



## Clinical trial results:

**A phase II, partially double-blind, randomised, controlled, single-centre study to assess the immunogenicity and reactogenicity of three different formulations of GSK Biologicals' DTPw-HBV-IPV/Hib candidate vaccine compared to the Zilbrix/Hib and Poliorix vaccines administered concomitantly, when administered as a single booster dose to poliovirus vaccine-primed healthy toddlers aged 12-24 months.**

### Summary

|                          |                   |
|--------------------------|-------------------|
| EudraCT number           | 2016-000645-31    |
| Trial protocol           | Outside EU/EEA    |
| Global end of trial date | 02 September 2010 |

### Results information

|                                |  |
|--------------------------------|--|
| Result version number          | v2 (current)   |
| This version publication date  | 18 May 2018  |
| First version publication date | 24 August 2016   |
| Version creation reason        | <ul style="list-style-type: none"><li>• Correction of full data set</li></ul> Minor corrections of the full study results. |

### Trial information

#### Trial identification

|                       |        |
|-----------------------|--------|
| Sponsor protocol code | 113264 |
|-----------------------|--------|

#### Additional study identifiers

|                                    |             |
|------------------------------------|-------------|
| ISRCTN number                      | -           |
| ClinicalTrials.gov id (NCT number) | NCT01106092 |
| 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, +44 2089904466, GSKClinicalSupportHD@gsk.com |
| Scientific contact           | Clinical Trials Call Center, GlaxoSmithKline Biologicals, +44 2089904466, 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 December 2010  |
| Is this the analysis of the primary completion data? | Yes               |
| Primary completion date                              | 02 September 2010 |
| Global end of trial reached?                         | Yes               |
| Global end of trial date                             | 02 September 2010 |
| Was the trial ended prematurely?                     | No                |

Notes:

## General information about the trial

Main objective of the trial:

- To demonstrate the non-inferiority of GSK Biologicals' DTPw-HBV-IPV(3 doses)/Hib vaccine compared to Poliorix co-administered with Zilbrix/Hib,  
-(full dose): in terms of seroprotection rates to the 3 poliovirus types and to demonstrate that the formulation induces at least a 2-fold increase in the geometric mean (GM) of the individual ratios (post- over pre-booster titres) for anti-poliovirus antibodies (Abs), 1 month after booster vaccination  
-(1/2 dose): in terms of seroprotection rates to the 3 poliovirus types and to demonstrate that the formulation induces at least a 2-fold increase in the GM of the individual ratios (post- over pre-booster titres) for anti-poliovirus abs, 1 month after booster vaccination  
-(1/3 dose): in terms of seroprotection rates to the 3 poliovirus types and to demonstrate that the formulation induces at least a 2-fold increase in the GM of the individual ratios (post- over pre-booster titres) for anti-poliovirus Abs, 1month after booster vaccination.

Protection of trial subjects:

The vaccinees were observed closely for at least 30 minutes following the administration of vaccines, with appropriate medical treatment readily available in case of a rare anaphylactic reaction.

Background therapy: -

Evidence for comparator: -

|   |             |
|---|-------------|
| Actual start date of recruitment                          | 13 May 2010 |
| Long term follow-up planned                               | No          |
| Independent data monitoring committee (IDMC) involvement? | Yes         |

Notes:

## Population of trial subjects

### Subjects enrolled per country

|                                      |                  |
|--------------------------------------|------------------|
| Country: Number of subjects enrolled | Philippines: 312 |
| Worldwide total number of subjects   | 312              |
| EEA total number of subjects         | 0                |

Notes:

### Subjects enrolled per age group

|   |   |
|---|---|
| In utero                                  | 0 |
| Preterm newborn - gestational age < 37 wk | 0 |
| Newborns (0-27 days)                      | 0 |

|  |     |
|--|-----|
| Infants and toddlers (28 days-23 months) | 312 |
| Children (2-11 years)                    | 0   |
| Adolescents (12-17 years)                | 0   |
| Adults (18-64 years)                     | 0   |
| From 65 to 84 years                      | 0   |
| 85 years and over                        | 0   |

## Subject disposition

### Recruitment

Recruitment details: -

### Pre-assignment

Screening details:

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

### Period 1

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

Blinding implementation details:

The study was conducted in a partially double blind manner:

- The study was double blind [i.e. the investigator and parent(s)/LAR(s) of the subjects were unaware of the treatment administered] for the three groups receiving the three different DTPw-HBV-IPV/Hib formulations (Form groups).
- The study was open-label with respect to the Control Group as subjects in this group received two injections.

### Arms

|                              |                     |
|------------------------------|---------------------|
| Are arms mutually exclusive? | Yes                 |
| <b>Arm title</b>             | GSK2036874A Group 1 |

Arm description:

Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of GSK2036874A vaccine (Formulation 1) intramuscularly into the anterolateral region of the left thigh, at Day 0.

|  |                   |
|--|-------------------|
| Arm type                               | Experimental      |
| Investigational medicinal product name | GSK2036874A       |
| Investigational medicinal product code |                   |
| Other name                             | DTPw-HBV-IPV/Hib  |
| Pharmaceutical forms                   | Injection         |
| Routes of administration               | Intramuscular use |

Dosage and administration details:

Subjects received one dose of the vaccine (formulation 1) in the anterolateral region of the left thigh, at Day 0.

|                  |                     |
|------------------|---------------------|
| <b>Arm title</b> | GSK2036874A Group 2 |
|------------------|---------------------|

Arm description:

Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of GSK2036874A vaccine (Formulation 2) intramuscularly into the anterolateral region of the left thigh, at Day 0.

|  |                   |
|--|-------------------|
| Arm type                               | Experimental      |
| Investigational medicinal product name | GSK2036874A       |
| Investigational medicinal product code |                   |
| Other name                             | DTPw-HBV-IPV/Hib  |
| Pharmaceutical forms                   | Injection         |
| Routes of administration               | Intramuscular use |

Dosage and administration details:

Subjects received one dose of the vaccine (formulation 2) in the anterolateral region of the left thigh, at Day 0.

|   |                     |
|---|---------------------|
| <b>Arm title</b>  | GSK2036874A Group 3 |
| Arm description:<br>Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of GSK2036874A vaccine (Formulation 3) intramuscularly into the anterolateral region of the left thigh, at Day 0. |                     |
| Arm type  | Experimental        |
| Investigational medicinal product name  | GSK2036874A         |
| Investigational medicinal product code  |                     |
| Other name  | DTPw-HBV-IPV/Hib    |
| Pharmaceutical forms  | Injection           |
| Routes of administration  | Intramuscular use   |

Dosage and administration details:

Subjects received one dose of the vaccine (formulation 3) in the anterolateral region of the left thigh, at Day 0.

|                  |                            |
|------------------|----------------------------|
| <b>Arm title</b> | Zilbrix/HIB/Poliorix Group |
|------------------|----------------------------|

Arm description:

Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of Zilbrix/Hib and Poliorix vaccines at Day 0, administered intramuscularly into the anterolateral regions of the left and right thighs, respectively.

|  |                   |
|--|-------------------|
| Arm type                               | Active comparator |
| Investigational medicinal product name | Zilbrix/Hib       |
| Investigational medicinal product code |                   |
| Other name                             | DTPw-HBV/Hib Kft. |
| Pharmaceutical forms                   | Injection         |
| Routes of administration               | Intramuscular use |

Dosage and administration details:

Subjects received one dose of the vaccine in the anterolateral region of the left thigh, at Day 0.

|  |                   |
|--|-------------------|
| Investigational medicinal product name | Poliorix          |
| Investigational medicinal product code |                   |
| Other name                             | IPV               |
| Pharmaceutical forms                   | Injection         |
| Routes of administration               | Intramuscular use |

Dosage and administration details:

Subjects received one dose of the vaccine in the anterolateral region of the right thigh, at Day 0.

| <b>Number of subjects in period 1</b> | GSK2036874A Group 1 | GSK2036874A Group 2 | GSK2036874A Group 3 |
|---------------------------------------|---------------------|---------------------|---------------------|
| Started                               | 78                  | 78                  | 78                  |
| Completed                             | 78                  | 78                  | 78                  |
| Not completed                         | 0                   | 0                   | 0                   |
| Consent withdrawn by subject          | -                   | -                   | -                   |

| <b>Number of subjects in period 1</b> | Zilbrix/HIB/Poliorix Group |
|---------------------------------------|----------------------------|
| Started                               | 78                         |
| Completed                             | 77                         |
| Not completed                         | 1                          |

|                              |   |
|------------------------------|---|
| Consent withdrawn by subject | 1 |
|------------------------------|---|

## Baseline characteristics

### Reporting groups

|  |                            |
|--|----------------------------|
| Reporting group title  | GSK2036874A Group 1        |
| Reporting group description:<br>Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of GSK2036874A vaccine (Formulation 1) intramuscularly into the anterolateral region of the left thigh, at Day 0.                                      |                            |
| Reporting group title  | GSK2036874A Group 2        |
| Reporting group description:<br>Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of GSK2036874A vaccine (Formulation 2) intramuscularly into the anterolateral region of the left thigh, at Day 0.                                      |                            |
| Reporting group title  | GSK2036874A Group 3        |
| Reporting group description:<br>Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of GSK2036874A vaccine (Formulation 3) intramuscularly into the anterolateral region of the left thigh, at Day 0.                                      |                            |
| Reporting group title  | Zilbrix/HIB/Poliorix Group |
| Reporting group description:<br>Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of Zilbrix/Hib and Poliorix vaccines at Day 0, administered intramuscularly into the anterolateral regions of the left and right thighs, respectively. |                            |

| Reporting group values  | GSK2036874A Group 1 | GSK2036874A Group 2 | GSK2036874A Group 3 |
|---|---------------------|---------------------|---------------------|
| Number of subjects  | 78                  | 78                  | 78                  |
| Age categorical<br>Units: Subjects  |                     |                     |                     |
| In utero<br>Preterm newborn infants (gestational age < 37 wks)<br>Newborns (0-27 days)<br>Infants and toddlers (28 days-23 months)<br>Children (2-11 years)<br>Adolescents (12-17 years)<br>Adults (18-64 years)<br>From 65-84 years<br>85 years and over |                     |                     |                     |
| Age continuous<br>Units: months   |                     |                     |                     |
| arithmetic mean   | 17.4                | 18                  | 17.7                |
| standard deviation  | ± 3.81              | ± 2.96              | ± 3.38              |
| Gender categorical<br>Units: Subjects   |                     |                     |                     |
| Female  | 37                  | 31                  | 35                  |
| Male  | 41                  | 47                  | 43                  |

|                                 |    |    |    |
|---------------------------------|----|----|----|
| Race/Ethnicity                  |    |    |    |
| Units: Subjects                 |    |    |    |
| Asian-South East Asian heritage | 78 | 78 | 78 |

| <b>Reporting group values</b>                      | Zilbrix/HIB/Poliorix Group | Total |  |
|--|----------------------------|-------|--|
| Number of subjects                                 | 78                         | 312   |  |
| Age categorical                                    |                            |       |  |
| Units: Subjects                                    |                            |       |  |
| In utero   |                            | 0     |  |
| Preterm newborn infants (gestational age < 37 wks) |                            | 0     |  |
| Newborns (0-27 days)                               |                            | 0     |  |
| Infants and toddlers (28 days-23 months)           |                            | 0     |  |
| Children (2-11 years)                              |                            | 0     |  |
| Adolescents (12-17 years)                          |                            | 0     |  |
| Adults (18-64 years)                               |                            | 0     |  |
| From 65-84 years                                   |                            | 0     |  |
| 85 years and over                                  |                            | 0     |  |
| Age continuous                                     |                            |       |  |
| Units: months                                      |                            |       |  |
| arithmetic mean                                    | 17.5                       |       |  |
| standard deviation                                 | ± 3.59                     | -     |  |
| Gender categorical                                 |                            |       |  |
| Units: Subjects                                    |                            |       |  |
| Female   | 40                         | 143   |  |
| Male   | 38                         | 169   |  |
| Race/Ethnicity                                     |                            |       |  |
| Units: Subjects                                    |                            |       |  |
| Asian-South East Asian heritage                    | 78                         | 312   |  |

## End points

### End points reporting groups

|                              |  |
|------------------------------|--|
| Reporting group title        | GSK2036874A Group 1  |
| Reporting group description: | Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of GSK2036874A vaccine (Formulation 1) intramuscularly into the anterolateral region of the left thigh, at Day 0.                                      |
| Reporting group title        | GSK2036874A Group 2  |
| Reporting group description: | Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of GSK2036874A vaccine (Formulation 2) intramuscularly into the anterolateral region of the left thigh, at Day 0.                                      |
| Reporting group title        | GSK2036874A Group 3  |
| Reporting group description: | Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of GSK2036874A vaccine (Formulation 3) intramuscularly into the anterolateral region of the left thigh, at Day 0.                                      |
| Reporting group title        | Zilbrix/HIB/Poliorix Group   |
| Reporting group description: | Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of Zilbrix/Hib and Poliorix vaccines at Day 0, administered intramuscularly into the anterolateral regions of the left and right thighs, respectively. |

### Primary: NUMBER OF SUBJECTS SEROPROTECTED AGAINST ANTI-POLIOVIRUS (ANTI-POLIO) TYPES 1, 2 AND 3.

|                        |   |
|------------------------|---|
| End point title        | NUMBER OF SUBJECTS SEROPROTECTED AGAINST ANTI-POLIOVIRUS (ANTI-POLIO) TYPES 1, 2 AND 3.   |
| End point description: | Seroprotection was defined as anti-polio types 1, 2 and 3 antibody titres $\geq$ 8 effective dose (ED50), for 50% of vaccinated subjects. |
| End point type         | Primary   |
| End point timeframe:   | At Month 1 (POST)   |

| End point values                  | GSK2036874A Group 1 | GSK2036874A Group 2 | GSK2036874A Group 3 | Zilbrix/HIB/Poliorix Group |
|-----------------------------------|---------------------|---------------------|---------------------|----------------------------|
| Subject group type                | Reporting group     | Reporting group     | Reporting group     | Reporting group            |
| Number of subjects analysed       | 78                  | 78                  | 78                  | 77                         |
| Units: Subjects                   |                     |                     |                     |                            |
| Anti-polio 1 POST [N=78;78;78;77] | 78                  | 77                  | 78                  | 77                         |
| Anti-polio 2 POST [N=77;78;78;77] | 77                  | 78                  | 78                  | 77                         |
| Anti-polio 3 POST [N=78;78;78;77] | 77                  | 77                  | 78                  | 77                         |

## Statistical analyses

|  |  |
|--|--|
| <b>Statistical analysis title</b>  | Difference in SPR rates for anti-polio 1 (F1)    |
| Statistical analysis description:  |  |
| To demonstrate the non-inferiority of GSK2036874A vaccine (Formulation 1) compared to Poliorix™ vaccine co-administered with Zilbrix™/Hib vaccine, in terms of seroprotection rates to the three poliovirus types and to demonstrate that the formulation induces at least a two-fold increase in the geometric mean of the individual ratios (post- over pre-booster titres) for anti-polio type 1 antibodies, one month after vaccination. |  |
| Comparison groups  | Zilbrix/HIB/Poliorix Group v GSK2036874A Group 1 |
| Number of subjects included in analysis  | 155  |
| Analysis specification   | Pre-specified                                    |
| Analysis type  | non-inferiority <sup>[1]</sup>                   |
| Parameter estimate   | Difference in seroprotection rate                |
| Point estimate   | 0  |
| Confidence interval  |  |
| level  | 95 %   |
| sides  | 2-sided  |
| lower limit  | -4.78  |
| upper limit  | 4.72   |

Notes:

[1] - The upper limit (UL) of the standardized asymptotic 95% confidence interval (CI) on the group [Zilbrix/Hib Group - GSK2036874A Group 1] difference in percentage of seroprotected subjects  $\leq 10\%$ .

|  |  |
|--|--|
| <b>Statistical analysis title</b>  | Difference in SPR rates for anti-polio 1 (F2)    |
| Statistical analysis description:  |  |
| To demonstrate the non-inferiority of GSK2036874A vaccine (Formulation 2) compared to Poliorix™ vaccine co-administered with Zilbrix™/Hib vaccine, in terms of seroprotection rates to the three poliovirus types and to demonstrate that the formulation induces at least a two-fold increase in the geometric mean of the individual ratios (post- over pre-booster titres) for anti-polio type 1 antibodies, one month after vaccination. |  |
| Comparison groups  | Zilbrix/HIB/Poliorix Group v GSK2036874A Group 2 |
| Number of subjects included in analysis  | 155  |
| Analysis specification   | Pre-specified                                    |
| Analysis type  | non-inferiority <sup>[2]</sup>                   |
| Parameter estimate   | Difference in seroprotection rate                |
| Point estimate   | 1.28   |
| Confidence interval  |  |
| level  | 95 %   |
| sides  | 2-sided  |
| lower limit  | -3.53  |
| upper limit  | 6.94   |

Notes:

[2] - The upper limit (UL) of the standardized asymptotic 95% confidence interval (CI) on the group [Zilbrix/Hib Group - GSK2036874A Group 2] difference in percentage of seroprotected subjects  $\leq 10\%$ .

|                                   |   |
|-----------------------------------|---|
| <b>Statistical analysis title</b> | Difference in SPR rates for anti-polio 1 (F3) |
|-----------------------------------|---|

**Statistical analysis description:**

To demonstrate the non-inferiority of GSK2036874A vaccine (Formulation 3) compared to Poliorix™ vaccine co-administered with Zilbrix™/Hib vaccine, in terms of seroprotection rates to the three poliovirus types and to demonstrate that the formulation induces at least a two-fold increase in the geometric mean of the individual ratios (post- over pre-booster titres) for anti-polio type 1 antibodies, one month after vaccination.

|   |  |
|---|--|
| Comparison groups                       | GSK2036874A Group 3 v Zilbrix/HIB/Poliorix Group |
| Number of subjects included in analysis | 155  |
| Analysis specification                  | Pre-specified                                    |
| Analysis type                           | non-inferiority <sup>[3]</sup>                   |
| Parameter estimate                      | Difference in seroprotection rate                |
| Point estimate                          | 0  |
| Confidence interval                     |  |
| level                                   | 95 %   |
| sides                                   | 2-sided  |
| lower limit                             | -4.78  |
| upper limit                             | 4.72   |

**Notes:**

[3] - The upper limit (UL) of the standardized asymptotic 95% confidence interval (CI) on the group [Zilbrix/Hib Group - GSK2036874A Group 3] difference in percentage of seroprotected subjects  $\leq$  10%.

|                                   |   |
|-----------------------------------|---|
| <b>Statistical analysis title</b> | Difference in SPR rates for anti-polio 2 (F1) |
|-----------------------------------|---|

**Statistical analysis description:**

To demonstrate the non-inferiority of GSK2036874A vaccine (Formulation 1) compared to Poliorix™ vaccine co-administered with Zilbrix™/Hib vaccine, in terms of seroprotection rates to the three poliovirus types and to demonstrate that the formulation induces at least a two-fold increase in the geometric mean of the individual ratios (post- over pre-booster titres) for anti-polio type 2 antibodies, one month after vaccination.

|   |  |
|---|--|
| Comparison groups                       | GSK2036874A Group 1 v Zilbrix/HIB/Poliorix Group |
| Number of subjects included in analysis | 155  |
| Analysis specification                  | Pre-specified                                    |
| Analysis type                           | non-inferiority <sup>[4]</sup>                   |
| Parameter estimate                      | Difference in seroprotection rate                |
| Point estimate                          | 0  |
| Confidence interval                     |  |
| level                                   | 95 %   |
| sides                                   | 2-sided  |
| lower limit                             | -4.78  |
| upper limit                             | 4.78   |

**Notes:**

[4] - The upper limit (UL) of the standardized asymptotic 95% confidence interval (CI) on the group [Zilbrix/Hib Group - GSK2036874A Group 1] difference in percentage of seroprotected subjects  $\leq$  10%.

|                                   |   |
|-----------------------------------|---|
| <b>Statistical analysis title</b> | Difference in SPR rates for anti-polio 2 (F2) |
|-----------------------------------|---|

**Statistical analysis description:**

To demonstrate the non-inferiority of GSK2036874A vaccine (Formulation 2) compared to Poliorix™ vaccine co-administered with Zilbrix™/Hib vaccine, in terms of seroprotection rates to the three poliovirus types and to demonstrate that the formulation induces at least a two-fold increase in the geometric mean of the individual ratios (post- over pre-booster titres) for anti-polio type 2 antibodies, one month after vaccination.

|                   |  |
|-------------------|--|
| Comparison groups | GSK2036874A Group 2 v Zilbrix/HIB/Poliorix Group |
|-------------------|--|

|   |                                   |
|---|-----------------------------------|
| Number of subjects included in analysis | 155                               |
| Analysis specification                  | Pre-specified                     |
| Analysis type                           | non-inferiority <sup>[5]</sup>    |
| Parameter estimate                      | Difference in seroprotection rate |
| Point estimate                          | 0                                 |
| Confidence interval                     |                                   |
| level                                   | 95 %                              |
| sides                                   | 2-sided                           |
| lower limit                             | -4.78                             |
| upper limit                             | 4.72                              |

Notes:

[5] - The upper limit (UL) of the standardized asymptotic 95% confidence interval (CI) on the group [Zilbrix/Hib Group - GSK2036874A Group 2] difference in percentage of seroprotected subjects  $\leq 10\%$ .

|                                   |   |
|-----------------------------------|---|
| <b>Statistical analysis title</b> | Difference in SPR rates for anti-polio 2 (F3) |
|-----------------------------------|---|

Statistical analysis description:

To demonstrate the non-inferiority of GSK2036874A vaccine (Formulation 3) compared to Poliorix™ vaccine co-administered with Zilbrix™/Hib vaccine, in terms of seroprotection rates to the three poliovirus types and to demonstrate that the formulation induces at least a two-fold increase in the geometric mean of the individual ratios (post- over pre-booster titres) for anti-polio type 2 antibodies, one month after vaccination.

|   |  |
|---|--|
| Comparison groups                       | GSK2036874A Group 3 v Zilbrix/HIB/Poliorix Group |
| Number of subjects included in analysis | 155  |
| Analysis specification                  | Pre-specified                                    |
| Analysis type                           | non-inferiority <sup>[6]</sup>                   |
| Parameter estimate                      | Difference in seroprotection rate                |
| Point estimate                          | 0  |
| Confidence interval                     |  |
| level                                   | 95 %   |
| sides                                   | 2-sided  |
| lower limit                             | -4.78  |
| upper limit                             | 4.72   |

Notes:

[6] - The upper limit (UL) of the standardized asymptotic 95% confidence interval (CI) on the group [Zilbrix/Hib Group - GSK2036874A Group 3] difference in percentage of seroprotected subjects  $\leq 10\%$ .

|                                   |   |
|-----------------------------------|---|
| <b>Statistical analysis title</b> | Difference in SPR rates for anti-polio 3 (F1) |
|-----------------------------------|---|

Statistical analysis description:

To demonstrate the non-inferiority of GSK2036874A vaccine (Formulation 1) compared to Poliorix™ vaccine co-administered with Zilbrix™/Hib vaccine, in terms of seroprotection rates to the three poliovirus types and to demonstrate that the formulation induces at least a two-fold increase in the geometric mean of the individual ratios (post- over pre-booster titres) for anti-polio type 3 antibodies, one month after vaccination.

|   |  |
|---|--|
| Comparison groups                       | GSK2036874A Group 1 v Zilbrix/HIB/Poliorix Group |
| Number of subjects included in analysis | 155  |
| Analysis specification                  | Pre-specified                                    |
| Analysis type                           | non-inferiority <sup>[7]</sup>                   |
| Parameter estimate                      | Difference in seroprotection rate                |
| Point estimate                          | 1.28   |
| Confidence interval                     |  |
| level                                   | 95 %   |
| sides                                   | 2-sided  |
| lower limit                             | -3.53  |
| upper limit                             | 6.94   |

Notes:

[7] - The upper limit (UL) of the standardized asymptotic 95% confidence interval (CI) on the group [Zilbrix/Hib Group - GSK2036874A Group 1] difference in percentage of seroprotected subjects  $\leq 10\%$ .

|  |  |
|--|--|
| <b>Statistical analysis title</b>  | Difference in SPR rates for anti-polio 3 (F2)    |
| Statistical analysis description:  |  |
| To demonstrate the non-inferiority of GSK2036874A vaccine (Formulation 2) compared to Poliorix™ vaccine co-administered with Zilbrix™/Hib vaccine, in terms of seroprotection rates to the three poliovirus types and to demonstrate that the formulation induces at least a two-fold increase in the geometric mean of the individual ratios (post- over pre-booster titres) for anti-polio type 3 antibodies, one month after vaccination. |  |
| Comparison groups  | GSK2036874A Group 2 v Zilbrix/HIB/Poliorix Group |
| Number of subjects included in analysis  | 155  |
| Analysis specification   | Pre-specified                                    |
| Analysis type  | non-inferiority <sup>[8]</sup>                   |
| Parameter estimate   | Difference in seroprotection rate                |
| Point estimate   | 1.28   |
| Confidence interval  |  |
| level  | 95 %   |
| sides  | 2-sided  |
| lower limit  | -3.53  |
| upper limit  | 6.94   |

Notes:

[8] - The upper limit (UL) of the standardized asymptotic 95% confidence interval (CI) on the group [Zilbrix/Hib Group - GSK2036874A Group 2] difference in percentage of seroprotected subjects  $\leq 10\%$ .

|  |  |
|--|--|
| <b>Statistical analysis title</b>  | Difference in SPR rates for anti-polio 3 (F3)    |
| Statistical analysis description:  |  |
| To demonstrate the non-inferiority of GSK2036874A vaccine (Formulation 3) compared to Poliorix™ vaccine co-administered with Zilbrix™/Hib vaccine, in terms of seroprotection rates to the three poliovirus types and to demonstrate that the formulation induces at least a two-fold increase in the geometric mean of the individual ratios (post- over pre-booster titres) for anti-polio type 3 antibodies, one month after vaccination. |  |
| Comparison groups  | GSK2036874A Group 3 v Zilbrix/HIB/Poliorix Group |
| Number of subjects included in analysis  | 155  |
| Analysis specification   | Pre-specified                                    |
| Analysis type  | non-inferiority <sup>[9]</sup>                   |
| Parameter estimate   | Difference in seroprotection rate                |
| Point estimate   | 0  |
| Confidence interval  |  |
| level  | 95 %   |
| sides  | 2-sided  |
| lower limit  | -4.78  |
| upper limit  | 4.72   |

Notes:

[9] - The upper limit (UL) of the standardized asymptotic 95% confidence interval (CI) on the group [Zilbrix/Hib Group - GSK2036874A Group 3] difference in percentage of seroprotected subjects  $\leq 10\%$ .

### **Primary: ANTI-POLIO TYPES 1, 2 AND 3 ANTIBODY TITERS**

|   |   |
|---|---|
| End point title   | ANTI-POLIO TYPES 1, 2 AND 3 ANTIBODY TITERS <sup>[10]</sup> |
| End point description:  |   |
| Antibody titers were presented as geometric mean titers (GMTs). |   |
| End point type  | Primary   |
| End point timeframe:  |   |
| At Month 1 (POST)   |   |

Notes:

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

Justification: The analysis of the primary endpoint was descriptive i.e. no statistical hypothesis test was performed.

| <b>End point values</b>                  | GSK2036874A Group 1       | GSK2036874A Group 2       | GSK2036874A Group 3       | Zilbrix/HIB/Polio Group   |
|--|---------------------------|---------------------------|---------------------------|---------------------------|
| Subject group type                       | Reporting group           | Reporting group           | Reporting group           | Reporting group           |
| Number of subjects analysed              | 78                        | 78                        | 78                        | 77                        |
| Units: Titers                            |                           |                           |                           |                           |
| geometric mean (confidence interval 95%) |                           |                           |                           |                           |
| Anti-polio 1 POST [N=78;78;78;77]        | 2218.4 (1786.3 to 2755.1) | 1486.7 (1065.9 to 2073.5) | 1245.1 (1007.2 to 1539.2) | 3760.2 (2973.7 to 4754.7) |
| Anti-polio 2 POST [N=77;78;78;77]        | 1598.8 (1293.5 to 1976.3) | 1056.4 (841.5 to 1326.1)  | 966.5 (779.5 to 1198.3)   | 2883.2 (2275.2 to 3653.8) |
| Anti-polio 3 POST [N=78;78;78;77]        | 2820 (2129.9 to 3733.9)   | 2217.7 (1654 to 2973.4)   | 1915.8 (1498.1 to 2449.8) | 3626.4 (2618.2 to 5022.9) |

## Statistical analyses

No statistical analyses for this end point

## Primary: ANTI-POLIO TYPES 1, 2 AND 3 ANTIBODY TITERS

|                        |   |
|------------------------|---|
| End point title        | ANTI-POLIO TYPES 1, 2 AND 3 ANTIBODY TITERS <sup>[11]</sup>     |
| End point description: | Antibody titers were presented as geometric mean titers (GMTs). |
| End point type         | Primary   |
| End point timeframe:   | At Month 0 (PRE)  |

Notes:

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

Justification: The analysis of the primary endpoint was descriptive i.e. no statistical hypothesis test was performed.

| <b>End point values</b>                  | GSK2036874A Group 1    | GSK2036874A Group 2    | GSK2036874A Group 3    | Zilbrix/HIB/Polio Group |
|--|------------------------|------------------------|------------------------|-------------------------|
| Subject group type                       | Reporting group        | Reporting group        | Reporting group        | Reporting group         |
| Number of subjects analysed              | 78                     | 78                     | 78                     | 77                      |
| Units: Titers                            |                        |                        |                        |                         |
| geometric mean (confidence interval 95%) |                        |                        |                        |                         |
| Anti-polio 1 PRE [N=78;78;78;77]         | 321.1 (231.2 to 446)   | 219.1 (144 to 333.6)   | 296.6 (205.1 to 428.8) | 296.9 (213.9 to 412.1)  |
| Anti-polio 2 PRE [N=78;78;78;77]         | 186.8 (140.1 to 249.2) | 152.2 (111.8 to 207.3) | 183.4 (146.4 to 229.7) | 148 (112.4 to 194.9)    |
| Anti-polio 3 PRE [N=78;78;78;77]         | 74.5 (56 to 99)        | 82.1 (62.1 to 108.6)   | 102.1 (77.6 to 134.4)  | 79.1 (57.9 to 108.1)    |

## Statistical analyses

No statistical analyses for this end point

### Secondary: NUMBER OF SEROCONVERTED SUBJECTS FOR ANTI-POLIO TYPES 1, 2 AND 3

|                 |  |
|-----------------|--|
| End point title | NUMBER OF SEROCONVERTED SUBJECTS FOR ANTI-POLIO TYPES 1, 2 AND 3 |
|-----------------|--|

End point description:

Seroconversion was defined as:

For initially seronegative subjects, antibody titre  $\geq 8$  ED50 one month after the booster dose;

For initially seropositive subjects: antibody titre one month after the booster dose  $\geq 4$  fold the pre-booster antibody titre;

For subjects with pre-booster antibody titre below the highest dilution tested (reciprocal  $< 8192$  ED50): highest dilution tested one month after the booster dose (reciprocal  $> 8192$  ED50).

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

End point timeframe:

At Month 1 (POST)

| End point values                  | GSK2036874A Group 1 | GSK2036874A Group 2 | GSK2036874A Group 3 | Zilbrix/HIB/Poliorix Group |
|-----------------------------------|---------------------|---------------------|---------------------|----------------------------|
| Subject group type                | Reporting group     | Reporting group     | Reporting group     | Reporting group            |
| Number of subjects analysed       | 78                  | 78                  | 78                  | 77                         |
| Units: Subjects                   |                     |                     |                     |                            |
| Anti-polio 1 POST [N=78;78;78;77] | 70                  | 64                  | 60                  | 69                         |
| Anti-polio 2 POST [N=77;78;78;77] | 68                  | 66                  | 70                  | 72                         |
| Anti-polio 3 POST [N=78;78;78;77] | 74                  | 74                  | 73                  | 75                         |

## Statistical analyses

No statistical analyses for this end point

### Secondary: NUMBER OF SUBJECTS SEROPROTECTED AGAINST ANTI-POLIOVIRUS (ANTI-POLIO) TYPES 1, 2 AND 3.

|                 |   |
|-----------------|---|
| End point title | NUMBER OF SUBJECTS SEROPROTECTED AGAINST ANTI-POLIOVIRUS (ANTI-POLIO) TYPES 1, 2 AND 3. |
|-----------------|---|

End point description:

Seroprotection was defined as anti-polio types 1, 2 and 3 antibody titres  $\geq 8$  effective dose (ED50), for 50% of vaccinated subjects.

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

End point timeframe:

At Month 0 (PRE)

| <b>End point values</b>          | GSK2036874A<br>Group 1 | GSK2036874A<br>Group 2 | GSK2036874A<br>Group 3 | Zilbrix/HIB/Polio<br>rix Group |
|----------------------------------|------------------------|------------------------|------------------------|--------------------------------|
| Subject group type               | Reporting group        | Reporting group        | Reporting group        | Reporting group                |
| Number of subjects analysed      | 78                     | 78                     | 78                     | 77                             |
| Units: Subjects                  |                        |                        |                        |                                |
| Anti-polio 1 PRE [N=78;78;78;77] | 76                     | 70                     | 74                     | 75                             |
| Anti-polio 2 PRE [N=78;78;78;77] | 77                     | 75                     | 78                     | 74                             |
| Anti-polio 3 PRE [N=78;78;78;77] | 74                     | 76                     | 76                     | 70                             |

### Statistical analyses

No statistical analyses for this end point

### Secondary: NUMBER OF SEROPROTECTED SUBJECTS FOR ANTI-DIPHTHERIA (ANTI-D) AND ANTI-TETANUS (ANTI-T)

|                        |   |
|------------------------|---|
| End point title        | NUMBER OF SEROPROTECTED SUBJECTS FOR ANTI-DIPHTHERIA (ANTI-D) AND ANTI-TETANUS (ANTI-T)                                       |
| End point description: | Seroprotection was defined as anti-D and anti-T antibody concentration $\geq 0.1$ International Units per milliliter (IU/mL). |
| End point type         | Secondary   |
| End point timeframe:   | At Month 0 (PRE) and Month 1 (POST)   |

| <b>End point values</b>     | GSK2036874A<br>Group 1 | GSK2036874A<br>Group 2 | GSK2036874A<br>Group 3 | Zilbrix/HIB/Polio<br>rix Group |
|-----------------------------|------------------------|------------------------|------------------------|--------------------------------|
| Subject group type          | Reporting group        | Reporting group        | Reporting group        | Reporting group                |
| Number of subjects analysed | 78                     | 78                     | 78                     | 77                             |
| Units: Subjects             |                        |                        |                        |                                |
| Anti-D PRE                  | 69                     | 69                     | 69                     | 65                             |
| Anti-D POST                 | 78                     | 78                     | 78                     | 77                             |
| Anti-T PRE                  | 78                     | 77                     | 77                     | 76                             |
| Anti-T POST                 | 78                     | 78                     | 78                     | 77                             |

### Statistical analyses

No statistical analyses for this end point

### Secondary: ANTI-D AND ANTI-T CONCENTRATIONS

|                 |                                  |
|-----------------|----------------------------------|
| End point title | ANTI-D AND ANTI-T CONCENTRATIONS |
|-----------------|----------------------------------|

End point description:

Antibody concentrations were presented as geometric mean concentrations (GMCs), expressed in IU/mL.

End point type Secondary

End point timeframe:

At Month 0 (PRE) and Month 1 (POST)

| <b>End point values</b>                     | GSK2036874A<br>Group 1     | GSK2036874A<br>Group 2       | GSK2036874A<br>Group 3       | Zilbrix/HIB/Polio<br>rix Group |
|---|----------------------------|------------------------------|------------------------------|--------------------------------|
| Subject group type                          | Reporting group            | Reporting group              | Reporting group              | Reporting group                |
| Number of subjects analysed                 | 78                         | 78                           | 78                           | 77                             |
| Units: IU/mL                                |                            |                              |                              |                                |
| geometric mean (confidence interval<br>95%) |                            |                              |                              |                                |
| Anti-D PRE                                  | 0.301 (0.237<br>to 0.382)  | 0.331 (0.258<br>to 0.424)    | 0.33 (0.264 to<br>0.412)     | 0.374 (0.276<br>to 0.508)      |
| Anti-D POST                                 | 6.519 (5.46 to<br>7.783)   | 7.687 (6.112<br>to 9.669)    | 8.659 (7.132<br>to 10.514)   | 6.807 (5.231<br>to 8.858)      |
| Anti-T PRE                                  | 0.776 (0.639<br>to 0.942)  | 0.766 (0.622<br>to 0.944)    | 0.833 (0.668<br>to 1.038)    | 0.932 (0.756<br>to 1.149)      |
| Anti-T POST                                 | 26.12 (22.65<br>to 30.121) | 31.047 (25.954<br>to 37.139) | 31.054 (26.837<br>to 35.934) | 24.402 (21.042<br>to 28.298)   |

### Statistical analyses

No statistical analyses for this end point

### Secondary: NUMBER OF SEROPROTECTED AND SEROPOSITIVE SUBJECTS FOR ANTI-HEPATITIS B (ANTI-HBS)

End point title NUMBER OF SEROPROTECTED AND SEROPOSITIVE SUBJECTS FOR ANTI-HEPATITIS B (ANTI-HBS)

End point description:

Seropositivity was defined as anti-HBs antibody concentration  $\geq 3.3$  milli-international units per milliliter (mIU/mL). Seroprotection was defined as anti-HBs antibody concentration  $\geq 10$  mIU/mL.

Note that percentage of subjects with concentration  $\geq 10$  mIU/mL was over-estimated due to the use of in-house assay overestimating concentrations between 10-100 mIU/mL. Accordingly GMCs were also overestimated.

A decrease in the specificity of the anti-HB ELISA assay had been observed in some studies for low levels of antibody (10-100 mIU/mL). The table shows updated results following partial or complete retesting/reanalysis. Some of the available blood samples initially tested with ELISA were re-tested using the new assay, CLIA.

End point type Secondary

End point timeframe:

At Month 0 (PRE) and Month 1 (POST)

| <b>End point values</b>         | GSK2036874A Group 1 | GSK2036874A Group 2 | GSK2036874A Group 3 | Zilbrix/HIB/Poliorix Group |
|---------------------------------|---------------------|---------------------|---------------------|----------------------------|
| Subject group type              | Reporting group     | Reporting group     | Reporting group     | Reporting group            |
| Number of subjects analysed     | 78                  | 78                  | 78                  | 77                         |
| Units: Subjects                 |                     |                     |                     |                            |
| Anti-HBs $\geq$ 3.3 mIU/mL PRE  | 71                  | 70                  | 73                  | 73                         |
| Anti-HBs $\geq$ 3.3 mIU/mL POST | 78                  | 77                  | 78                  | 77                         |
| Anti-HBs $\geq$ 10 mIU/mL PRE   | 64                  | 67                  | 62                  | 70                         |
| Anti-HBs $\geq$ 10 mIU/mL POST  | 77                  | 77                  | 78                  | 77                         |

### Statistical analyses

No statistical analyses for this end point

### Secondary: ANTI-HBS CONCENTRATIONS

|                        |  |
|------------------------|--|
| End point title        | ANTI-HBS CONCENTRATIONS  |
| End point description: | Antibody concentrations were presented as geometric mean concentrations (GMCs), expressed in mIU/mL. |
| End point type         | Secondary  |
| End point timeframe:   | At Month 0 (PRE) and Month 1 (POST)  |

| <b>End point values</b>                  | GSK2036874A Group 1       | GSK2036874A Group 2     | GSK2036874A Group 3       | Zilbrix/HIB/Poliorix Group |
|--|---------------------------|-------------------------|---------------------------|----------------------------|
| Subject group type                       | Reporting group           | Reporting group         | Reporting group           | Reporting group            |
| Number of subjects analysed              | 78                        | 78                      | 78                        | 77                         |
| Units: mIU/mL                            |                           |                         |                           |                            |
| geometric mean (confidence interval 95%) |                           |                         |                           |                            |
| Anti-HBs PRE                             | 59.9 (40.3 to 89.1)       | 46.9 (32.8 to 67.2)     | 61.9 (42.2 to 91)         | 88.5 (60.7 to 129)         |
| Anti-HBs POST                            | 2713.4 (1846.9 to 3986.2) | 2395.1 (1630 to 3519.4) | 3992.8 (2747.2 to 5803.1) | 3484.3 (2452.2 to 4950.8)  |

### Statistical analyses

No statistical analyses for this end point

### Secondary: NUMBER OF SEROPROTECTED SUBJECTS AGAINST ANTI-POLYRIBOSIL-RIBITOL-PHOSPHATE (ANTI-PRP)

|                        |  |
|------------------------|--|
| End point title        | NUMBER OF SEROPROTECTED SUBJECTS AGAINST ANTI-POLYRIBOSIL-RIBITOL-PHOSPHATE (ANTI-PRP)                             |
| End point description: | Seroprotection was defined as anti-PRP antibody concentration $\geq$ 0.15 micrograms per milliliter ( $\mu$ g/mL). |

|                                     |           |
|-------------------------------------|-----------|
| End point type                      | Secondary |
| End point timeframe:                |           |
| At Month 0 (PRE) and Month 1 (POST) |           |

| <b>End point values</b>     | GSK2036874A Group 1 | GSK2036874A Group 2 | GSK2036874A Group 3 | Zilbrix/HIB/Poliorix Group |
|-----------------------------|---------------------|---------------------|---------------------|----------------------------|
| Subject group type          | Reporting group     | Reporting group     | Reporting group     | Reporting group            |
| Number of subjects analysed | 78                  | 78                  | 78                  | 77                         |
| Units: Subjects             |                     |                     |                     |                            |
| Anti-PRP PRE                | 28                  | 27                  | 30                  | 35                         |
| Anti-PRP POST               | 77                  | 76                  | 71                  | 76                         |

### Statistical analyses

No statistical analyses for this end point

### Secondary: ANTI-PRP CONCENTRATIONS

|   |                         |
|---|-------------------------|
| End point title   | ANTI-PRP CONCENTRATIONS |
| End point description:  |                         |
| Antibody concentrations were presented as geometric mean concentrations (GMCs), expressed in µg/mL. |                         |
| End point type  | Secondary               |
| End point timeframe:  |                         |
| At Month 0 (PRE) and Month 1 (POST)   |                         |

| <b>End point values</b>                  | GSK2036874A Group 1    | GSK2036874A Group 2   | GSK2036874A Group 3    | Zilbrix/HIB/Poliorix Group |
|--|------------------------|-----------------------|------------------------|----------------------------|
| Subject group type                       | Reporting group        | Reporting group       | Reporting group        | Reporting group            |
| Number of subjects analysed              | 78                     | 78                    | 78                     | 77                         |
| Units: µg/mL                             |                        |                       |                        |                            |
| geometric mean (confidence interval 95%) |                        |                       |                        |                            |
| Anti-PRP PRE                             | 0.134 (0.109 to 0.166) | 0.137 (0.11 to 0.172) | 0.152 (0.118 to 0.197) | 0.171 (0.13 to 0.226)      |
| Anti-PRP POST                            | 2.871 (1.797 to 4.587) | 2.243 (1.52 to 3.31)  | 1.575 (1.065 to 2.33)  | 3.305 (2.373 to 4.603)     |

### Statistical analyses

No statistical analyses for this end point

### Secondary: NUMBER OF SEROPOSITIVE SUBJECTS FOR ANTI-BORDETELLA PERTUSSIS (ANTI-BPT)

|                        |   |
|------------------------|---|
| End point title        | NUMBER OF SEROPOSITIVE SUBJECTS FOR ANTI-BORDETELLA PERTUSSIS (ANTI-BPT)                                    |
| End point description: | Sepositivity was defined as anti-BPT antibody concentration $\geq 15$ ELISA units per milliliter (EL.U/mL). |
| End point type         | Secondary   |
| End point timeframe:   | At Month 0 (PRE) and Month 1 (POST)   |

| End point values              | GSK2036874A Group 1 | GSK2036874A Group 2 | GSK2036874A Group 3 | Zilbrix/HIB/Polio Group |
|-------------------------------|---------------------|---------------------|---------------------|-------------------------|
| Subject group type            | Reporting group     | Reporting group     | Reporting group     | Reporting group         |
| Number of subjects analysed   | 76                  | 78                  | 78                  | 77                      |
| Units: Subjects               |                     |                     |                     |                         |
| Anti-BPT PRE [N=76;78;78;77]  | 50                  | 50                  | 51                  | 49                      |
| Anti-BPT POST [N=76;74;77;75] | 76                  | 73                  | 77                  | 75                      |

### Statistical analyses

No statistical analyses for this end point

### Secondary: ANTI-BPT CONCENTRATIONS

|                        |  |
|------------------------|--|
| End point title        | ANTI-BPT CONCENTRATIONS  |
| End point description: | Antibody concentrations were presented as geometric mean concentrations (GMCs), expressed in EL.U/mL |
| End point type         | Secondary  |
| End point timeframe:   | At Month 0 (PRE) and Month 1 (POST)  |

| End point values                         | GSK2036874A Group 1    | GSK2036874A Group 2  | GSK2036874A Group 3  | Zilbrix/HIB/Polio Group |
|--|------------------------|----------------------|----------------------|-------------------------|
| Subject group type                       | Reporting group        | Reporting group      | Reporting group      | Reporting group         |
| Number of subjects analysed              | 76                     | 78                   | 78                   | 77                      |
| Units: EL.U/mL                           |                        |                      |                      |                         |
| geometric mean (confidence interval 95%) |                        |                      |                      |                         |
| Anti-BPT PRE [N=76;78;78;77]             | 19.6 (16.4 to 23.6)    | 20.1 (16.5 to 24.5)  | 18.9 (15.9 to 22.4)  | 19.5 (16 to 23.9)       |
| Anti-BPT POST [N=76;74;77;75]            | 161.8 (143.6 to 182.3) | 182.9 (158 to 211.9) | 211 (190.1 to 234.2) | 194.7 (170.6 to 222.4)  |

### Statistical analyses

No statistical analyses for this end point

### Secondary: NUMBER OF SUBJECTS WITH A BOOSTER RESPONSE FOR ANTI-BPT

End point title NUMBER OF SUBJECTS WITH A BOOSTER RESPONSE FOR ANTI-BPT

End point description:

Booster response defined as:

For initially seronegative subjects, antibody concentration  $\geq 15$  EL.U/mL one month after the booster dose;

For initially seropositive subjects: antibody concentration one month after the booster dose  $\geq 2$  fold the pre-booster antibody concentration.

End point type Secondary

End point timeframe:

At Month 1 (POST)

| End point values            | GSK2036874A Group 1 | GSK2036874A Group 2 | GSK2036874A Group 3 | Zilbrix/HIB/Polio Group |
|-----------------------------|---------------------|---------------------|---------------------|-------------------------|
| Subject group type          | Reporting group     | Reporting group     | Reporting group     | Reporting group         |
| Number of subjects analysed | 74                  | 74                  | 77                  | 75                      |
| Units: Subjects             |                     |                     |                     |                         |
| Anti-BPT (POST)             | 72                  | 72                  | 77                  | 72                      |

### Statistical analyses

No statistical analyses for this end point

### Secondary: NUMBER OF SUBJECTS WITH ANY SOLICITED LOCAL SYMPTOMS

End point title NUMBER OF SUBJECTS WITH ANY SOLICITED LOCAL SYMPTOMS

End point description:

Assessed solicited local symptoms were pain, redness and swelling. Any = occurrence of the symptom regardless of intensity grade.

End point type Secondary

End point timeframe:

During the 8-day (Day 0-Day 7) follow-up period after vaccination.

| End point values            | GSK2036874A Group 1 | GSK2036874A Group 2 | GSK2036874A Group 3 | Zilbrix/HIB/Polio Group |
|-----------------------------|---------------------|---------------------|---------------------|-------------------------|
| Subject group type          | Reporting group     | Reporting group     | Reporting group     | Reporting group         |
| Number of subjects analysed | 78                  | 78                  | 78                  | 78                      |
| Units: Subjects             |                     |                     |                     |                         |
| Any Pain                    | 67                  | 65                  | 66                  | 68                      |
| Any Redness                 | 28                  | 29                  | 35                  | 35                      |
| Any Swelling                | 33                  | 32                  | 36                  | 35                      |

## Statistical analyses

No statistical analyses for this end point

### Secondary: NUMBER OF SUBJECTS WITH ANY UNSOLICITED ADVERSE EVENTS (AES)

|                 |  |
|-----------------|--|
| End point title | NUMBER OF SUBJECTS WITH ANY 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 was defined as the occurrence of any unsolicited AE regardless of intensity grade or relation to vaccination.

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

End point timeframe:

During the 31-day (Day 0-Day 30) follow-up period after vaccination

| End point values            | GSK2036874A Group 1 | GSK2036874A Group 2 | GSK2036874A Group 3 | Zilbrix/HIB/Polio Group |
|-----------------------------|---------------------|---------------------|---------------------|-------------------------|
| Subject group type          | Reporting group     | Reporting group     | Reporting group     | Reporting group         |
| Number of subjects analysed | 78                  | 78                  | 78                  | 78                      |
| Units: Subjects             |                     |                     |                     |                         |
| AE(s)                       | 30                  | 44                  | 30                  | 40                      |

## Statistical analyses

No statistical analyses for this end point

### Secondary: NUMBER OF SUBJECTS WITH SERIOUS ADVERSE EVENTS (SAES)

|                 |   |
|-----------------|---|
| End point title | NUMBER OF SUBJECTS WITH SERIOUS ADVERSE EVENTS (SAES) |
|-----------------|---|

End point description:

Serious adverse events (SAEs) assessed include medical occurrences that result in death, are life threatening, require hospitalization or prolongation of hospitalization or result in disability/incapacity.

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

End point timeframe:

During the entire study period (from Month 0 to Month 1).

| <b>End point values</b>     | GSK2036874A Group 1 | GSK2036874A Group 2 | GSK2036874A Group 3 | Zilbrix/HIB/Polio Group |
|-----------------------------|---------------------|---------------------|---------------------|-------------------------|
| Subject group type          | Reporting group     | Reporting group     | Reporting group     | Reporting group         |
| Number of subjects analysed | 78                  | 78                  | 78                  | 78                      |
| Units: Subjects             |                     |                     |                     |                         |
| SAE(s)                      | 1                   | 3                   | 2                   | 1                       |

### Statistical analyses

No statistical analyses for this end point

### Secondary: NUMBER OF SUBJECTS WITH ANY SOLICITED GENERAL SYMPTOMS

|                 |  |
|-----------------|--|
| End point title | NUMBER OF SUBJECTS WITH ANY SOLICITED GENERAL SYMPTOMS |
|-----------------|--|

End point description:

Assessed solicited general symptoms were drowsiness, irritability, loss of appetite and fever [defined as axillary temperature equal to or above ( $\geq$ ) 37.5 degrees Celsius ( $^{\circ}$ C)]. Any = occurrence of the symptom regardless of intensity grade.

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

End point timeframe:

During the 8-day (Day 0-Day 7) follow-up period after vaccination.

| <b>End point values</b>     | GSK2036874A Group 1 | GSK2036874A Group 2 | GSK2036874A Group 3 | Zilbrix/HIB/Polio Group |
|-----------------------------|---------------------|---------------------|---------------------|-------------------------|
| Subject group type          | Reporting group     | Reporting group     | Reporting group     | Reporting group         |
| Number of subjects analysed | 78                  | 78                  | 78                  | 78                      |
| Units: Subjects             |                     |                     |                     |                         |
| Any Drowsiness              | 43                  | 42                  | 46                  | 41                      |
| Any Irritability            | 53                  | 60                  | 57                  | 65                      |
| Any Loss of appetite        | 33                  | 36                  | 36                  | 38                      |
| Any Temperature (Axillary)  | 59                  | 60                  | 57                  | 63                      |

### Statistical analyses

No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

Solicited local/general symptoms: During the 8-day (Day 0-Day 7) follow-up period after vaccination.

Unsolicited AE(s): During the 31-day (Day 0-Day 30) follow-up period after vaccination. SAE(s): During the entire study period (from Month 0 to Month 1)

Adverse event reporting additional description:

The number of occurrences reported for solicited symptoms, adverse events, and serious adverse events were not available for posting. The number of subjects affected by each specific event was indicated as the number of occurrences.

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

### Dictionary used

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

|                    |      |
|--------------------|------|
| Dictionary version | 16.0 |
|--------------------|------|

### Reporting groups

|                       |                     |
|-----------------------|---------------------|
| Reporting group title | GSK2036874A Group 1 |
|-----------------------|---------------------|

Reporting group description:

Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of GSK2036874A vaccine (Formulation 1) intramuscularly into the anterolateral region of the left thigh, at Day 0.

|                       |                     |
|-----------------------|---------------------|
| Reporting group title | GSK2036874A Group 2 |
|-----------------------|---------------------|

Reporting group description:

Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of GSK2036874A vaccine (Formulation 2) intramuscularly into the anterolateral region of the left thigh, at Day 0.

|                       |                     |
|-----------------------|---------------------|
| Reporting group title | GSK2036874A Group 3 |
|-----------------------|---------------------|

Reporting group description:

Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of GSK2036874A vaccine (Formulation 3) intramuscularly into the anterolateral region of the left thigh, at Day 0.

|                       |                            |
|-----------------------|----------------------------|
| Reporting group title | Zilbrix/HIB/Poliorix Group |
|-----------------------|----------------------------|

Reporting group description:

Healthy male or female children between and including 12 and 24 months of age at the time of the booster vaccination, who were primed with a three-dose vaccination course of polio vaccine, additionally received 1 dose of Zilbrix/Hib™ and Poliorix™ vaccines at Day 0, administered intramuscularly into the anterolateral regions of the left and right thighs, respectively.

| <b>Serious adverse events</b>                     | GSK2036874A Group 1 | GSK2036874A Group 2 | GSK2036874A Group 3 |
|---|---------------------|---------------------|---------------------|
| Total subjects affected by serious adverse events |                     |                     |                     |
| subjects affected / exposed                       | 1 / 78 (1.28%)      | 3 / 78 (3.85%)      | 2 / 78 (2.56%)      |
| number of deaths (all causes)                     | 0                   | 0                   | 0                   |
| number of deaths resulting from adverse events    |                     |                     |                     |
| Nervous system disorders                          |                     |                     |                     |
| Febrile convulsion                                |                     |                     |                     |

|   |                |                |                |
|---|----------------|----------------|----------------|
| subjects affected / exposed                     | 0 / 78 (0.00%) | 3 / 78 (3.85%) | 1 / 78 (1.28%) |
| occurrences causally related to treatment / all | 0 / 0          | 0 / 3          | 0 / 1          |
| deaths causally related to treatment / all      | 0 / 0          | 0 / 0          | 0 / 0          |
| <b>Infections and infestations</b>              |                |                |                |
| Pneumonia                                       |                |                |                |
| subjects affected / exposed                     | 1 / 78 (1.28%) | 0 / 78 (0.00%) | 1 / 78 (1.28%) |
| occurrences causally related to treatment / all | 0 / 1          | 0 / 0          | 0 / 1          |
| deaths causally related to treatment / all      | 0 / 0          | 0 / 0          | 0 / 0          |
| Urinary tract infection                         |                |                |                |
| subjects affected / exposed                     | 1 / 78 (1.28%) | 0 / 78 (0.00%) | 0 / 78 (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>Serious adverse events</b>                            | Zilbrix/HIB/Poliorix Group |  |  |
|--|----------------------------|--|--|
| <b>Total subjects affected by serious adverse events</b> |                            |  |  |
| subjects affected / exposed                              | 1 / 78 (1.28%)             |  |  |
| number of deaths (all causes)                            | 0                          |  |  |
| number of deaths resulting from adverse events           |                            |  |  |
| <b>Nervous system disorders</b>                          |                            |  |  |
| Febrile convulsion                                       |                            |  |  |
| subjects affected / exposed                              | 1 / 78 (1.28%)             |  |  |
| occurrences causally related to treatment / all          | 0 / 1                      |  |  |
| deaths causally related to treatment / all               | 0 / 0                      |  |  |
| <b>Infections and infestations</b>                       |                            |  |  |
| Pneumonia  |                            |  |  |
| subjects affected / exposed                              | 0 / 78 (0.00%)             |  |  |
| occurrences causally related to treatment / all          | 0 / 0                      |  |  |
| deaths causally related to treatment / all               | 0 / 0                      |  |  |
| Urinary tract infection                                  |                            |  |  |
| subjects affected / exposed                              | 0 / 78 (0.00%)             |  |  |
| occurrences causally related to treatment / all          | 0 / 0                      |  |  |
| deaths causally related to treatment / all               | 0 / 0                      |  |  |

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

| <b>Non-serious adverse events</b>                     | GSK2036874A<br>Group 1 | GSK2036874A<br>Group 2 | GSK2036874A<br>Group 3 |
|---|------------------------|------------------------|------------------------|
| Total subjects affected by non-serious adverse events |                        |                        |                        |
| subjects affected / exposed                           | 75 / 78 (96.15%)       | 74 / 78 (94.87%)       | 76 / 78 (97.44%)       |
| General disorders and administration site conditions  |                        |                        |                        |
| Pain  |                        |                        |                        |
| subjects affected / exposed                           | 67 / 78 (85.90%)       | 65 / 78 (83.33%)       | 66 / 78 (84.62%)       |
| occurrences (all)                                     | 67                     | 65                     | 66                     |
| Redness   |                        |                        |                        |
| subjects affected / exposed                           | 28 / 78 (35.90%)       | 29 / 78 (37.18%)       | 35 / 78 (44.87%)       |
| occurrences (all)                                     | 28                     | 29                     | 35                     |
| Swelling  |                        |                        |                        |
| subjects affected / exposed                           | 33 / 78 (42.31%)       | 32 / 78 (41.03%)       | 36 / 78 (46.15%)       |
| occurrences (all)                                     | 33                     | 32                     | 36                     |
| Drowsiness  |                        |                        |                        |
| subjects affected / exposed                           | 43 / 78 (55.13%)       | 42 / 78 (53.85%)       | 46 / 78 (58.97%)       |
| occurrences (all)                                     | 43                     | 42                     | 46                     |
| Fever   |                        |                        |                        |
| subjects affected / exposed                           | 59 / 78 (75.64%)       | 60 / 78 (76.92%)       | 57 / 78 (73.08%)       |
| occurrences (all)                                     | 59                     | 60                     | 57                     |
| Irritability  |                        |                        |                        |
| subjects affected / exposed                           | 53 / 78 (67.95%)       | 60 / 78 (76.92%)       | 57 / 78 (73.08%)       |
| occurrences (all)                                     | 53                     | 60                     | 57                     |
| Loss of appetite                                      |                        |                        |                        |
| subjects affected / exposed                           | 33 / 78 (42.31%)       | 36 / 78 (46.15%)       | 36 / 78 (46.15%)       |
| occurrences (all)                                     | 33                     | 36                     | 36                     |
| Respiratory, thoracic and mediastinal disorders       |                        |                        |                        |
| Cough   |                        |                        |                        |
| subjects affected / exposed                           | 5 / 78 (6.41%)         | 10 / 78 (12.82%)       | 9 / 78 (11.54%)        |
| occurrences (all)                                     | 5                      | 10                     | 9                      |
| Infections and infestations                           |                        |                        |                        |
| Nasopharyngitis                                       |                        |                        |                        |
| subjects affected / exposed                           | 3 / 78 (3.85%)         | 12 / 78 (15.38%)       | 11 / 78 (14.10%)       |
| occurrences (all)                                     | 3                      | 12                     | 11                     |
| Upper respiratory tract infection                     |                        |                        |                        |
| subjects affected / exposed                           | 9 / 78 (11.54%)        | 12 / 78 (15.38%)       | 5 / 78 (6.41%)         |
| occurrences (all)                                     | 9                      | 12                     | 5                      |

|  |                     |                     |                     |
|--|---------------------|---------------------|---------------------|
| Conjunctivitis bacterial<br>subjects affected / exposed<br>occurrences (all) | 1 / 78 (1.28%)<br>1 | 4 / 78 (5.13%)<br>4 | 0 / 78 (0.00%)<br>0 |
|--|---------------------|---------------------|---------------------|

|   |                               |  |  |
|---|-------------------------------|--|--|
| <b>Non-serious adverse events</b>   | Zilbrix/HIB/Poliorix<br>Group |  |  |
| Total subjects affected by non-serious<br>adverse events<br>subjects affected / exposed | 77 / 78 (98.72%)              |  |  |
| General disorders and administration<br>site conditions                                 |                               |  |  |
| Pain<br>subjects affected / exposed<br>occurrences (all)                                | 68 / 78 (87.18%)<br>68        |  |  |
| Redness<br>subjects affected / exposed<br>occurrences (all)                             | 35 / 78 (44.87%)<br>35        |  |  |
| Swelling<br>subjects affected / exposed<br>occurrences (all)                            | 35 / 78 (44.87%)<br>35        |  |  |
| Drowsiness<br>subjects affected / exposed<br>occurrences (all)                          | 41 / 78 (52.56%)<br>41        |  |  |
| Fever<br>subjects affected / exposed<br>occurrences (all)                               | 63 / 78 (80.77%)<br>63        |  |  |
| Irritability<br>subjects affected / exposed<br>occurrences (all)                        | 65 / 78 (83.33%)<br>65        |  |  |
| Loss of appetite<br>subjects affected / exposed<br>occurrences (all)                    | 38 / 78 (48.72%)<br>38        |  |  |
| Respiratory, thoracic and mediastinal<br>disorders                                      |                               |  |  |
| Cough<br>subjects affected / exposed<br>occurrences (all)                               | 8 / 78 (10.26%)<br>8          |  |  |
| Infections and infestations   |                               |  |  |
| Nasopharyngitis   |                               |  |  |

|   |                        |  |  |
|---|------------------------|--|--|
| subjects affected / exposed<br>occurrences (all)                                      | 13 / 78 (16.67%)<br>13 |  |  |
| Upper respiratory tract infection<br>subjects affected / exposed<br>occurrences (all) | 9 / 78 (11.54%)<br>9   |  |  |
| Conjunctivitis bacterial<br>subjects affected / exposed<br>occurrences (all)          | 0 / 78 (0.00%)<br>0    |  |  |

## **More information**

### **Substantial protocol amendments (globally)**

Were there any global substantial amendments to the protocol? No

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### **Interruptions (globally)**

Were there any global interruptions to the trial? No

### **Limitations and caveats**

None reported