Clinical trial results:
Safety and immunogenicity of Cervarix™ in human immunodeficiency virus infected females

Summary

EudraCT number	2013-003429-28
Trial protocol	EE
Global end of trial date	

Results information

Result version number	v2
This version publication date	07 January 2018
First version publication date	30 April 2017
Version creation reason	

Trial information

Trial identification

Sponsor protocol code	109823

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01031069
WHO universal trial number (UTN)	-
Other trial identifiers	GSK eTrack: 109823

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	Interim
Date of interim/final analysis	07 December 2016
Is this the analysis of the primary completion data?	Yes
Primary completion date	13 January 2016
Global end of trial reached?	No

Notes:

General information about the trial

Main objective of the trial:

To evaluate the safety of both vaccines in HIV+ subjects for up to 1 month after the third dose of vaccine.

To demonstrate non-inferiority of HPV1 versus (vs.) HPV2 in terms of geometric mean titres (GMTs) against HPV-16 and HPV-18 measured by Pseudovirion-based neutralization assay (PBNA) 1 month after administration of the third dose of vaccine in HIV+ subjects.

If the first primary objective for immunogenicity was demonstrated, superiority of HPV1 over HPV2 in terms of GMTs against HPV-16 and HPV-18 measured by PBNA in HIV+ subjects was assessed following a sequential approach.

Protection of trial subjects:

All subjects were supervised after vaccination/product administration with appropriate medical treatment readily available. Vaccines were administered by qualified and trained personnel. Vaccines were administered only to eligible subjects that had no contraindications to any components of the vaccines.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	26 October 2010
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Brazil: 431
Country: Number of subjects enrolled	Estonia: 37
Country: Number of subjects enrolled	India: 224
Country: Number of subjects enrolled	Thailand: 181
Worldwide total number of subjects	873
EEA total number of subjects	37

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)	0
Adolescents (12-17 years)	201
Adults (18-64 years)	460
From 65 to 84 years	212
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

A number of 873 subjects were enrolled, out of which 212 did not receive any study vaccination.

Pre-assignment

Screening details:

Screening involved: checking of inclusion/exclusion criteria, demographic data, history and physical examination, AF B sputum test and/or chest X-ray, blood sampling for HIV testing and safety, urine pregnancy testing, birth control and HIV, STI, STD counselling, checking records for concomitant medication/vaccination, subject card distribution.

Pre-assignment period milestones

Number of subjects started	873
Number of subjects completed	661

Pre-assignment subject non-completion reasons

Reason: Number of subjects	No vaccination received: 212

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	Subject, Investigator, Assessor

Arms

Are arms mutually exclusive?	Yes
Arm title	HIV+/Cervarix Group

Arm description:

HIV seropositive female subjects, between and including 15 and 25 years of age, who received 3 doses of Cervarix™ vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.

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

Dosage and administration details:

Subjects received three doses of the study vaccine administered intramuscularly according to a Day 0, Week 6, and Month 6 vaccination schedule.

Arm title	HIV+/Gardasil Group

Arm description:

HIV seropositive female subjects, between and including 15 and 25 years of age, who received 3 doses of Gardasil® vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.

Arm type	Active comparator

Investigational medicinal product name	Gardasil
Investigational medicinal product code	
Other name	Merck's Human Papillomavirus Quadrivalent (Types 6, 11, 16, and 18) Vaccine
Pharmaceutical forms	Suspension for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Subjects received three doses of the study vaccine administered intramuscularly according to a Day 0, Week 6, and Month 6 vaccination schedule.

Arm title	HIV-/Cervarix Group

Arm description:

HIV seronegative female subjects, between and including 15 and 25 years of age, who received 3 doses of Cervarix™ vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.

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

Dosage and administration details:

Subjects received three doses of the study vaccine administered intramuscularly according to a Day 0, Week 6, and Month 6 vaccination schedule.

Arm title	HIV-/Gardasil Group

Arm description:

HIV seronegative female subjects, between and including 15 and 25 years of age, who received 3 doses of Gardasil® vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.

Arm type	Active comparator
Investigational medicinal product name	Gardasil
Investigational medicinal product code	
Other name	Merck's Human Papillomavirus Quadrivalent (Types 6, 11, 16, and 18) Vaccine
Pharmaceutical forms	Suspension for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Subjects received three doses of the study vaccine administered intramuscularly according to a Day 0, Week 6, and Month 6 vaccination schedule.

Number of subjects in period 1[1]	HIV+/Cervarix Group	HIV+/Gardasil Group	HIV-/Cervarix Group
Started	167	165	164
Completed	151	150	136
Not completed	16	15	28
Consent withdrawn by subject	2	3	11
Adverse event, non-fatal	-	1	-
Migrated/moved from study area	1	2	1
Unspecified	5	5	6
Lost to follow-up	8	4	10

Number of subjects in period 1[1]	HIV-/Gardasil Group
Started	165
Completed	144
Not completed	21
Consent withdrawn by subject	10
Adverse event, non-fatal	-
Migrated/moved from study area	-
Unspecified	5
Lost to follow-up	6

Notes:

[1] - The number of subjects reported to be in the baseline period are not the same as the worldwide number enrolled in the trial. It is expected that these numbers will be the same.
Justification: A number of 873 subjects were enrolled, out of which 212 did not receive any study vaccination.

Baseline characteristics

Reporting groups	
Reporting group title	HIV+/Cervarix Group
Reporting group description:	
HIV seropositive female subjects, between and including 15 and 25 years of age, who received 3 doses of Cervarix™ vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.	
Reporting group title	HIV+/Gardasil Group
Reporting group description:	
HIV seropositive female subjects, between and including 15 and 25 years of age, who received 3 doses of Gardasil® vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.	
Reporting group title	HIV-/Cervarix Group
Reporting group description:	
HIV seronegative female subjects, between and including 15 and 25 years of age, who received 3 doses of Cervarix™ vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.	
Reporting group title	HIV-/Gardasil Group
Reporting group description:	
HIV seronegative female subjects, between and including 15 and 25 years of age, who received 3 doses of Gardasil® vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.	

Reporting group values	HIV+/Cervarix Group	HIV+/Gardasil Group	HIV-/Cervarix Group
Number of subjects	167	165	164
Age categorical			
Units: Subjects			
Age continuous			
Age continuous description			
Units: years			
arithmetic mean	20.3	20.1	19.4
standard deviation	± 3.4	± 3.4	± 3.1
Gender categorical			
Gender categorical description			
Units: Subjects			
Female	167	165	164
Male	0	0	0
Geographic Ancestry			
Units: Subjects			
African Heritage/African American	20	9	7
Asian - Central/South Asian Heritage	21	18	67
Asian - East Asian Heritage	3	2	1
Asian - Japanese Heritage	0	0	1
Asian - South East Asian Heritage	40	44	39
White - Arabic/North African Heritage	17	12	7

White - Caucasian/European Heritage	56	66	40
Mixed Origin	10	14	2

Reporting group values	HIV-/Gardasil Group	Total	
Number of subjects	165	661	
Age categorical Units: Subjects			

Age continuous			
Age continuous description			
Units: years			
arithmetic mean	19.5		
standard deviation	± 3.0	-	
Gender categorical			
Gender categorical description			
Units: Subjects			
Female	165	661	
Male	0	0	
Geographic Ancestry Units: Subjects			
African Heritage/African American	7	43	
Asian - Central/South Asian Heritage	68	174	
Asian - East Asian Heritage	0	6	
Asian - Japanese Heritage	2	3	
Asian - South East Asian Heritage	42	165	
White - Arabic/North African Heritage	6	42	
White - Caucasian/European Heritage	33	195	
Mixed Origin	7	33	

End points

End points reporting groups

Reporting group title	HIV+/Cervarix Group
Reporting group description:	
HIV seropositive female subjects, between and including 15 and 25 years of age, who received 3 doses of Cervarix™ vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.	
Reporting group title	HIV+/Gardasil Group
Reporting group description:	
HIV seropositive female subjects, between and including 15 and 25 years of age, who received 3 doses of Gardasil® vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.	
Reporting group title	HIV-/Cervarix Group
Reporting group description:	
HIV seronegative female subjects, between and including 15 and 25 years of age, who received 3 doses of Cervarix™ vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.	
Reporting group title	HIV-/Gardasil Group
Reporting group description:	
HIV seronegative female subjects, between and including 15 and 25 years of age, who received 3 doses of Gardasil® vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.	

Primary: Number of human immunodeficiency virus positive subjects (HIV+) subjects with serious adverse events (SAEs)

End point title	Number of human immunodeficiency virus positive subjects (HIV+) subjects with serious adverse events (SAEs)[1][2]
End point description:	
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	Primary
End point timeframe:	
Up to 30 days after the last vaccination dose (Month 7)	

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: This endpoint was descriptive, hence no statistical analyses were available.

[2] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: This endpoint is only reporting values for HIV positive subjects.

End point values	HIV+/Cervarix Group	HIV+/Gardasil Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	167	165		
Units: Subjects	9	9		

Statistical analyses

No statistical analyses for this end point

Primary: Number of HIV+ subjects with medically significant conditions (MSCs)

End point title	Number of HIV+ subjects with medically significant conditions (MSCs)[3][4]

End point description:

Medically significant conditions (MSCs) are defined as AEs prompting emergency room or physician visits that are not related to common diseases, or not related to routine visits for physical examination or vaccination, SAEs that are not related to common diseases.

End point type	Primary

End point timeframe:

Up to 30 days after the last vaccination dose (Month 7)

Notes:

[3] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: This endpoint was descriptive, hence no statistical analyses were available.

[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: This endpoint is only reporting values for HIV positive subjects.

End point values	HIV+/Cervarix Group	HIV+/Gardasil Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	167	165		
Units: Subjects	14	19		

Statistical analyses

No statistical analyses for this end point

Primary: Number of HIV+ subjects with pregnancies and pregnancy outcomes

End point title	Number of HIV+ subjects with pregnancies and pregnancy outcomes[5][6]

End point description:

Pregnancy related outcomes were: live infant with no apparent congenital anomaly/with congenital anomaly, elective termination (termin.) for no apparent congenital anomaly/for apparent congenital anomaly, ectopic pregnancy, spontaneous abortion with no apparent congenital (congen.) anomaly, stillbirth with no apparent congenital anomaly/with apparent congenital anomaly, lost to follow-up, ongoing pregnancy, missing pregnancy.

End point type	Primary

End point timeframe:

Up to 30 days after the last vaccination dose (Month 7)

Notes:

[5] - 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: This endpoint was descriptive, hence no statistical analyses were available.

[6] - 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: This endpoint is only reporting values for HIV positive subjects.

End point values	HIV+/Cervarix Group	HIV+/Gardasil Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	167	165		
Units: Subjects				
Any pregnancies	16	15		
Live infant with NO apparent congenital anomaly	12	13		
Live infant with congenital anomaly	0	0		
Elective termin. - NO apparent congenital anomaly	1	0		
Elective termin. - congenital anomaly	0	0		
Ectopic pregnancy	0	0		
Spontaneous abortion - NO apparent congen. anomaly	1	1		
Stillbirth with NO apparent congenital anomaly	0	0		
Stillbirth with congenital anomaly	0	0		
Lost to follow-up	2	0		
Pregnancy ongoing	0	1		
Missing pregnancy	0	0		

Statistical analyses

No statistical analyses for this end point

Primary: Number of HIV+ subjects with haematological and biochemical parameter abnormalities

End point title	Number of HIV+ subjects with haematological and biochemical parameter abnormalities[7][8]

End point description:

Among assessed haematological and biochemical parameters were: alanine aminotransferase [ALAT], basophilis [BSPH], creatinine [CRT], eosinophils [ESPH], haematocrit [HTCR], haemoglobin [HGB], lymphocytes [LYMP], monocytes [MONO], neutrophils [NTPH], platelets [PLAT], red blood cells [RBC] and white blood cells [WBC]. Unknown = value unknown for the specified visit and laboratory parameter; Below = value below the laboratory reference range defined for the specified visit and laboratory parameter; Within = value within the laboratory reference range defined for the specified visit and laboratory parameter; Above = value above the laboratory reference range defined for the specified visit and laboratory parameter.

End point type	Primary

End point timeframe:

At 30 days after the last vaccination dose (Month 7)

Notes:

[7] - 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: This endpoint was descriptive, hence no statistical analyses were available.

[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: This endpoint is only reporting values for HIV positive subjects.

End point values	HIV+/Cervarix Group	HIV+/Gardasil Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	167	165		
Units: Subjects				
ALAT, Unknown (N=151;150)	0	0		
BSPH, Unknown (N=151;150)	0	0		
CRT, Unknown (N=151;149)	0	0		
ESPH, Unknown (N=151;150)	0	0		
HTCR, Unknown (N=151;150)	0	0		
HGB, Unknown (N=151;150)	0	0		
LYMP, Unknown (N=151;150)	0	0		
MONO, Unknown (N=151;150)	0	0		
NTPH, Unknown (N=151;150)	0	0		
PLAT, Unknown (N=151;150)	0	0		
RBC, Unknown (N=151;150)	0	0		
WBC, Unknown (N=151;150)	0	0		
ALAT, Below (N=151;150)	5	10		
BSPH, Below (N=151;150)	0	0		
CRT, Below (N=151;149)	31	42		
ESPH, Below (N=151;150)	15	15		
HTCR, Below (N=151;150)	30	35		
HGB, Below (N=151;150)	44	47		
LYMP, Below (N=151;150)	14	11		
MONO, Below (N=151;150)	10	10		
NTPH, Below (N=151;150)	18	18		
PLAT, Below (N=151;150)	1	3		
RBC, Below (N=151;150)	47	38		
WBC, Below (N=151;150)	13	10		
ALAT, Within (N=151;150)	137	125		
BSPH, Within (N=151;150)	150	150		
CRT, Within (N=151;149)	118	107		
ESPH, Within (N=151;150)	132	130		
HTCR, Within (N=151;150)	120	113		
HGB, Within (N=151;150)	106	102		
LYMP, Within (N=151;150)	122	124		
MONO, Within (N=151;150)	124	117		
NTPH, Within (N=151;150)	123	118		
PLAT, Within (N=151;150)	148	143		
RBC, Within (N=151;150)	101	107		
WBC, Within (N=151;150)	130	133		
ALAT, Above (N=151;150)	9	15		
BSPH, Above (N=151;150)	1	0		
CRT, Above (N=151;149)	2	0		
ESPH, Above (N=151;150)	4	5		
HTCR, Above (N=151;150)	1	2		
HGB, Above (N=151;150)	1	1		
LYMP, Above (N=151;150)	15	15		
MONO, Above (N=151;150)	17	23		
NTPH, Above (N=151;150)	10	14		
PLAT, Above (N=151;150)	2	4		
RBC, Above (N=151;150)	3	5		

WBC, Above (N=151;150)	8	7		

Statistical analyses

No statistical analyses for this end point

Primary: Cluster of differentiation 4 (CD4+) cell count in HIV+ subjects

End point title	Cluster of differentiation 4 (CD4+) cell count in HIV+

End point description:

CD4+ cell count, expressed in cells/cubic millimeter (mm3), was assessed for HIV+ subjects.

End point type	Primary

End point timeframe:

At 30 days after the last vaccination dose (Month 7)

Notes:

[9] - 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: This endpoint was descriptive, hence no statistical analyses were available.

[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: This endpoint is only reporting values for HIV positive subjects.

End point values	HIV+/Cervarix Group	HIV+/Gardasil Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	167	165		
Units: cells/mm3				
median (inter-quartile range (Q1-Q3))	506.0 (428.0 to 750.1)	530.5 (423.0 to 720.0)		

Statistical analyses

No statistical analyses for this end point

Primary: HIV viral load (VL) in HIV+ subjects

End point title	HIV viral load (VL) in HIV+ subjects[11][12]

End point description:

HIV VL, expressed in copies/milliliter (mL), was assessed for HIV+ subjects.

End point type	Primary

End point timeframe:

At 30 days after the last vaccination dose (Month 7)

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: This endpoint was descriptive, hence no statistical analyses were available.

[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: This endpoint is only reporting values for HIV positive subjects.

End point values	HIV+/Cervarix Group	HIV+/Gardasil Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	167	165		
Units: HIV copies/mL				
median (inter-quartile range (Q1-Q3))	2.5 (1.3 to 3.2)	2.5 (1.6 to 3.3)		

Statistical analyses

No statistical analyses for this end point

Primary: Number of HIV+ subjects by WHO HIV clinical staging

End point title	Number of HIV+ subjects by WHO HIV clinical staging[13][14]

End point description:

HIV+ subjects were categorised into clinical stages 1 through 4, as per the WHO classification.

End point type	Primary

End point timeframe:

At 30 days after the last vaccination dose (Month 7)

Notes:

[13] - 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: This endpoint was descriptive, hence no statistical analyses were available.

[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: This endpoint is only reporting values for HIV positive subjects.

End point values	HIV+/Cervarix Group	HIV+/Gardasil Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	167	165		
Units: Subjects				
Clinical Stage 1	143	143		
Clinical Stage 2	6	2		
Clinical Stage 3	1	1		
Clinical Stage 4	1	4		

Statistical analyses

No statistical analyses for this end point

Primary: Number of HIV+ subjects with potential immune-mediated diseases (pIMDs)

End point title	Number of HIV+ subjects with potential immune-mediated

	diseases (pIMDs)[15][16]

End point description:

Potential immune-mediated diseases are a subset of AEs that include autoimmune diseases and other inflammatory and/or neurologic disorders of interest which may or may not have an autoimmune aetiology.

End point type	Primary

End point timeframe:

Up to 30 days after the last vaccination dose (Month 7)

Notes:

[15] - 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: This endpoint was descriptive, hence no statistical analyses were available.

[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: This endpoint is only reporting values for HIV positive subjects.

End point values	HIV+/Cervarix Group	HIV+/Gardasil Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	167	165		
Units: Subjects	1	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of HIV- subjects with serious adverse events (SAEs)

End point title	Number of HIV- subjects with serious adverse events (SAEs)[17]

End point description:

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:

Up to 30 days after the last vaccination dose (Month 7)

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: This endpoint is only reporting values for HIV negative subjects.

End point values	HIV-/Cervarix Group	HIV-/Gardasil Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	164	165		
Units: Subjects	2	2		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of HIV- subjects with medically significant conditions (MSCs)

End point title	Number of HIV- subjects with medically significant conditions (MSCs)[18]

End point description:

Medically significant conditions (MSCs) are defined as AEs prompting emergency room or physician visits that are not related to common diseases, or not related to routine visits for physical examination or vaccination, SAEs that are not related to common diseases.

End point type	Secondary

End point timeframe:

Up to 30 days after the last vaccination dose (Month 7)

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: This endpoint is only reporting values for HIV negative subjects.

End point values	HIV-/Cervarix Group	HIV-/Gardasil Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	164	165		
Units: Subjects	7	13		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of HIV- subjects with potential immune-mediated disease (pIMDs)

End point title	Number of HIV- subjects with potential immune-mediated disease (pIMDs)[19]

End point description:

Potential immune-mediated diseases are a subset of AEs that include autoimmune diseases and other inflammatory and/or neurologic disorders of interest which may or may not have an autoimmune aetiology.

End point type	Secondary

End point timeframe:

Up to 30 days after the last vaccination dose (Month 7)

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: This endpoint is only reporting values for HIV negative subjects.

End point values	HIV-/Cervarix Group	HIV-/Gardasil Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	164	165		
Units: Subjects	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Frequency of cluster of differentiation 4/8 [CD4+/CD8+] T-cell response

End point title	Frequency of cluster of differentiation 4/8 [CD4+/CD8+] T-cell response

End point description:

The combinations of cytokines expressed were CD4/8-all doubles, CD4/8-d-cluster of differentiation 40 L (CD40L), CD4/8-d-interferon gamma (IFNG), CD4/8-interleukin-2 (IL-2), CD4/8-d-tumour necrosis alpha (TNFA), as assessed by intracellular cytokine staining (ICS). At the time of posting this record, the results for Month 12 were not available. The record will be updated when the additional validated results are available.

End point type	Secondary

End point timeframe:

At Day 0, Week 6, Week 10, Month 7 and Month 12

End point values	HIV+/Cervarix Group	HIV+/Gardasil Group	HIV-/Cervarix Group	HIV-/Gardasil Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	17	15	19	18
Units: CD4 cells/million T-cells				
median (inter-quartile range (Q1-Q3))				
CD4-All doubles,Anti-HPV-16,Day 0 (N=17;15;17;18)	41.0 (1.0 to 118.0)	101.0 (43.0 to 215.0)	1.0 (1.0 to 28.0)	54.5 (1.0 to 88.0)
CD4-All doubles,Anti-HPV-18,Day 0 (N=17;15;17;18)	7.0 (1.0 to 116.0)	87.0 (18.0 to 184.0)	1.0 (1.0 to 82.0)	1.0 (1.0 to 98.0)
CD4-All doubles,Anti-HPV-16,Week 6 (N=16;14;16;18)	445.5 (262.0 to 1028.0)	345.5 (227.0 to 1034.0)	298.0 (173.0 to 540.5)	661.0 (234.0 to 982.0)
CD4-All doubles,Anti-HPV-18,Week 6 (N=16;14;16;18)	396.0 (163.0 to 832.0)	309.5 (203.0 to 852.0)	237.0 (81.0 to 421.5)	320.5 (117.0 to 524.0)
CD4-All doubles,Anti-HPV-16,Week 10(N=14;14;19;18)	2955.5 (1075.0 to 5200.0)	1449.0 (922.0 to 1778.0)	1767.0 (916.0 to 4428.0)	1268.5 (648.0 to 2453.0)
CD4-All doubles,Anti-HPV-18,Week 10(N=14;14;19;18)	2036.5 (951.0 to 3123.0)	602.0 (498.0 to 2079.0)	1243.0 (587.0 to 3400.0)	515.5 (414.0 to 1178.0)
CD4-All doubles,Anti-HPV-16,Month 7(N=17;15;17;18)	3693.0 (1870.0 to 5153.0)	1679.5 (1052.0 to 2734.0)	3414.5 (1424.5 to 4520.0)	1505.0 (995.0 to 2205.0)
CD4-All doubles,Anti-HPV-18,Month 7(N=17;15;17;18)	1866.0 (1267.0 to 2875.0)	840.5 (518.0 to 1641.0)	2084.5 (911.0 to 4110.0)	669.0 (470.0 to 1035.0)
CD4-d-CD40L, Anti-HPV-16, Day 0 (N=17;15;17;18)	22.0 (1.0 to 118.0)	99.0 (60.0 to 215.0)	1.0 (1.0 to 58.0)	46.0 (1.0 to 81.0)
CD4-d-CD40L, Anti-HPV-18, Day 0 (N=17;15;17;18)	36.0 (1.0 to 81.0)	89.0 (1.0 to 176.0)	1.0 (1.0 to 54.0)	13.5 (1.0 to 100.0)
CD4-d-CD40L, Anti-HPV-16, Week 6 (N=16;14;16;18)	426.0 (258.5 to 999.5)	326.5 (196.0 to 1034.0)	298.0 (209.5 to 540.0)	582.0 (223.0 to 967.0)

CD4-d-CD40L, Anti-HPV-18, Week 6 (N=16;14;16;18)	403.5 (144.0 to 835.0)	296.0 (216.0 to 840.0)	242.5 (36.5 to 393.0)	310.0 (95.0 to 521.0)
CD4-d-CD40L, Anti-HPV-16, Week 10 (N=14;14;19;18)	2893.5 (988.0 to 5006.0)	1440.0 (882.0 to 1814.0)	1678.0 (917.0 to 4306.0)	1239.0 (562.0 to 2362.0)
CD4-d-CD40L, Anti-HPV-18, Week 10 (N=14;14;19;18)	2015.0 (944.0 to 3021.0)	564.5 (507.0 to 2045.0)	1051.0 (631.0 to 3317.0)	474.5 (385.0 to 811.0)
CD4-d-CD40L, Anti-HPV-16, Month 7 (N=13;14;16;17)	3658.0 (1804.0 to 5070.0)	1619.5 (1071.0 to 2600.0)	3290.0 (1464.5 to 4387.5)	1389.0 (949.0 to 2133.0)
CD4-d-CD40L, Anti-HPV-18, Month 7 (N=13;14;16;17)	1839.0 (1066.0 to 2893.0)	833.5 (518.0 to 1605.0)	2014.0 (979.0 to 3878.5)	647.0 (442.0 to 981.0)
CD4-d-IFNG, Anti-HPV-16, Day 0 (N=17;15;17;18)	27.0 (1.0 to 63.0)	30.0 (1.0 to 51.0)	1.0 (1.0 to 45.0)	39.0 (1.0 to 61.0)
CD4-d-IFNG, Anti-HPV-18, Day 0 (N=17;15;17;18)	4.0 (1.0 to 42.0)	51.0 (1.0 to 59.0)	1.0 (1.0 to 54.0)	21.0 (1.0 to 46.0)
CD4-d-IFNG, Anti-HPV-16, Week 6 (N=16;14;16;18)	222.5 (117.0 to 393.0)	116.0 (75.0 to 222.0)	42.5 (1.0 to 127.5)	241.5 (71.0 to 404.0)
CD4-d-IFNG, Anti-HPV-18, Week 6 (N=16;14;16;18)	98.0 (25.0 to 361.0)	104.5 (35.0 to 211.0)	1.0 (1.0 to 44.0)	129.5 (1.0 to 182.0)
CD4-d-IFNG, Anti-HPV-16, Week 10 (N=14;14;19;18)	1220.0 (554.0 to 1478.0)	450.0 (245.0 to 527.0)	332.0 (282.0 to 1251.0)	442.0 (160.0 to 935.0)
CD4-d-IFNG, Anti-HPV-18, Week 10 (N=14;14;19;18)	694.0 (342.0 to 1207.0)	326.5 (121.0 to 455.0)	222.0 (124.0 to 569.0)	202.0 (122.0 to 279.0)
CD4-d-IFNG, Anti-HPV-16, Month 7 (N=13;14;16;17)	1513.0 (891.0 to 1993.0)	585.5 (190.0 to 846.0)	731.0 (267.5 to 1245.0)	495.0 (319.0 to 859.0)
CD4-d-IFNG, Anti-HPV-18, Month 7 (N=13;14;16;17)	694.0 (409.0 to 868.0)	306.0 (171.0 to 382.0)	414.5 (245.5 to 616.5)	198.0 (126.0 to 435.0)
CD4-d-IL-2, Anti-HPV-16, Day 0 (N=17;15;17;18)	43.0 (1.0 to 81.0)	30.0 (7.0 to 121.0)	1.0 (1.0 to 58.0)	1.0 (1.0 to 21.0)
CD4-d-IL-2, Anti-HPV-18, Day 0 (N=17;15;17;18)	46.0 (1.0 to 115.0)	37.0 (1.0 to 102.0)	1.0 (1.0 to 31.0)	13.5 (1.0 to 57.0)
CD4-d-IL-2, Anti-HPV-16, Week 6 (N=16;14;16;18)	361.0 (235.5 to 966.0)	300.0 (234.0 to 827.0)	245.5 (137.0 to 468.0)	454.5 (228.0 to 816.0)
CD4-d-IL-2, Anti-HPV-18, Week 6 (N=16;14;16;18)	364.5 (161.0 to 858.0)	193.5 (94.0 to 687.0)	227.5 (131.5 to 379.5)	286.0 (129.0 to 413.0)
CD4-d-IL-2, Anti-HPV-16, Week 10 (N=14;14;19;18)	2503.0 (938.0 to 4606.0)	1221.0 (678.0 to 1584.0)	1542.0 (776.0 to 3499.0)	929.5 (435.0 to 2128.0)
CD4-d-IL-2, Anti-HPV-18, Week 10 (N=14;14;19;18)	1668.5 (635.0 to 2183.0)	555.5 (349.0 to 1687.0)	1183.0 (456.0 to 2311.0)	411.0 (245.0 to 891.0)
CD4-d-IL-2, Anti-HPV-16, Month 7 (N=13;14;16;17)	2847.0 (1557.0 to 4064.0)	1318.5 (672.0 to 2141.0)	2608.5 (1147.5 to 3875.0)	1128.0 (697.0 to 1574.0)
CD4-d-IL-2, Anti-HPV-18, Month 7 (N=13;14;16;17)	1522.0 (914.0 to 2285.0)	615.0 (472.0 to 1234.0)	1442.0 (811.0 to 3471.0)	537.0 (341.0 to 643.0)
CD4-d-TNFA, Anti-HPV-16, Day 0 (N=17;15;17;18)	1.0 (1.0 to 58.0)	71.0 (1.0 to 252.0)	32.0 (1.0 to 74.0)	34.0 (1.0 to 76.0)
CD4-d-TNFA, Anti-HPV-18, Day 0 (N=17;15;17;18)	1.0 (1.0 to 52.0)	35.0 (1.0 to 131.0)	25.0 (1.0 to 39.0)	15.5 (1.0 to 83.0)
CD4-d-TNFA, Anti-HPV-16, Week 6 (N=16;14;16;18)	326.5 (49.5 to 714.0)	171.0 (133.0 to 701.0)	237.0 (89.5 to 325.0)	337.5 (183.0 to 648.0)
CD4-d-TNFA, Anti-HPV-18, Week 6 (N=16;14;16;18)	234.0 (66.0 to 579.0)	204.0 (94.0 to 539.0)	162.5 (75.5 to 247.0)	156.5 (72.0 to 398.0)
CD4-d-TNFA, Anti-HPV-16, Week 10 (N=14;14;19;18)	2086.0 (519.0 to 4016.0)	903.5 (606.0 to 1355.0)	1260.0 (764.0 to 3094.0)	865.5 (453.0 to 2100.0)
CD4-d-TNFA, Anti-HPV-18, Week 10 (N=14;14;19;18)	1493.5 (592.0 to 2341.0)	443.0 (248.0 to 1432.0)	899.0 (415.0 to 2310.0)	334.5 (203.0 to 958.0)
CD4-d-TNFA, Anti-HPV-16, Month 7 (N=13;14;16;17)	2688.0 (1399.0 to 3994.0)	1109.0 (670.0 to 2066.0)	2621.0 (1062.0 to 3652.5)	1215.0 (792.0 to 1665.0)
CD4-d-TNFA, Anti-HPV-18, Month 7 (N=13;14;16;17)	1366.0 (1126.0 to 2449.0)	598.0 (362.0 to 1522.0)	1614.0 (760.5 to 3463.5)	505.0 (330.0 to 683.0)

CD8-All doubles,Anti-HPV-16, Day 0 (N=17;15;17;18)	1.0 (1.0 to 40.0)	1.0 (1.0 to 43.0)	1.0 (1.0 to 28.0)	1.0 (1.0 to 29.0)
CD8-All doubles,Anti-HPV-18, Day 0 (N=17;15;17;18)	6.0 (1.0 to 50.0)	23.0 (1.0 to 60.0)	21.0 (1.0 to 54.0)	1.0 (1.0 to 35.0)
CD8-All doubles,Anti-HPV-16,Week 6 (N=16;14;16;18)	2.0 (1.0 to 34.5)	13.0 (1.0 to 70.0)	1.0 (1.0 to 14.5)	1.0 (1.0 to 3.0)
CD8-All doubles,Anti-HPV-18,Week 6 (N=16;14;16;18)	37.5 (9.0 to 66.5)	2.0 (1.0 to 42.0)	1.0 (1.0 to 42.5)	30.5 (1.0 to 74.0)
CD8-All doubles,Anti-HPV-16,Week 10(N=14;14;19;18)	41.0 (1.0 to 75.0)	3.5 (1.0 to 36.0)	1.0 (1.0 to 54.0)	1.0 (1.0 to 29.0)
CD8-All doubles,Anti-HPV-18,Week 10(N=14;14;19;18)	11.0 (1.0 to 60.0)	1.0 (1.0 to 60.0)	5.0 (1.0 to 84.0)	1.0 (1.0 to 41.0)
CD8-All doubles,Anti-HPV-16,Month 7(N=13;14;16;17)	51.0 (18.0 to 69.0)	9.5 (1.0 to 33.0)	1.0 (1.0 to 74.5)	2.0 (1.0 to 54.0)
CD8-All doubles,Anti-HPV-18,Month 7(N=13;14;16;17)	41.0 (1.0 to 159.0)	30.0 (3.0 to 49.0)	15.5 (1.0 to 106.5)	24.0 (1.0 to 54.0)
CD8-d-CD40L, Anti-HPV-16, Day 0 (N=17;15;17;18)	1.0 (1.0 to 29.0)	1.0 (1.0 to 6.0)	1.0 (1.0 to 10.0)	1.0 (1.0 to 7.0)
CD8-d-CD40L, Anti-HPV-18, Day 0 (N=17;15;17;18)	1.0 (1.0 to 29.0)	1.0 (1.0 to 19.0)	1.0 (1.0 to 33.0)	1.0 (1.0 to 16.0)
CD8-d-CD40L, Anti-HPV-16, Week 6 (N=16;14;16;18)	1.0 (1.0 to 24.5)	1.0 (1.0 to 32.0)	1.0 (1.0 to 18.0)	1.0 (1.0 to 1.0)
CD8-d-CD40L, Anti-HPV-18, Week 6 (N=16;14;16;18)	9.5 (1.0 to 27.5)	1.0 (1.0 to 17.0)	1.0 (1.0 to 23.0)	1.0 (1.0 to 36.0)
CD8-d-CD40L, Anti-HPV-16, Week 10 (N=14;14;19;18)	18.5 (1.0 to 73.0)	1.0 (1.0 to 29.0)	1.0 (1.0 to 41.0)	1.0 (1.0 to 27.0)
CD8-d-CD40L, Anti-HPV-18, Week 10 (N=14;14;19;18)	10.5 (1.0 to 34.0)	2.5 (1.0 to 34.0)	26.0 (1.0 to 72.0)	1.0 (1.0 to 30.0)
CD8-d-CD40L, Anti-HPV-16, Month 7 (N=13;14;16;17)	26.0 (1.0 to 63.0)	3.0 (1.0 to 20.0)	2.0 (1.0 to 52.0)	1.0 (1.0 to 36.0)
CD8-d-CD40L, Anti-HPV-18, Month 7 (N=13;14;16;17)	4.0 (1.0 to 42.0)	15.0 (1.0 to 31.0)	38.0 (1.0 to 92.0)	4.0 (1.0 to 33.0)
CD8-d-IFNG, Anti-HPV-16, Day 0 (N=17;15;17;18)	1.0 (1.0 to 29.0)	1.0 (1.0 to 43.0)	1.0 (1.0 to 28.0)	1.0 (1.0 to 2.0)
CD8-d-IFNG, Anti-HPV-18, Day 0 (N=17;15;17;18)	6.0 (1.0 to 33.0)	19.0 (1.0 to 47.0)	21.0 (1.0 to 54.0)	4.0 (1.0 to 35.0)
CD8-d-IFNG, Anti-HPV-16, Week 6 (N=16;14;16;18)	2.5 (1.0 to 39.5)	17.5 (1.0 to 78.0)	1.0 (1.0 to 14.5)	1.0 (1.0 to 11.0)
CD8-d-IFNG, Anti-HPV-18, Week 6 (N=16;14;16;18)	27.5 (1.0 to 55.5)	1.0 (1.0 to 47.0)	1.0 (1.0 to 42.5)	35.5 (1.0 to 84.0)
CD8-d-IFNG, Anti-HPV-16, Week 10 (N=14;14;19;18)	34.0 (1.0 to 99.0)	25.0 (1.0 to 30.0)	1.0 (1.0 to 38.0)	1.0 (1.0 to 29.0)
CD8-d-IFNG, Anti-HPV-18, Week 10 (N=14;14;19;18)	3.0 (1.0 to 68.0)	7.5 (1.0 to 34.0)	24.0 (1.0 to 76.0)	1.0 (1.0 to 1.0)
CD8-d-IFNG, Anti-HPV-16, Month 7 (N=13;14;16;17)	46.0 (1.0 to 68.0)	1.0 (1.0 to 26.0)	1.0 (1.0 to 74.5)	1.0 (1.0 to 50.0)
CD8-d-IFNG, Anti-HPV-18, Month 7 (N=13;14;16;17)	41.0 (1.0 to 68.0)	21.0 (1.0 to 41.0)	4.0 (1.0 to 90.5)	3.0 (1.0 to 52.0)
CD8-d-IL-2, Anti-HPV-16, Day 0 (N=17;15;17;18)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 16.0)
CD8-d-IL-2, Anti-HPV-18, Day 0 (N=17;15;17;18)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)
CD8-d-IL-2, Anti-HPV-16, Week 6 (N=16;14;16;18)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)
CD8-d-IL-2, Anti-HPV-18, Week 6 (N=16;14;16;18)	1.0 (1.0 to 23.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)
CD8-d-IL-2, Anti-HPV-16, Week 10 (N=14;14;19;18)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 32.0)	1.0 (1.0 to 1.0)
CD8-d-IL-2, Anti-HPV-18, Week 10 (N=14;14;19;18)	1.0 (1.0 to 26.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 25.0)	1.0 (1.0 to 1.0)
CD8-d-IL-2, Anti-HPV-16, Month 7 (N=13;14;16;17)	1.0 (1.0 to 23.0)	1.0 (1.0 to 17.0)	1.0 (1.0 to 37.5)	1.0 (1.0 to 1.0)

CD8-d-IL-2, Anti-HPV-18, Month 7 (N=13;14;16;17)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 29.0)	1.0 (1.0 to 1.0)
CD8-d-TNFA, Anti-HPV-16, Day 0 (N=17;15;17;18)	1.0 (1.0 to 10.0)	1.0 (1.0 to 35.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 29.0)
CD8-d-TNFA, Anti-HPV-18, Day 0 (N=17;15;17;18)	6.0 (1.0 to 50.0)	7.0 (1.0 to 54.0)	1.0 (1.0 to 33.0)	1.0 (1.0 to 34.0)
CD8-d-TNFA, Anti-HPV-16, Week 6 (N=16;14;16;18)	1.0 (1.0 to 46.0)	1.0 (1.0 to 35.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 31.0)
CD8-d-TNFA, Anti-HPV-18, Week 6 (N=16;14;16;18)	19.0 (1.0 to 50.0)	1.0 (1.0 to 57.0)	1.0 (1.0 to 28.0)	1.0 (1.0 to 26.0)
CD8-d-TNFA, Anti-HPV-16, Week 10 (N=14;14;19;18)	1.5 (1.0 to 32.0)	1.0 (1.0 to 24.0)	1.0 (1.0 to 31.0)	1.0 (1.0 to 26.0)
CD8-d-TNFA, Anti-HPV-18, Week 10 (N=14;14;19;18)	17.5 (1.0 to 34.0)	14.0 (1.0 to 61.0)	5.0 (1.0 to 42.0)	1.0 (1.0 to 34.0)
CD8-d-TNFA, Anti-HPV-16, Month 7 (N=13;14;16;17)	34.0 (1.0 to 41.0)	13.0 (1.0 to 33.0)	1.0 (1.0 to 49.0)	2.0 (1.0 to 33.0)
CD8-d-TNFA, Anti-HPV-18, Month 7 (N=13;14;16;17)	41.0 (1.0 to 111.0)	26.5 (15.0 to 58.0)	1.0 (1.0 to 58.0)	1.0 (1.0 to 32.0)

Statistical analyses

No statistical analyses for this end point

Secondary: Frequency of specific B-cells for HPV-16/18 antigens

End point title	Frequency of specific B-cells for HPV-16/18 antigens

End point description:

B cell memory was assessed by Enzyme Linked Immuno Spot (ELISPOT) assay. The assay was performed in a subset of approximately 100 subjects (50 HIV+ and 50 HIV-). At the time of posting this record, the results for Month 12 were not available. The record will be updated when the additional validated results are available.

End point type	Secondary

End point timeframe:

At Day 0, Week 6, Week 10, Month 7 and Month 12

End point values	HIV+/Cervarix Group	HIV+/Gardasil Group	HIV-/Cervarix Group	HIV-/Gardasil Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	13	12	20	20
Units: B-cells/million cells				
median (inter-quartile range (Q1-Q3))				
HPV-16, Day 0 (N=12;11;18;20)	1.0 (1.0 to 1.0)	1.0 (1.0 to 61.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)
HPV-18, Day 0 (N=12;11;18;20)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)
HPV-16, Week 6 (N=10;12;15;15)	91.0 (1.0 to 154.0)	1.0 (1.0 to 1.0)	22.0 (1.0 to 154.0)	1.0 (1.0 to 204.0)
HPV-18, Week 6 (N=10;12;15;15)	39.5 (1.0 to 693.0)	1.0 (1.0 to 45.5)	155.0 (1.0 to 345.0)	33.0 (1.0 to 80.0)
HPV-16, Week 10 (N=12;9;20;20)	558.0 (95.5 to 989.5)	198.0 (1.0 to 391.0)	494.0 (90.5 to 834.0)	150.5 (33.5 to 726.5)
HPV-18, Week 10 (N=12;9;20;20)	150.0 (31.0 to 471.0)	1.0 (1.0 to 42.0)	211.0 (84.0 to 656.0)	29.5 (1.0 to 222.0)

HPV-16, Month 7 (N=13;9;20;17)	624.0 (457.0 to 1196.0)	213.0 (165.0 to 632.0)	1504.0 (481.0 to 3026.0)	448.0 (257.0 to 890.0)
HPV-18, Month 7 (N=13;9;20;17)	332.0 (153.0 to 494.0)	1.0 (1.0 to 392.0)	513.5 (111.5 to 1292.0)	65.0 (1.0 to 158.0)

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information[1]

Timeframe for reporting adverse events:

Solicited and unsolicited AEs: within the 30 day (Days 0-29) post-vaccination period; SAEs: up to Month 7.

Adverse event reporting additional description:

At the time of posting this record, the solicited local, general and unsolicited symptoms were being re-analysed. They will be added as soon as validated results become available.

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	19.0

Reporting groups

Reporting group title	HIV+/Cervarix Group

Reporting group description:

HIV seropositive female subjects, between and including 15 and 25 years of age, who received 3 doses of Cervarix™ vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.

Reporting group title	HIV+/Gardasil Group

Reporting group description:

HIV seropositive female subjects, between and including 15 and 25 years of age, who received 3 doses of Gardasil® vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.

Reporting group title	HIV-/Cervarix Group

Reporting group description:

HIV seronegative female subjects, between and including 15 and 25 years of age, who received 3 doses of Cervarix™ vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.

Reporting group title	HIV-/Gardasil Group

Reporting group description:

HIV seronegative female subjects, between and including 15 and 25 years of age, who received 3 doses of Gardasil® vaccine, administered intramuscularly in the deltoid muscle of the non-dominant arm, according to a three-dose schedule: at Day 0, Week 6, Month 6.

Notes:

[1] - There are no non-serious adverse events recorded for these results. It is expected that there will be at least one non-serious adverse event reported.
Justification: At the time of posting this record, the solicited local, general and unsolicited symptoms were being re-analysed. They will be added as soon as validated results become available.

Serious adverse events	HIV+/Cervarix Group	HIV+/Gardasil Group	HIV-/Cervarix Group
Total subjects affected by serious adverse events			
subjects affected / exposed	9 / 167 (5.39%)	9 / 165 (5.45%)	2 / 164 (1.22%)
number of deaths (all causes)	0	1	0
number of deaths resulting from adverse events	0	0	0
Injury, poisoning and procedural complications			
Road traffic accident			
subjects affected / exposed	1 / 167 (0.60%)	0 / 165 (0.00%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	1 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Pregnancy, puerperium and perinatal conditions			
Abortion spontaneous			
subjects affected / exposed	1 / 167 (0.60%)	0 / 165 (0.00%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	1 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Abortion spontaneous complete			
subjects affected / exposed	0 / 167 (0.00%)	1 / 165 (0.61%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pre-eclampsia			
subjects affected / exposed	0 / 167 (0.00%)	1 / 165 (0.61%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Blood and lymphatic system disorders			
Immune thrombocytopenic purpura			
subjects affected / exposed	1 / 167 (0.60%)	0 / 165 (0.00%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	1 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastrointestinal disorders			
Gastritis			
subjects affected / exposed	1 / 167 (0.60%)	0 / 165 (0.00%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	1 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Reproductive system and breast disorders			
Cervical dysplasia			
subjects affected / exposed	0 / 167 (0.00%)	0 / 165 (0.00%)	1 / 164 (0.61%)
occurrences causally related to treatment / all	0 / 0	0 / 0	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Psychiatric disorders			
Suicide attempt			
subjects affected / exposed	0 / 167 (0.00%)	1 / 165 (0.61%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Renal and urinary disorders			

Renal failure			
subjects affected / exposed	1 / 167 (0.60%)	0 / 165 (0.00%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	1 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Musculoskeletal and connective tissue disorders			
Monarthritis			
subjects affected / exposed	0 / 167 (0.00%)	1 / 165 (0.61%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infections and infestations			
Appendicitis			
subjects affected / exposed	0 / 167 (0.00%)	2 / 165 (1.21%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	0 / 0	2 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Dengue fever			
subjects affected / exposed	0 / 167 (0.00%)	0 / 165 (0.00%)	1 / 164 (0.61%)
occurrences causally related to treatment / all	0 / 0	0 / 0	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Meningitis tuberculous			
subjects affected / exposed	1 / 167 (0.60%)	0 / 165 (0.00%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	1 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumonia			
subjects affected / exposed	1 / 167 (0.60%)	0 / 165 (0.00%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	1 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumonia bacterial			
subjects affected / exposed	0 / 167 (0.00%)	1 / 165 (0.61%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
Pneumonia mycoplasmal			
subjects affected / exposed	1 / 167 (0.60%)	0 / 165 (0.00%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	1 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Pulmonary tuberculosis			
subjects affected / exposed	0 / 167 (0.00%)	1 / 165 (0.61%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
Tonsillitis			
subjects affected / exposed	1 / 167 (0.60%)	1 / 165 (0.61%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	1 / 1	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Urinary tract infection			
subjects affected / exposed	0 / 167 (0.00%)	1 / 165 (0.61%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Vaginitis gardnerella			
subjects affected / exposed	0 / 167 (0.00%)	0 / 165 (0.00%)	1 / 164 (0.61%)
occurrences causally related to treatment / all	0 / 0	0 / 0	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Viral infection			
subjects affected / exposed	1 / 167 (0.60%)	0 / 165 (0.00%)	0 / 164 (0.00%)
occurrences causally related to treatment / all	1 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Serious adverse events	HIV-/Gardasil Group		
Total subjects affected by serious adverse events			
subjects affected / exposed	2 / 165 (1.21%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Injury, poisoning and procedural complications			
Road traffic accident			
subjects affected / exposed	1 / 165 (0.61%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Pregnancy, puerperium and perinatal conditions			
Abortion spontaneous			

subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Abortion spontaneous complete			
subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Pre-eclampsia			
subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Blood and lymphatic system disorders			
Immune thrombocytopenic purpura			
subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Gastrointestinal disorders			
Gastritis			
subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Reproductive system and breast disorders			
Cervical dysplasia			
subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Psychiatric disorders			
Suicide attempt			
subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Renal and urinary disorders			
Renal failure			

subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Musculoskeletal and connective tissue disorders			
Monarthritis			
subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Appendicitis			
subjects affected / exposed	1 / 165 (0.61%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Dengue fever			
subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Meningitis tuberculous			
subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Pneumonia			
subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Pneumonia bacterial			
subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Pneumonia mycoplasmal			
subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		

Pulmonary tuberculosis			
subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Tonsillitis			
subjects affected / exposed	0 / 165 (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 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Vaginitis gardnerella			
subjects affected / exposed	0 / 165 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Viral infection			
subjects affected / exposed	0 / 165 (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 %

Non-serious adverse events	HIV+/Cervarix Group	HIV+/Gardasil Group	HIV-/Cervarix Group
Total subjects affected by non-serious adverse events			
subjects affected / exposed	0 / 167 (0.00%)	0 / 165 (0.00%)	0 / 164 (0.00%)

Non-serious adverse events	HIV-/Gardasil Group		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	0 / 165 (0.00%)		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

At the time of posting this record, the solicited local and general symptoms were being re-analysed. They will be added as soon as validated results become available.

Notes: