Clinical trial results:
Persistence of antibodies after full vaccination course with GSK Biologicals' Menitorix or MenC conjugate vaccine, co-administered with DTPa or DTPa/Hib containing vaccine and pneumococcal conjugate vaccine, in children up to 6 years of age

Summary

EudraCT number	2008-007846-69
Trial protocol	DE ES
Global end of trial date	21 November 2012

Results information

Result version number	v1
This version publication date	20 June 2016
First version publication date	23 April 2015

Trial information

Trial identification

Sponsor protocol code	112830

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT00891176
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	19 June 2013
Is this the analysis of the primary completion data?	Yes
Primary completion date	21 November 2012
Global end of trial reached?	Yes
Global end of trial date	21 November 2012
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

At approximately 3, 4 and 6 years of age, in subjects who previously received a full vaccination course with Hib-MenC conjugate vaccine co-administrated with DTPa-containing and pneumococcal conjugate vaccines or with MenC conjugate vaccines co-administered with DTPa/Hib containing and GSK Biologicals' 10Pn-PD-DiT conjugate vaccines, and who participated in the blood sampling subset of study 10PN-PD-DIT-017:
•To evaluate the antibody persistence with respect to the MenC component of the Hib-MenC conjugate vaccine in terms of percentage of subjects with rSBA-MenC titres >= 1:8

Protection of trial subjects:

All subjects were supervised closely for at least 30 minutes following vaccination with appropriate medical treatment readily available. Vaccines were administered by qualified and trained personnel. Vaccines/products were administered only to eligible subjects that had no contraindications to any components of the vaccines. Subjects were followed-up from the time the subject consents to participate in the study until she/he is discharged.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	14 May 2009
Long term follow-up planned	Yes
Long term follow-up rationale	Efficacy
Long term follow-up duration	72 Months
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Germany: 108
Country: Number of subjects enrolled	Spain: 186
Country: Number of subjects enrolled	Poland: 306
Worldwide total number of subjects	600
EEA total number of subjects	600

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0

Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	600
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:

All subjects who received the full vaccination course corresponding to their group in the primary vaccination study 107005 and in the booster vaccination study 109507 and who were part of the blood sampling subset were asked to participate in this long-term follow up study comprising 3 time points. No vaccine was given.

Pre-assignment period milestones

Number of subjects started	600
Number of subjects completed	581

Pre-assignment subject non-completion reasons

Reason: Number of subjects	No vaccination received: 19

Period 1

Period 1 title	Long term Persistence (Visit 1)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Not blinded

Arms

Are arms mutually exclusive?	Yes
Arm title	Synflorix-Meningitec 1 Group

Arm description:

Subjects who received concomitantly in the primary study 107005:
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 2 primary doses of Meningitec intramuscularly into the lower left thigh at 2 and 4 months of age.
3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age. (In Poland, subjects were offered a third dose of Meningitec at 7 months of age to comply with national recommendations).
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Arm type	Experimental
Investigational medicinal product name	Menitorix
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age.
No vaccine was administered during this long-term follow up study.

Investigational medicinal product name	Pneumoccoccal conjugate vaccine GSK1024850A
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age. No vaccine was administered during this long-term follow up study.

Investigational medicinal product name	Infanrix Penta
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age (all countries) and as booster dose at 11-18 months of age (Germany and Poland). No vaccine was administered during this long-term follow up study

Investigational medicinal product name	Infanrix IPV
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as booster dose at 11-18 months of age (Spain) No vaccine was administered during this long-term follow up study

Arm title	Synflorix-NeisVac-C 1 Group

Arm description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 2 primary doses of Neis-Vac-C intramuscularly into the lower left thigh at 2 and 4 months of age.
3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age. (In Poland, subjects were offered a third dose of Neis-Vac-C at 7 months of age to comply with national recommendations).
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Arm type	Active comparator
Investigational medicinal product name	Menitorix
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age.
No vaccine was administered during this long-term follow up study

Investigational medicinal product name	Pneumococcal conjugate vaccine GSK1024850A
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age. No vaccine was administered during this long-term follow up study

Investigational medicinal product name	Prevenar
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age. No vaccine was administered during this long-term follow up study.

Arm title	Synflorix-Menitorix 1 Group

Arm description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age.
3 primary doses of Pediarix intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Pediarix

Arm type	Experimental
Investigational medicinal product name	Pneumococcal conjugate vaccine GSK1024850A
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age. No vaccine was administered during this long-term follow up study.

Investigational medicinal product name	Meningitec
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2 and 4 months of age and as booster dose at 11-18 months of age. No vaccine was administered during this long-term follow up study

Investigational medicinal product name	Infanrix hexa
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age (all countries) and as booster dose at 11-18 months of age (Germany and Poland). No vaccine was administered during this long-term follow up study

Arm title	Prevenar-Menitorix 1 Group

Arm description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Prevenar intramuscularly into the right thigh at 2, 4 and 6 months of age 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age.
3 primary doses of Pediarix intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Pediarix

Arm type	Experimental
Investigational medicinal product name	Pneumococcal conjugate vaccine GSK1024850A
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age. No vaccine was administered during this long-term follow up study.

Number of subjects in period 1[1]	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group
Started	144	147	149
Completed	144	147	149

Number of subjects in period 1[1]	Prevenar-Menitorix 1 Group
Started	141
Completed	141

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: Some subjects were enrolled but did not start the trial.

Period 2

Period 2 title	Long term Persistence (Visit 2)
Is this the baseline period?	No
Allocation method	Non-randomised - controlled
Blinding used	Not blinded

Arms

Are arms mutually exclusive?	Yes
Arm title	Synflorix-Meningitec 2 Group

Arm description:

Subjects who received concomitantly in the primary study 107005:
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 2 primary doses of Meningitec intramuscularly into the lower left thigh at 2 and 4 months of age.
3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
(In Poland, subjects were offered a third dose of Meningitec at 7 months of age to comply with national recommendations).
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Arm type	Experimental
Investigational medicinal product name	Menitorix
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age. No vaccine was administered during this long-term follow up study.

Arm title	Synflorix-NeisVac-C 2 Group

Arm description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 2 primary doses of Neis-Vac-C intramuscularly into the lower left thigh at 2 and 4 months of age.
3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
(In Poland, subjects were offered a third dose of Neis-Vac-C at 7 months of age to comply with national recommendations).
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Arm type	Active comparator
Investigational medicinal product name	Menitorix
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age. No vaccine was administered during this long-term follow up study.

Arm title	Synflorix-Menitorix 2 Group

Arm description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age.
3 primary doses of Pediarix intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Pediarix

Arm type	Experimental
Investigational medicinal product name	Pneumococcal conjugate vaccine GSK1024850A
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age. No vaccine was administered during this long-term follow up study.

Arm title	Prevenar-Menitorix 2 Group

Arm description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Prevenar intramuscularly into the right thigh at 2, 4 and 6 months of age 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age.
3 primary doses of Pediarix intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Pediarix

Arm type	Experimental

Investigational medicinal product name	Pneumococcal conjugate vaccine GSK1024850A
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age. No vaccine was administered during this long-term follow up study.

Number of subjects in period 2[2]	Synflorix-Meningitec 2 Group	Synflorix-NeisVac-C 2 Group	Synflorix-Menitorix 2 Group
Started	140	142	142
Completed	140	142	142

Number of subjects in period 2[2]	Prevenar-Menitorix 2 Group
Started	137
Completed	137

Notes:

[2] - The number of subjects starting the period is not consistent with the number completing the preceding period. It is expected the number of subjects starting the subsequent period will be the same as the number completing the preceding period.
Justification: Some subjects did not come back for the subsequent visits

Period 3

Period 3 title	Long term Persistence (Visit 3)
Is this the baseline period?	No
Allocation method	Non-randomised - controlled
Blinding used	Not blinded

Arms

Are arms mutually exclusive?	Yes
Arm title	Synflorix-Meningitec 3 Group

Arm description:

Subjects who received concomitantly in the primary study 107005:
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 2 primary doses of Meningitec intramuscularly into the lower left thigh at 2 and 4 months of age.
3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age. (In Poland, subjects were offered a third dose of Meningitec at 7 months of age to comply with national recommendations).
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Arm type	Experimental

Investigational medicinal product name	Menitorix
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age. No vaccine was administered during this long-term follow up study.

Arm title	Synflorix-NeisVac-C 3 Group

Arm description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 2 primary doses of Neis-Vac-C intramuscularly into the lower left thigh at 2 and 4 months of age.
3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age. (In Poland, subjects were offered a third dose of Neis-Vac-C at 7 months of age to comply with national recommendations).
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Arm type	Active comparator
Investigational medicinal product name	Menitorix
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age. No vaccine was administered during this long-term follow up study.

Arm title	Synflorix-Menitorix 3 Group

Arm description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age.
3 primary doses of Pediarix intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Pediarix

Arm type	Experimental
Investigational medicinal product name	Pneumococcal conjugate vaccine GSK1024850A
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age. No vaccine was administered during this long-term follow up study.

Arm title	Prevenar-Menitorix 3 Group

Arm description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Prevenar intramuscularly into the right thigh at 2, 4 and 6 months of age 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age.
3 primary doses of Pediarix intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Pediarix

Arm type	Experimental

Investigational medicinal product name	Pneumococcal conjugate vaccine GSK1024850A
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Intramuscular injection into the thigh as primary vaccination at 2, 4 and 6 months of age and as booster dose at 11-18 months of age. No vaccine was administered during this long-term follow up study.

Number of subjects in period 3[3]	Synflorix-Meningitec 3 Group	Synflorix-NeisVac-C 3 Group	Synflorix-Menitorix 3 Group
Started	131	138	135
Completed	131	138	135

Number of subjects in period 3[3]	Prevenar-Menitorix 3 Group
Started	135
Completed	135

Notes:

[3] - The number of subjects starting the period is not consistent with the number completing the preceding period. It is expected the number of subjects starting the subsequent period will be the same as the number completing the preceding period.
Justification: Some subjects did not come back for the subsequent visits

Baseline characteristics

Reporting groups

Reporting group title	Synflorix-Meningitec 1 Group

Reporting group description:

Subjects who received concomitantly in the primary study 107005:
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 2 primary doses of Meningitec intramuscularly into the lower left thigh at 2 and 4 months of age.
3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age. (In Poland, subjects were offered a third dose of Meningitec at 7 months of age to comply with national recommendations).
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Reporting group title	Synflorix-NeisVac-C 1 Group

Reporting group description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 2 primary doses of Neis-Vac-C intramuscularly into the lower left thigh at 2 and 4 months of age.
3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age. (In Poland, subjects were offered a third dose of Neis-Vac-C at 7 months of age to comply with national recommendations).
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Reporting group title	Synflorix-Menitorix 1 Group

Reporting group description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age.
3 primary doses of Pediarix intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Pediarix

Reporting group title	Prevenar-Menitorix 1 Group

Reporting group description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Prevenar intramuscularly into the right thigh at 2, 4 and 6 months of age 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age.
3 primary doses of Pediarix intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Pediarix

Reporting group values	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group
Number of subjects	144	147	149
Age categorical Units: Subjects			
In utero			
Preterm newborn infants (gestational age < 37 wks)			
Newborns (0-27 days)			
Infants and toddlers (28 days-23 months)			
Children (2-11 years)			
Adolescents (12-17 years)			

Adults (18-64 years)			
From 65-84 years			
85 years and over			
Age continuous			
Units: months			
arithmetic mean	37.1	37.2	37.3
standard deviation	± 1.17	± 1.2	± 1.18
Gender categorical			
Units: Subjects			
Female	71	65	86
Male	73	82	63

Reporting group values	Prevenar-Menitorix 1 Group	Total	
Number of subjects	141	581	
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	37.3		
standard deviation	± 1.28	-	
Gender categorical			
Units: Subjects			
Female	71	293	
Male	70	288	

End points

End points reporting groups

Reporting group title	Synflorix-Meningitec 1 Group

Reporting group description:

Subjects who received concomitantly in the primary study 107005:
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 2 primary doses of Meningitec intramuscularly into the lower left thigh at 2 and 4 months of age.
3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age. (In Poland, subjects were offered a third dose of Meningitec at 7 months of age to comply with national recommendations).
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Reporting group title	Synflorix-NeisVac-C 1 Group

Reporting group description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 2 primary doses of Neis-Vac-C intramuscularly into the lower left thigh at 2 and 4 months of age.
3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age. (In Poland, subjects were offered a third dose of Neis-Vac-C at 7 months of age to comply with national recommendations).
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Reporting group title	Synflorix-Menitorix 1 Group

Reporting group description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age.
3 primary doses of Pediarix intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Pediarix

Reporting group title	Prevenar-Menitorix 1 Group

Reporting group description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Prevenar intramuscularly into the right thigh at 2, 4 and 6 months of age 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age.
3 primary doses of Pediarix intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Pediarix

Reporting group title	Synflorix-Meningitec 2 Group

Reporting group description:

Subjects who received concomitantly in the primary study 107005:
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 2 primary doses of Meningitec intramuscularly into the lower left thigh at 2 and 4 months of age.
3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age. (In Poland, subjects were offered a third dose of Meningitec at 7 months of age to comply with national recommendations).
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Reporting group title	Synflorix-NeisVac-C 2 Group

Reporting group description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 2 primary doses of Neis-Vac-C intramuscularly into the lower left thigh at 2 and 4 months of age.

3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age. (In Poland, subjects were offered a third dose of Neis-Vac-C at 7 months of age to comply with national recommendations).
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Reporting group title	Synflorix-Menitorix 2 Group

Reporting group description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age.
3 primary doses of Pediarix intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Pediarix

Reporting group title	Prevenar-Menitorix 2 Group

Reporting group description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Prevenar intramuscularly into the right thigh at 2, 4 and 6 months of age 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age.
3 primary doses of Pediarix intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Pediarix

Reporting group title	Synflorix-Meningitec 3 Group

Reporting group description:

Subjects who received concomitantly in the primary study 107005:
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 2 primary doses of Meningitec intramuscularly into the lower left thigh at 2 and 4 months of age.
3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age. (In Poland, subjects were offered a third dose of Meningitec at 7 months of age to comply with national recommendations).
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Reporting group title	Synflorix-NeisVac-C 3 Group

Reporting group description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 2 primary doses of Neis-Vac-C intramuscularly into the lower left thigh at 2 and 4 months of age.
3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age. (In Poland, subjects were offered a third dose of Neis-Vac-C at 7 months of age to comply with national recommendations).
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Reporting group title	Synflorix-Menitorix 3 Group

Reporting group description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age.
3 primary doses of Pediarix intramuscularly into the upper left thigh at 2, 4 and 6 months of age.
During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Pediarix

Reporting group title	Prevenar-Menitorix 3 Group

Reporting group description:

Subjects who received concomitantly in the primary study (107005):
3 primary doses of Prevenar intramuscularly into the right thigh at 2, 4 and 6 months of age 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age.
3 primary doses of Pediarix intramuscularly into the upper left thigh at 2, 4 and 6 months of age.

During the booster study (109507), subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Pediarix

Primary: Number of subjects with Meningoccoccal serogroup C serum bactericidal titers using rabitt complement (rSBA-MenC) equal to or above the cut-off value 1:8

End point title	Number of subjects with Meningoccoccal serogroup C serum bactericidal titers using rabitt complement (rSBA-MenC) equal to or above the cut-off value 1:8[1]

End point description:

End point type	Primary

End point timeframe:

At 3, 4 and 6 years of age

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: The scope of this primary endpoint was descriptive, no statistical analyses were conducted.

End point values	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group	Prevenar-Menitorix 1 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	139	146	143	137
Units: Subjects	120	144	127	113

End point values	Synflorix-Meningitec 2 Group	Synflorix-NeisVac-C 2 Group	Synflorix-Menitorix 2 Group	Prevenar-Menitorix 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	134	137	128	128
Units: Subjects	97	132	108	98

End point values	Synflorix-Meningitec 3 Group	Synflorix-NeisVac-C 3 Group	Synflorix-Menitorix 3 Group	Prevenar-Menitorix 3 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	128	137	130	134
Units: Subjects	31	55	50	34

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-polyribosyl -ribitol phosphate (Anti-PRP)

and antibody concentration equal to or above cut-off

End point title	Number of subjects with anti-polyribosyl -ribitol phosphate (Anti-PRP) and antibody concentration equal to or above cut-off

End point description:

End point type	Secondary

End point timeframe:

At 3, 4 and 6 years of age. The cut-off were 0.15 ug/mL and 1.0 ug/mL

End point values	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group	Prevenar-Menitorix 1 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	132	139	137	138
Units: Subjects				
≥ 0.15 µg/mL	132	139	137	138
≥ 1.0 µg/mL	101	105	127	115

End point values	Synflorix-Meningitec 2 Group	Synflorix-NeisVac-C 2 Group	Synflorix-Menitorix 2 Group	Prevenar-Menitorix 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	134	136	130	133
Units: Subjects				
≥ 0.15 µg/mL	133	134	130	132
≥ 1.0 µg/mL	88	85	117	106

End point values	Synflorix-Meningitec 3 Group	Synflorix-NeisVac-C 3 Group	Synflorix-Menitorix 3 Group	Prevenar-Menitorix 3 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	127	134	130	132
Units: Subjects				
≥ 0.15 µg/mL	126	132	130	132
≥ 1.0 µg/mL	85	77	110	100

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with pneumoccoccal serotypes concentration equal to and above the cut-off values

End point title	Number of subjects with pneumoccoccal serotypes

	concentration equal to and above the cut-off values

End point description:

End point type	Secondary

End point timeframe:

At 3, 4 and 6 years of age

End point values	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group	Prevenar-Menitorix 1 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	141	146	144	140
Units: Subjects				
Anti-1	138	143	135	83
Anti-4	138	141	140	133
Anti-5	140	144	142	101
Anti-6B	137	143	139	137
Anti-7F	141	146	141	68
Anti-9V	138	144	141	139
Anti14	141	146	144	140
Anti-18 C	141	146	140	139
Anti-19F	141	146	144	137
Anti-23	140	145	140	139

End point values	Synflorix-Meningitec 2 Group	Synflorix-NeisVac-C 2 Group	Synflorix-Menitorix 2 Group	Prevenar-Menitorix 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	136	138	133	136
Units: Subjects				
Anti-1	130	135	124	100
Anti-4	130	133	127	132
Anti-5	136	137	131	115
Anti-6B	131	134	125	132
Anti-7F	135	138	130	85
Anti-9V	135	135	128	135
Anti14	136	138	132	136
Anti-18 C	136	138	130	136
Anti-19F	135	136	133	136
Anti-23	133	137	126	134

End point values	Synflorix-Meningitec 3 Group	Synflorix-NeisVac-C 3 Group	Synflorix-Menitorix 3 Group	Prevenar-Menitorix 3 Group

Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	128	137	130	133
Units: Subjects				
Anti-1	121	129	114	101
Anti-4	108	123	106	126
Anti-5	125	131	124	112
Anti-6B	125	133	128	130
Anti-7F	125	134	129	113
Anti-9V	125	133	126	131
Anti14	128	137	130	133
Anti-18 C	127	136	125	128
Anti-19F	128	137	130	133
Anti-23	127	136	128	133

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with opsonophagocytic activity

End point title	Number of subjects with opsonophagocytic activity

End point description:

End point type	Secondary

End point timeframe:

At 3 years of age

End point values	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group	Prevenar-Menitorix 1 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	131	131	131	132
Units: Subjects				
Opsono-1	30	32	29	14
Opsono-4	54	48	43	77
Opsono-5	73	47	55	5
Opsono-6B	84	81	78	115
Opsono-7F	128	130	131	126
Opsono-9V	127	131	127	124
Opsono-14	110	118	106	112
Opsono-18C	51	68	44	48
Opsono-19F	105	108	89	91
Opsono-23F	106	112	113	129

Statistical analyses

No statistical analyses for this end point

Secondary: Antibody concentrations against vaccine pneumococcal serotypes

End point title	Antibody concentrations against vaccine pneumococcal serotypes

End point description:

End point type	Secondary

End point timeframe:

At 3, 4 and 6 years of age

End point values	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group	Prevenar-Menitorix 1 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	141	146	144	140
Units: µg/mL				
geometric mean (confidence interval 95%)				
Anti-1	0.26 (0.22 to 0.3)	0.23 (0.19 to 0.26)	0.21 (0.18 to 0.25)	0.07 (0.06 to 0.09)
Anti-4	0.27 (0.23 to 0.32)	0.23 (0.2 to 0.27)	0.23 (0.2 to 0.27)	0.35 (0.29 to 0.42)
Anti-5	0.46 (0.39 to 0.54)	0.39 (0.33 to 0.46)	0.41 (0.35 to 0.5)	0.09 (0.07 to 0.1)
Anti-6B	0.59 (0.45 to 0.76)	0.56 (0.45 to 0.71)	0.63 (0.47 to 0.84)	0.95 (0.77 to 1.18)
Anti-7F	0.58 (0.5 to 0.67)	0.51 (0.43 to 0.59)	0.54 (0.45 to 0.66)	0.07 (0.05 to 0.09)
Anti-9V	0.6 (0.49 to 0.73)	0.54 (0.44 to 0.66)	0.47 (0.39 to 0.57)	0.7 (0.57 to 0.85)
Anti-14	1.33 (1.04 to 1.7)	1.09 (0.88 to 1.35)	1 (0.8 to 1.25)	1.48 (1.23 to 1.78)
Anti-18C	0.6 (0.5 to 0.71)	0.84 (0.73 to 0.97)	0.59 (0.48 to 0.71)	0.59 (0.5 to 0.7)
Anti-19F	2.06 (1.58 to 2.69)	1.63 (1.27 to 2.09)	1.35 (1.05 to 1.72)	1.48 (1.07 to 2.05)
Anti-23F	0.73 (0.58 to 0.92)	0.69 (0.55 to 0.88)	0.62 (0.46 to 0.82)	1.36 (1.07 to 1.73)

End point values	Synflorix-Meningitec 2 Group	Synflorix-NeisVac-C 2 Group	Synflorix-Menitorix 2 Group	Prevenar-Menitorix 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	136	138	133	136
Units: µg/mL				
geometric mean (confidence interval 95%)				
Anti-1	0.22 (0.19 to 0.27)	0.21 (0.17 to 0.26)	0.18 (0.15 to 0.21)	0.08 (0.07 to 0.1)
Anti-4	0.22 (0.19 to 0.26)	0.21 (0.18 to 0.25)	0.2 (0.17 to 0.24)	0.32 (0.27 to 0.39)

Anti-5	0.47 (0.37 to 0.59)	0.36 (0.3 to 0.42)	0.34 (0.28 to 0.42)	0.1 (0.08 to 0.11)
Anti-6B	0.74 (0.53 to 1.01)	0.65 (0.49 to 0.86)	0.78 (0.57 to 1.06)	0.99 (0.76 to 1.29)
Anti-7F	0.51 (0.41 to 0.63)	0.44 (0.37 to 0.52)	0.46 (0.37 to 0.58)	0.09 (0.07 to 0.12)
Anti-9V	0.52 (0.42 to 0.65)	0.61 (0.46 to 0.81)	0.54 (0.4 to 0.72)	0.72 (0.57 to 0.91)
Anti-14	1.51 (1.18 to 1.92)	1.57 (1.25 to 1.97)	1.41 (1.1 to 1.82)	1.71 (1.38 to 2.12)
Anti-18C	0.49 (0.41 to 0.59)	0.81 (0.67 to 0.98)	0.6 (0.48 to 0.75)	0.49 (0.4 to 0.59)
Anti-19F	2.66 (1.92 to 3.67)	2.36 (1.7 to 3.29)	2.5 (1.8 to 3.48)	2.41 (1.78 to 3.25)
Anti-23F	0.98 (0.71 to 1.35)	0.84 (0.65 to 1.1)	0.98 (0.69 to 1.39)	1.56 (1.16 to 2.09)

End point values	Synflorix-Meningitec 3 Group	Synflorix-NeisVac-C 3 Group	Synflorix-Menitorix 3 Group	Prevenar-Menitorix 3 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	128	137	131	134
Units: µg/mL				
geometric mean (confidence interval 95%)				
Anti-1	0.19 (0.16 to 0.23)	0.22 (0.17 to 0.27)	0.2 (0.15 to 0.26)	0.11 (1.38 to 2.16)
Anti-4	0.14 (0.11 to 0.17)	0.14 (0.11 to 0.17)	0.12 (0.1 to 0.15)	0.24 (0.18 to 0.32)
Anti-5	0.37 (0.3 to 0.45)	0.31 (0.26 to 0.37)	0.3 (0.25 to 0.37)	0.13 (0.51 to 0.83)
Anti-6B	1.71 (1.32 to 2.23)	1.13 (0.87 to 1.48)	1.28 (1 to 1.64)	1.73 (2.08 to 3.23)
Anti-7F	0.61 (0.49 to 0.78)	0.59 (0.46 to 0.74)	0.64 (0.5 to 0.82)	0.24 (0.39 to 0.62)
Anti-9V	0.76 (0.56 to 1.01)	0.67 (0.51 to 0.88)	0.57 (0.42 to 0.79)	0.65 (2.48 to 3.91)
Anti-14	2.84 (2.17 to 3.73)	2.22 (1.72 to 2.86)	2.81 (2.07 to 3.81)	2.59 (2.32 to 3.86)
Anti-18C	0.52 (0.41 to 0.66)	0.75 (0.6 to 0.94)	0.56 (0.43 to 0.74)	0.49 (0.09 to 0.13)
Anti-19F	3.91 (3.01 to 5.1)	3.94 (2.99 to 5.2)	4.24 (3.3 to 5.45)	3.11 (0.19 to 0.29)
Anti-23F	1.71 (1.26 to 2.3)	1.7 (1.27 to 2.26)	1.41 (1.06 to 1.87)	2.99 (0.11 to 0.15)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-protein D (anti-PD) antibody concentrations equal or above cut off values

End point title	Number of subjects with anti-protein D (anti-PD) antibody concentrations equal or above cut off values

End point description:

End point type	Secondary

End point timeframe:

At 3, 4 and 6 years of age

End point values	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group	Prevenar-Menitorix 1 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	140	145	144	139
Units: Subjects				
Anti-PD	132	137	136	69

End point values	Synflorix-Meningitec 2 Group	Synflorix-NeisVac-C 2 Group	Synflorix-Menitorix 2 Group	Prevenar-Menitorix 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	136	138	129	132
Units: Subjects				
Anti-PD	127	128	115	75

End point values	Synflorix-Meningitec 3 Group	Synflorix-NeisVac-C 3 Group	Synflorix-Menitorix 3 Group	Prevenar-Menitorix 3 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	128	137	131	133
Units: Subjects				
Anti-PD	113	119	113	74

Statistical analyses

No statistical analyses for this end point

Secondary: Concentration of antibodies against protein D

End point title	Concentration of antibodies against protein D

End point description:

End point type	Secondary

End point timeframe:

At 3, 4 and 6 years of age

End point values	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group	Prevenar-Menitorix 1 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	140	145	144	139
Units: EL.U/mL				
geometric mean (confidence interval 95%)				
Anti-PD	494.6 (414 to 591)	444.8 (373.2 to 530.1)	439.8 (366.4 to 527.9)	100.3 (87.6 to 114.9)

End point values	Synflorix-Meningitec 2 Group	Synflorix-NeisVac-C 2 Group	Synflorix-Menitorix 2 Group	Prevenar-Menitorix 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	136	138	129	132
Units: EL.U/mL				
geometric mean (confidence interval 95%)				
Anti-PD	401.1 (338.3 to 475.6)	387.2 (326.7 to 458.9)	334.8 (277.7 to 403.7)	107.9 (94.6 to 123.1)

End point values	Synflorix-Meningitec 3 Group	Synflorix-NeisVac-C 3 Group	Synflorix-Menitorix 3 Group	Prevenar-Menitorix 3 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	128	137	131	133
Units: EL.U/mL				
geometric mean (confidence interval 95%)				
Anti-PD	284.7 (239.5 to 338.4)	278 (236.3 to 327.1)	266.1 (222.2 to 318.8)	105.2 (92.4 to 119.8)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-hepatitis B surface antigen (anti-HBs) antibody concentrations equal to or above cut-off values

End point title	Number of subjects with anti-hepatitis B surface antigen (anti-HBs) antibody concentrations equal to or above cut-off values

End point description:

End point type	Secondary

End point timeframe:
At 3 years of age

End point values	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group	Prevenar-Menitorix 1 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	107	102	105	102
Units: Subjects				
≥ 10 mIU/mL	105	96	102	99
≥ 100 mIU/mL	77	81	74	74

Statistical analyses

No statistical analyses for this end point

Secondary: Anti-hepatitis B surface antigen (anti-HBs) antibody concentrations

End point title	Anti-hepatitis B surface antigen (anti-HBs) antibody concentrations

End point description:

End point type	Secondary

End point timeframe:
At 3 years of age

End point values	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group	Prevenar-Menitorix 1 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	107	102	105	102
Units: mIU/mL				
geometric mean (confidence interval 95%)				
Anti-HBs antibody concentrations	367.5 (256.8 to 525.9)	325.7 (228.3 to 464.7)	288.1 (198.7 to 417.9)	371.4 (254.1 to 542.8)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with Meningoccoccal serogroup C serum bactericidal titers using rabitt complement (rSBA-MenC) equal to or above cut-off value 1:128

End point title	Number of subjects with Meningoccoccal serogroup C serum bactericidal titers using rabitt complement (rSBA-MenC) equal

	to or above cut-off value 1:128

End point description:

End point type	Secondary

End point timeframe:

At 3, 4 and 6 years of age

End point values	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group	Prevenar-Menitorix 1 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	139	146	143	137
Units: Subjects				
rSBA-MenC	69	109	98	68

End point values	Synflorix-Meningitec 2 Group	Synflorix-NeisVac-C 2 Group	Synflorix-Menitorix 2 Group	Prevenar-Menitorix 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	134	137	128	128
Units: Subjects				
rSBA-MenC	49	79	75	58

End point values	Synflorix-Meningitec 3 Group	Synflorix-NeisVac-C 3 Group	Synflorix-Menitorix 3 Group	Prevenar-Menitorix 3 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	128	137	130	134
Units: Subjects				
rSBA-MenC	11	19	15	14

Statistical analyses

No statistical analyses for this end point

Secondary: Meningoccoccal serogroup C serum bactericidal (rSBA-MenC) titers

End point title	Meningoccoccal serogroup C serum bactericidal (rSBA-MenC) titers

End point description:

End point type	Secondary

End point timeframe:

At 3, 4 and 6 years of age

End point values	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group	Prevenar-Menitorix 1 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	139	146	143	137
Units: Titer				
geometric mean (confidence interval 95%)				
rSBA-MenC titers	100.5 (75.6 to 133.8)	235.3 (189.1 to 292.7)	167.5 (126 to 222.7)	84 (61.6 to 114.6)

End point values	Synflorix-Meningitec 2 Group	Synflorix-NeisVac-C 2 Group	Synflorix-Menitorix 2 Group	Prevenar-Menitorix 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	134	137	128	128
Units: Titer				
geometric mean (confidence interval 95%)				
rSBA-MenC titers	45.3 (33.2 to 61.8)	146.8 (116.2 to 185.4)	112.4 (81.8 to 154.6)	68.1 (48.4 to 95.9)

End point values	Synflorix-Meningitec 3 Group	Synflorix-NeisVac-C 3 Group	Synflorix-Menitorix 3 Group	Prevenar-Menitorix 3 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	128	137	130	134
Units: Titer				
geometric mean (confidence interval 95%)				
rSBA-MenC titers	7.2 (5.8 to 8.9)	11.9 (8.9 to 16)	10.1 (7.9 to 12.9)	8.5 (6.6 to 11.1)

Statistical analyses

No statistical analyses for this end point

Secondary: Anti-polyribosyl -ribitol phosphate (anti-PRP) concentrations

End point title	Anti-polyribosyl -ribitol phosphate (anti-PRP) concentrations

End point description:

End point type	Secondary

End point timeframe:

At 3, 4 and 6 years of age

End point values	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group	Prevenar-Menitorix 1 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	132	139	137	138
Units: µg/mL				
geometric mean (confidence interval 95%)				
Anti-PRP concentrations	2.293 (1.87 to 2.812)	2.222 (1.794 to 2.752)	4.177 (3.427 to 5.092)	3.636 (2.957 to 4.471)

End point values	Synflorix-Meningitec 2 Group	Synflorix-NeisVac-C 2 Group	Synflorix-Menitorix 2 Group	Prevenar-Menitorix 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	134	136	130	133
Units: µg/mL				
geometric mean (confidence interval 95%)				
Anti-PRP concentrations	1.767 (1.454 to 2.146)	1.738 (1.386 to 2.178)	3.804 (3.092 to 4.679)	2.805 (2.297 to 3.425)

End point values	Synflorix-Meningitec 3 Group	Synflorix-NeisVac-C 3 Group	Synflorix-Menitorix 3 Group	Prevenar-Menitorix 3 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	127	134	130	132
Units: µg/mL				
geometric mean (confidence interval 95%)				
Anti-PRP concentrations	1.655 (1.339 to 2.045)	1.647 (1.298 to 2.09)	2.947 (2.396 to 3.624)	2.558 (2.065 to 3.168)

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:

End point type	Secondary

End point timeframe:

At 3, 4 and 6 years of age

End point values	Synflorix-Meningitec 1 Group	Synflorix-NeisVac-C 1 Group	Synflorix-Menitorix 1 Group	Prevenar-Menitorix 1 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	144	147	149	141
Units: Subjects				
SAE(s)	0	0	0	0
Related SAE(s)	0	0	0	0

End point values	Synflorix-Meningitec 2 Group	Synflorix-NeisVac-C 2 Group	Synflorix-Menitorix 2 Group	Prevenar-Menitorix 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	140	142	142	137
Units: Subjects				
SAE(s)	0	0	0	0
Related SAE(s)	0	0	0	0

End point values	Synflorix-Meningitec 3 Group	Synflorix-NeisVac-C 3 Group	Synflorix-Menitorix 3 Group	Prevenar-Menitorix 3 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	131	138	135	135
Units: Subjects				
SAE(s)	0	0	0	0
Related SAE(s)	0	0	0	0

Statistical analyses

No statistical analyses for this end point

Secondary: Anti-hepatitis B surface antigen (anti-HBs) antibody concentrations

End point title	Anti-hepatitis B surface antigen (anti-HBs) antibody concentrations

End point description:

End point type	Secondary

End point timeframe:

At 4 years of age

End point values	Synflorix-Meningitec 2 Group	Synflorix-NeisVac-C 2 Group	Synflorix-Menitorix 2 Group	Prevenar-Menitorix 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	95	102	98	98
Units: mIU/mL				
geometric mean (confidence interval 95%)				
Anti-HBs antibody concentrations	273.5 (183.2 to 408.3)	238.8 (165.6 to 344.3)	174.6 (114.5 to 266.4)	284.7 (190.7 to 425.1)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with anti-hepatitis B surface antigen (anti-HBs) antibody concentrations equal to or above cut-off values

End point title	Number of subjects with anti-hepatitis B surface antigen (anti-HBs) antibody concentrations equal to or above cut-off values

End point description:

Cut-off values assessed were defined as equal to or above 10 milli-international units per milliliter (mIU/mL) or equal to or above 100 mIU/mL.

End point type	Secondary

End point timeframe:

At 4 years of age

End point values	Synflorix-Meningitec 2 Group	Synflorix-NeisVac-C 2 Group	Synflorix-Menitorix 2 Group	Prevenar-Menitorix 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	95	102	98	98
Units: Subjects				
≥ 10 mIU/mL	86	93	86	90
≥ 100 mIU/mL	67	72	62	72

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with opsonophagocytic activity

End point title	Number of subjects with opsonophagocytic activity

End point description:

Opsonophagocytic activity was measured by a killing-assay. The results were presented as the dilution

of serum (opsonic titer) able to sustain 50% killing of live pneumococci under the assay conditions. The cut-off of the assay was an opsonic titer of 8.

End point type	Secondary

End point timeframe:

At 4 years of age

End point values	Synflorix-Meningitec 2 Group	Synflorix-NeisVac-C 2 Group	Synflorix-Menitorix 2 Group	Prevenar-Menitorix 2 Group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	131	134	123	128
Units: Subjects				
Opsono-1 (n=131;134;123;128)	33	32	20	12
Opsono-4 (N=127;132;118;126)	49	50	36	72
Opsono-5 (N=129;132;122;128)	65	46	40	5
Opsono-6B (N=128;129;122;126)	93	97	101	111
Opsono-7F (N=131;134;123;128)	131	134	123	126
Opsono-9V (N=130;132;120;126)	125	130	118	122
Opsono-14 (N=126;128;114;121)	96	105	95	110
Opsono-18C (N=113;118;113;118)	34	56	46	45
Opsono-19F (N=131;133;123;128)	87	88	80	89
Opsono-23F (N=129133;119;121)	98	108	86	111

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information[1]

Timeframe for reporting adverse events:

From last study contact of the booster study at 17-24 months of age (NCT00463437) until 6 years of age

Adverse event reporting additional description:

Since no vaccine was administered during the study, other adverse events were not assessed.

Assessment type	Non-systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	16.0

Reporting groups

Reporting group title	Synflorix-Meningitec Group

Reporting group description:

Subjects who received concomitantly in the primary study (NCT00334334): 3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age, 2 primary doses of Meningitec intramuscularly into the lower left thigh at 2 and 4 months of age and 3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age. (In Poland subjects were offered a third dose of Meningitec at 7 months of age to comply with national recommendations). During the booster study (NCT00463437) subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Reporting group title	Synflorix-NeisVac-C Group

Reporting group description:

Subjects who received concomitantly in the primary study (NCT00334334): 3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age, 2 primary doses of Neis-Vac-C intramuscularly into the lower left thigh at 2 and 4 months of age and 3 primary doses of Infanrix hexa intramuscularly into the upper left thigh at 2, 4 and 6 months of age. (In Poland subjects were offered a third dose of Neis-Vac-C at 7 months of age to comply with national recommendations). During the booster study (NCT00463437) subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV/Hib was given instead of Infanrix hexa.

Reporting group title	Synflorix-Menitorix Group

Reporting group description:

Subjects who received concomitantly in the primary study (NCT00334334): 3 primary doses of Synflorix intramuscularly into the right thigh at 2, 4 and 6 months of age, 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age and 3 primary doses of Infanrix penta intramuscularly into the upper left thigh at 2, 4 and 6 months of age. During the booster study (NCT00463437) subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Infanrix penta.

Reporting group title	Prevenar-Menitorix Group

Reporting group description:

Subjects who received concomitantly in the primary study (NCT00334334): 3 primary doses of Prevenar intramuscularly into the right thigh at 2, 4 and 6 months of age, 3 primary doses of Menitorix intramuscularly into the lower left thigh at 2, 4 and 6 months of age and 3 primary doses of Infanrix penta intramuscularly into the upper left thigh at 2, 4 and 6 months of age. During the booster study (NCT00463437) subjects received the same vaccines as during the primary study at 11-18 months of age, with the exception of Spain, where Infanrix IPV was given instead of Infanrix penta.

Serious adverse events	Synflorix-Meningitec Group	Synflorix-NeisVac-C Group	Synflorix-Menitorix Group
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 144 (0.00%)	0 / 147 (0.00%)	0 / 149 (0.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0

Serious adverse events	Prevenar-Menitorix Group		
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 141 (0.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		

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

Non-serious adverse events	Synflorix-Meningitec Group	Synflorix-NeisVac-C Group	Synflorix-Menitorix Group
Total subjects affected by non-serious adverse events			
subjects affected / exposed	0 / 144 (0.00%)	0 / 147 (0.00%)	0 / 149 (0.00%)

Non-serious adverse events	Prevenar-Menitorix Group		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	0 / 141 (0.00%)		

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: No non-serious adverse events were recorded in this study.

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

None reported