serious adverse events (SAEs) |
|-----------------|--|

End point description:

SAEs assessed include medical occurrences that resulted in death, were life-threatening, required hospitalization or prolongation of hospitalization or resulted in disability/incapacity or were a congenital anomaly/birth defect in the offspring of a study subject. Any = any SAE regardless of intensity grade or relation to vaccination. Related = SAE assessed by the investigator as causally related to the study vaccination.

|   |           |
|---|-----------|
| End point type  | Secondary |
| End point timeframe:                                    |           |
| From Day 0 up to Month 36 (throughout the study period) |           |

| End point values            | Cervarix 1 Group | Cervarix 2 Group | Cervarix 3 Group |  |
|-----------------------------|------------------|------------------|------------------|--|
| Subject group type          | Reporting group  | Reporting group  | Reporting group  |  |
| Number of subjects analysed | 550              | 482              | 415              |  |
| Units: Subjects             |                  |                  |                  |  |
| Any SAEs                    | 20               | 28               | 24               |  |
| Related SAEs                | 0                | 0                | 1                |  |
| Fatal SAEs                  | 0                | 0                | 0                |  |

### Statistical analyses

No statistical analyses for this end point

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**Secondary: Number of subjects reporting pregnancies and outcomes of reported pregnancies**

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|                 |   |
|-----------------|---|
| End point title | Number of subjects reporting pregnancies and outcomes of reported pregnancies |
|-----------------|---|

End point description:

Outcomes of reported pregnancies were: Ectopic pregnancy, Elective termination NO apparent congenital anomaly (ACA), Live Infant NO ACA, Stillbirth NO ACA.

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

End point timeframe:

From Day 0 up to Month 36 (throughout the study period)

---

| End point values            | Cervarix 1 Group | Cervarix 2 Group | Cervarix 3 Group |  |
|-----------------------------|------------------|------------------|------------------|--|
| Subject group type          | Reporting group  | Reporting group  | Reporting group  |  |
| Number of subjects analysed | 1                | 34               | 1                |  |
| Units: Subjects             |                  |                  |                  |  |
| Ectopic pregnancy           | 0                | 1                | 0                |  |
| Elective termination NO ACA | 0                | 2                | 0                |  |
| Live Infant NO ACA          | 1                | 30               | 1                |  |
| Stillbirth NO ACA           | 0                | 1                | 0                |  |

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**Statistical analyses**

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No statistical analyses for this end point

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**Secondary: Number of subjects completing the vaccination course**

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|                 |  |
|-----------------|--|
| End point title | Number of subjects completing the vaccination course |
|-----------------|--|

End point description:

The number of subjects completing the vaccination course was assessed as the number of subjects with at least one dose received during the study.

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

End point timeframe:

From Day 0 up to Month 13

---

| End point values            | Cervarix 1 Group | Cervarix 2 Group | Cervarix 3 Group |  |
|-----------------------------|------------------|------------------|------------------|--|
| Subject group type          | Reporting group  | Reporting group  | Reporting group  |  |
| Number of subjects analysed | 550              | 482              | 415              |  |
| Units: Subjects             | 550              | 482              | 415              |  |

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**Statistical analyses**

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## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

Solicited symptoms were collected during the 7-day period (Days 0-6) after vaccination. Unsolicited AEs were collected during the 30-day period (Days 0-29) after vaccination. SAEs were collected from Day 0 to Month 36.

Adverse event reporting additional description:

The occurrence of reported AEs (all/related) was not available and encoded as equal to the number of subjects affected. For the systematically assessed other (non-serious) adverse events, the number of exposed subjects included those from Total Vaccinated cohort who had the symptom sheet completed.

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

### Dictionary used

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

|                    |      |
|--------------------|------|
| Dictionary version | 18.0 |
|--------------------|------|

### Reporting groups

|                       |                  |
|-----------------------|------------------|
| Reporting group title | Cervarix 1 Group |
|-----------------------|------------------|

Reporting group description:

Female subjects aged 9 to 14 years at the time of the first vaccination, who received 2 doses of the Cervarix vaccine at Months 0 and 6. The vaccine was administered intramuscularly into the deltoid muscle of the non-dominant arm.

|                       |                  |
|-----------------------|------------------|
| Reporting group title | Cervarix 2 Group |
|-----------------------|------------------|

Reporting group description:

Female subjects aged 15 to 25 years at the time of the first vaccination, who received 3 doses of the Cervarix vaccine at Months 0, 1 and 6. The vaccine was administered intramuscularly into the deltoid muscle of the non-dominant arm.

|                       |                  |
|-----------------------|------------------|
| Reporting group title | Cervarix 3 Group |
|-----------------------|------------------|

Reporting group description:

Female subjects aged 9 to 14 years at the time of the first vaccination, who received 2 doses of the Cervarix vaccine at Months 0 and 12. The vaccine was administered intramuscularly into the deltoid muscle of the non-dominant arm.

| Serious adverse events  | Cervarix 1 Group | Cervarix 2 Group | Cervarix 3 Group |
|---|------------------|------------------|------------------|
| Total subjects affected by serious adverse events                   |                  |                  |                  |
| subjects affected / exposed   | 20 / 550 (3.64%) | 28 / 482 (5.81%) | 24 / 415 (5.78%) |
| number of deaths (all causes)                                       | 0                | 0                | 0                |
| number of deaths resulting from adverse events                      | 0                | 0                | 0                |
| Neoplasms benign, malignant and unspecified (incl cysts and polyps) |                  |                  |                  |
| Medulloblastoma   |                  |                  |                  |
| subjects affected / exposed   | 0 / 550 (0.00%)  | 1 / 482 (0.21%)  | 0 / 415 (0.00%)  |
| occurrences causally related to treatment / all                     | 0 / 0            | 0 / 1            | 0 / 0            |
| deaths causally related to treatment / all                          | 0 / 0            | 0 / 0            | 0 / 0            |
| Cholesteatoma   |                  |                  |                  |

|   |                 |                 |                 |
|---|-----------------|-----------------|-----------------|
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Synovial sarcoma                                |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Uterine leiomyoma                               |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Vascular disorders                              |                 |                 |                 |
| Circulatory collapse                            |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 0 / 482 (0.00%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 0           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Surgical and medical procedures                 |                 |                 |                 |
| Ectopic pregnancy termination                   |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Pregnancy, puerperium and perinatal conditions  |                 |                 |                 |
| Hyperemesis gravidarum                          |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Premature baby                                  |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Abortion threatened                             |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |

|   |                 |                 |                 |
|---|-----------------|-----------------|-----------------|
| Postpartum haemorrhage                          |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Stillbirth                                      |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Immune system disorders                         |                 |                 |                 |
| Drug hypersensitivity                           |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 0 / 482 (0.00%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 0           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Anaphylactic reaction                           |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Reproductive system and breast disorders        |                 |                 |                 |
| Ovarian cyst ruptured                           |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Respiratory, thoracic and mediastinal disorders |                 |                 |                 |
| Transient tachypnoea of the newborn             |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Respiratory disorder                            |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Tonsillar hypertrophy                           |                 |                 |                 |

|   |                 |                 |                 |
|---|-----------------|-----------------|-----------------|
| subjects affected / exposed                     | 0 / 550 (0.00%) | 0 / 482 (0.00%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 0           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Psychiatric disorders                           |                 |                 |                 |
| Psychotic disorder                              |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Schizoaffective disorder                        |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 2 / 482 (0.41%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 2           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Injury, poisoning and procedural complications  |                 |                 |                 |
| Foot fracture                                   |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Forearm fracture                                |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Carbon monoxide poisoning                       |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Intentional overdose                            |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Ligament rupture                                |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |

|   |                 |                 |                 |
|---|-----------------|-----------------|-----------------|
| Road traffic accident                           |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Traumatic intracranial haemorrhage              |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Alcohol poisoning                               |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 0 / 482 (0.00%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 0           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Cardiac disorders                               |                 |                 |                 |
| Supraventricular tachycardia                    |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 0 / 482 (0.00%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 0           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Nervous system disorders                        |                 |                 |                 |
| Seizure   |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| VIIth nerve paralysis                           |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 0 / 482 (0.00%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 0           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Blood and lymphatic system disorders            |                 |                 |                 |
| Lymphadenitis                                   |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Eye disorders                                   |                 |                 |                 |
| Strabismus                                      |                 |                 |                 |

|   |                 |                 |                 |
|---|-----------------|-----------------|-----------------|
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| <b>Gastrointestinal disorders</b>               |                 |                 |                 |
| Abdominal strangulated hernia                   |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Abdominal pain                                  |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Abdominal pain lower                            |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 0 / 482 (0.00%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 0           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Anal haemorrhage                                |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Constipation                                    |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 0 / 482 (0.00%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 0           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Dyspepsia                                       |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 0 / 482 (0.00%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 0           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Faecaloma                                       |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 0 / 482 (0.00%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 0           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Nausea  |                 |                 |                 |

|   |                 |                 |                 |
|---|-----------------|-----------------|-----------------|
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Chronic gastritis                               |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Hepatobiliary disorders                         |                 |                 |                 |
| Cholelithiasis                                  |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Renal and urinary disorders                     |                 |                 |                 |
| IgA nephropathy                                 |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Endocrine disorders                             |                 |                 |                 |
| Autoimmune thyroiditis                          |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Musculoskeletal and connective tissue disorders |                 |                 |                 |
| Synovial cyst                                   |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Systemic lupus erythematosus                    |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 0 / 482 (0.00%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 0           | 1 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Infections and infestations                     |                 |                 |                 |
| Dengue fever                                    |                 |                 |                 |

|   |                 |                 |                 |
|---|-----------------|-----------------|-----------------|
| subjects affected / exposed                     | 1 / 550 (0.18%) | 4 / 482 (0.83%) | 3 / 415 (0.72%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 4           | 0 / 3           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Gastroenteritis bacterial                       |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Influenza                                       |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Tubo-ovarian abscess                            |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Tonsillitis                                     |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 1 / 482 (0.21%) | 2 / 415 (0.48%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 1           | 0 / 2           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Otitis media chronic                            |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Infectious mononucleosis                        |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 0 / 482 (0.00%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 0           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Pelvic inflammatory disease                     |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Peritonitis                                     |                 |                 |                 |

|   |                 |                 |                 |
|---|-----------------|-----------------|-----------------|
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Pneumonia                                       |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Salpingitis                                     |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Salpingo-oophoritis                             |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Otitis media acute                              |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Pelvic infection                                |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Pharyngitis                                     |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Viral infection                                 |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 0 / 482 (0.00%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 0           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Appendicitis                                    |                 |                 |                 |

|   |                 |                 |                 |
|---|-----------------|-----------------|-----------------|
| subjects affected / exposed                     | 0 / 550 (0.00%) | 3 / 482 (0.62%) | 5 / 415 (1.20%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 3           | 0 / 5           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Gastroenteritis                                 |                 |                 |                 |
| subjects affected / exposed                     | 2 / 550 (0.36%) | 1 / 482 (0.21%) | 2 / 415 (0.48%) |
| occurrences causally related to treatment / all | 0 / 2           | 0 / 1           | 0 / 2           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Metabolism and nutrition disorders              |                 |                 |                 |
| Hypovolaemia                                    |                 |                 |                 |
| subjects affected / exposed                     | 0 / 550 (0.00%) | 1 / 482 (0.21%) | 1 / 415 (0.24%) |
| occurrences causally related to treatment / all | 0 / 0           | 0 / 1           | 0 / 1           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |
| Type 1 diabetes mellitus                        |                 |                 |                 |
| subjects affected / exposed                     | 1 / 550 (0.18%) | 0 / 482 (0.00%) | 0 / 415 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1           | 0 / 0           | 0 / 0           |
| deaths causally related to treatment / all      | 0 / 0           | 0 / 0           | 0 / 0           |

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

| <b>Non-serious adverse events</b>                     | Cervarix 1 Group   | Cervarix 2 Group   | Cervarix 3 Group   |
|---|--------------------|--------------------|--------------------|
| Total subjects affected by non-serious adverse events |                    |                    |                    |
| subjects affected / exposed                           | 513 / 550 (93.27%) | 466 / 482 (96.68%) | 387 / 415 (93.25%) |
| General disorders and administration site conditions  |                    |                    |                    |
| Pain  |                    |                    |                    |
| subjects affected / exposed <sup>[1]</sup>            | 499 / 550 (90.73%) | 461 / 480 (96.04%) | 381 / 413 (92.25%) |
| occurrences (all)                                     | 499                | 461                | 381                |
| Redness   |                    |                    |                    |
| subjects affected / exposed <sup>[2]</sup>            | 247 / 550 (44.91%) | 212 / 480 (44.17%) | 197 / 413 (47.70%) |
| occurrences (all)                                     | 247                | 212                | 197                |
| Swelling  |                    |                    |                    |
| subjects affected / exposed <sup>[3]</sup>            | 225 / 550 (40.91%) | 204 / 480 (42.50%) | 171 / 413 (41.40%) |
| occurrences (all)                                     | 225                | 204                | 171                |
| Arthralgia  |                    |                    |                    |

|   |                    |                    |                    |
|---|--------------------|--------------------|--------------------|
| subjects affected / exposed <sup>[4]</sup>  | 111 / 550 (20.18%) | 107 / 480 (22.29%) | 93 / 413 (22.52%)  |
| occurrences (all)                           | 111                | 107                | 93                 |
| Fatigue                                     |                    |                    |                    |
| subjects affected / exposed <sup>[5]</sup>  | 247 / 550 (44.91%) | 310 / 480 (64.58%) | 215 / 413 (52.06%) |
| occurrences (all)                           | 247                | 310                | 215                |
| Gastrointestinal symptoms                   |                    |                    |                    |
| subjects affected / exposed <sup>[6]</sup>  | 98 / 550 (17.82%)  | 134 / 480 (27.92%) | 77 / 413 (18.64%)  |
| occurrences (all)                           | 98                 | 134                | 77                 |
| Headache                                    |                    |                    |                    |
| subjects affected / exposed <sup>[7]</sup>  | 204 / 550 (37.09%) | 246 / 480 (51.25%) | 185 / 413 (44.79%) |
| occurrences (all)                           | 204                | 246                | 185                |
| Myalgia                                     |                    |                    |                    |
| subjects affected / exposed <sup>[8]</sup>  | 278 / 550 (50.55%) | 295 / 480 (61.46%) | 221 / 413 (53.51%) |
| occurrences (all)                           | 278                | 295                | 221                |
| Rash  |                    |                    |                    |
| subjects affected / exposed <sup>[9]</sup>  | 33 / 550 (6.00%)   | 25 / 480 (5.21%)   | 29 / 413 (7.02%)   |
| occurrences (all)                           | 33                 | 25                 | 29                 |
| Fever                                       |                    |                    |                    |
| subjects affected / exposed <sup>[10]</sup> | 41 / 550 (7.45%)   | 48 / 480 (10.00%)  | 42 / 413 (10.17%)  |
| occurrences (all)                           | 41                 | 48                 | 42                 |
| Infections and infestations                 |                    |                    |                    |
| Nasopharyngitis                             |                    |                    |                    |
| subjects affected / exposed                 | 22 / 550 (4.00%)   | 27 / 482 (5.60%)   | 14 / 415 (3.37%)   |
| occurrences (all)                           | 22                 | 27                 | 14                 |

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 sheet 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 sheet 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 sheet 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 sheet 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 sheet 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 sheet 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 sheet 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.

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[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 sheet 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 sheet completed.

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

| Date             | Amendment   |
|------------------|---|
| 26 November 2013 | The HPV-070 protocol is being amended for the following reason: The assay used to measure anti-HPV-16/-18 antibody concentrations at the designated laboratory was improved to increase the assay precision by changing the assay cut-off value from 8 EL.U/mL to 19 EL.U/mL for HPV-16 and from 7 EL.U/mL to 18 EL.U/mL for HPV-18. This change in the assay was implemented for the testing of samples from Month 18 onwards. |

Notes:

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### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported