Clinical trial results:
A Phase 3, Randomized, Double-blind, Third Party Unblind Trial to Evaluate the Safety and Immunogenicity of a 20-Valent Pneumococcal Conjugate Vaccine in Healthy Japanese Infants

Summary

EudraCT number	2022-001146-38
Trial protocol	Outside EU/EEA
Global end of trial date	02 April 2022

Results information

Result version number	v1
This version publication date	16 October 2022
First version publication date	16 October 2022

Trial information

Trial identification

Sponsor protocol code	B7471016

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT04530838
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Pfizer Inc.
Sponsor organisation address	235 E 42nd Street, New York, United States, NY 10017
Public contact	Pfizer ClinicalTrials.gov Call Center, Pfizer Inc., 001 18007181021, ClinicalTrials.gov_Inquiries@pfizer.com
Scientific contact	Pfizer ClinicalTrials.gov Call Center, Pfizer Inc., 001 18007181021, ClinicalTrials.gov_Inquiries@pfizer.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	21 April 2022
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	02 April 2022
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

Safety: To describe the safety profile of 20vPnC by both SC injection and IM injection.
Immunogenicity: To demonstrate the percentage of subjects with predefined serotype-specific IgG concentrations for the 13 serotypes in the 20vPnC SC group are noninferior to the percentage of the corresponding serotypes in the 13vPnC SC group at 1 month after Dose 3
To demonstrate the percentage of subjects with predefined serotype-specific IgG concentrations for the 7 additional serotypes in the 20vPnC SC group are noninferior to the lowest percentage among the 13 serotypes in the 13vPnC SC group at 1 month after Dose 3
To describe the immune responses to 20 serotypes induced by 20vPnC given by IM injection at 1 month after Dose 3

Protection of trial subjects:

The study was in compliance with the ethical principles derived from the Declaration of Helsinki and in compliance with all International Council for Harmonisation (ICH) Good Clinical Practice (GCP) Guidelines. All the local regulatory requirements pertinent to safety of trial subjects were followed.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	16 September 2020
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Japan: 668
Worldwide total number of subjects	668
EEA total number of subjects	0

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	668
Children (2-11 years)	0
Adolescents (12-17 years)	0

Adults (18-64 years)	0
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

A total of 668 subjects were enrolled and randomized in the study. One subject did not receive any treatment. One subject receive vaccination through route which was not as per randomization. Hence, data of these subjects were excluded from analysis.

Period 1

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

Arms

Are arms mutually exclusive?	Yes
Arm title	20vPnC (SC)

Arm description:

Subjects received 4 doses of 0.5 millilitre (mL) 20-valent Pneumococcal Conjugate Vaccine (20vPnC) subcutaneously (SC) into the anterolateral thigh. The time interval between Vaccination 1, 2 and 3 was 4 to 8 weeks from the previous vaccination. Subjects completed Vaccination 1, 2 and 3 by 12 months of age. Vaccination 4 was administered at least after 60 days of Vaccination 3.

Arm type	Experimental
Investigational medicinal product name	20-Valent Pneumococcal Conjugate Vaccine
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Subjects received 0.5 mL dose of 20vPnC subcutaneously on Visits 1, 2, 3, and 5 with Vaccination 1, 2, 3, and 4, respectively.

Arm title	13vPnC (SC)

Arm description:

Subjects received 4 doses of 0.5 mL 13-valent Pneumococcal Conjugate Vaccine (13vPnC) SC into the anterolateral thigh. The time interval between Vaccination 1, 2 and 3 was 4 to 8 weeks from the previous vaccination. Subjects completed Vaccination 1, 2 and 3 by 12 months of age. Vaccination 4 was administered at least after 60 days of Vaccination 3.

Arm type	Experimental
Investigational medicinal product name	13-Valent Pneumococcal Conjugate Vaccine
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Subjects received 0.5 mL dose of 13vPnC subcutaneously on Visits 1, 2, 3, and 5 with Vaccination 1, 2, 3, and 4, respectively.

Arm title	20vPnC (IM)

Arm description:

Subjects received 4 doses of 0.5 mL 20vPnC intramuscularly (IM) into the anterolateral thigh muscle. The time interval between Vaccination 1, 2 and 3 was 4 to 8 weeks from the previous vaccination. Subjects completed Vaccination 1, 2 and 3 by 12 months of age. Vaccination 4 was administered at least

after 60 days of Vaccination 3.

Arm type	Experimental
Investigational medicinal product name	20-Valent Pneumococcal Conjugate Vaccine
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Subjects received 0.5 mL dose of 20vPnC intramuscularly on Visits 1, 2, 3, and 5 with Vaccination 1, 2, 3, and 4, respectively.

Number of subjects in period 1[1]	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)
Started	225	224	217
Completed	217	220	211
Not completed	8	4	6
Physician decision	-	-	1
No longer meets eligibility criteria	1	-	2
Adverse event, non-fatal	-	1	-
Death	-	-	1
Unspecified	2	1	-
Withdrawal by parent/guardian	5	2	2

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 total of 668 subjects were enrolled and randomized in the study. One subject did not receive any treatment. One subject receive vaccination through route which was not as per randomization. Hence, data of these subjects were excluded from analysis.

Baseline characteristics

Reporting groups	
Reporting group title	20vPnC (SC)
Reporting group description:	
Subjects received 4 doses of 0.5 millilitre (mL) 20-valent Pneumococcal Conjugate Vaccine (20vPnC) subcutaneously (SC) into the anterolateral thigh. The time interval between Vaccination 1, 2 and 3 was 4 to 8 weeks from the previous vaccination. Subjects completed Vaccination 1, 2 and 3 by 12 months of age. Vaccination 4 was administered at least after 60 days of Vaccination 3.	
Reporting group title	13vPnC (SC)
Reporting group description:	
Subjects received 4 doses of 0.5 mL 13-valent Pneumococcal Conjugate Vaccine (13vPnC) SC into the anterolateral thigh. The time interval between Vaccination 1, 2 and 3 was 4 to 8 weeks from the previous vaccination. Subjects completed Vaccination 1, 2 and 3 by 12 months of age. Vaccination 4 was administered at least after 60 days of Vaccination 3.	
Reporting group title	20vPnC (IM)
Reporting group description:	
Subjects received 4 doses of 0.5 mL 20vPnC intramuscularly (IM) into the anterolateral thigh muscle. The time interval between Vaccination 1, 2 and 3 was 4 to 8 weeks from the previous vaccination. Subjects completed Vaccination 1, 2 and 3 by 12 months of age. Vaccination 4 was administered at least after 60 days of Vaccination 3.	

Reporting group values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)
Number of subjects	225	224	217
Age Categorical Units: Subjects			
In utero	0	0	0
Preterm newborn infants (gestational age < 37 wks)	0	0	0
Newborns (0-27 days)	0	0	0
Infants and toddlers (28 days-23 months)	225	224	217
Children (2-11 years)	0	0	0
Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	0	0	0
From 65-84 years	0	0	0
85 years and over	0	0	0
Age Continuous Units: months			
arithmetic mean	2.4	2.4	2.4
standard deviation	± 0.33	± 0.40	± 0.42
Gender Categorical Units: Subjects			
Female	117	114	106
Male	108	110	111
Race Units: Subjects			
Asian	225	224	217
Ethnicity Units: Subjects			
Non-Hispanic/non-Latino	225	224	217

Reporting group values	Total		
Number of subjects	666		
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)	666		
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			
standard deviation	-		
Gender Categorical Units: Subjects			
Female	337		
Male	329		
Race Units: Subjects			
Asian	666		
Ethnicity Units: Subjects			
Non-Hispanic/non-Latino	666		

End points

End points reporting groups

Reporting group title	20vPnC (SC)

Reporting group description:

Subjects received 4 doses of 0.5 millilitre (mL) 20-valent Pneumococcal Conjugate Vaccine (20vPnC) subcutaneously (SC) into the anterolateral thigh. The time interval between Vaccination 1, 2 and 3 was 4 to 8 weeks from the previous vaccination. Subjects completed Vaccination 1, 2 and 3 by 12 months of age. Vaccination 4 was administered at least after 60 days of Vaccination 3.

Reporting group title	13vPnC (SC)

Reporting group description:

Subjects received 4 doses of 0.5 mL 13-valent Pneumococcal Conjugate Vaccine (13vPnC) SC into the anterolateral thigh. The time interval between Vaccination 1, 2 and 3 was 4 to 8 weeks from the previous vaccination. Subjects completed Vaccination 1, 2 and 3 by 12 months of age. Vaccination 4 was administered at least after 60 days of Vaccination 3.

Reporting group title	20vPnC (IM)

Reporting group description:

Subjects received 4 doses of 0.5 mL 20vPnC intramuscularly (IM) into the anterolateral thigh muscle. The time interval between Vaccination 1, 2 and 3 was 4 to 8 weeks from the previous vaccination. Subjects completed Vaccination 1, 2 and 3 by 12 months of age. Vaccination 4 was administered at least after 60 days of Vaccination 3.

Primary: Percentage of Subjects With Local Reactions (LR) Within 7 Days After Vaccination 1

End point title	Percentage of Subjects With Local Reactions (LR) Within 7 Days After Vaccination 1[1]

End point description:

Local reactions included pain at injection site, redness and swelling were measured and recorded in measuring device (caliper) units. 1 measuring device unit =0.5 centimetre (cm). Pain at injection site was graded as mild: hurts if gently touched; moderate: hurts if gently touched with crying; severe: limited limb movement. Redness and swelling were graded as mild: >0 to 2.0 cm; moderate >2.0 to 7.0 cm; and severe: >7.0 cm. Safety population included all the subjects who received at least 1 dose of the investigational product (IP) with safety follow up after any vaccination.

End point type	Primary

End point timeframe:

Within 7 Days after Vaccination 1

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: Only descriptive data was planned to be analysed for this endpoint.

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	225	224	217	
Units: Percentage of subjects				
number (confidence interval 95%)				
Redness: Mild	58.2 (51.5 to 64.7)	51.3 (44.6 to 58.1)	26.3 (20.5 to 32.7)	
Redness: Moderate	20.0 (15.0 to 25.8)	23.7 (18.3 to 29.8)	11.1 (7.2 to 16.0)	
Redness: Severe	0 (0.0 to 1.6)	0 (0.0 to 1.6)	0 (0.0 to 1.7)	
Swelling: Mild	48.9 (42.2 to 55.6)	42.9 (36.3 to 49.6)	17.5 (12.7 to 23.2)	

Swelling: Moderate	19.6 (14.6 to 25.3)	23.2 (17.9 to 29.3)	11.1 (7.2 to 16.0)	
Swelling: Severe	0 (0.0 to 1.6)	0 (0.0 to 1.6)	0 (0.0 to 1.7)	
Pain at the injection site: Mild	15.6 (11.1 to 21.0)	13.4 (9.2 to 18.6)	12.4 (8.4 to 17.6)	
Pain at the injection site: Moderate	1.8 (0.5 to 4.5)	2.7 (1.0 to 5.7)	3.2 (1.3 to 6.5)	
Pain at the injection site: Severe	0 (0.0 to 1.6)	0 (0.0 to 1.6)	0.5 (0.0 to 2.5)	

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects With Local Reactions Within 7 Days After Vaccination 2

End point title	Percentage of Subjects With Local Reactions Within 7 Days After Vaccination 2[2]

End point description:

Local reactions included pain at injection site, redness and swelling were measured and recorded in measuring device (caliper) units. 1 measuring device unit =0.5 cm. Pain at injection site was graded as mild: hurts if gently touched; moderate: hurts if gently touched with crying; severe: limited limb movement. Redness and swelling were graded as mild: >0 to 2.0 cm; moderate >2.0 to 7.0 cm; and severe: >7.0 cm. Safety population included all the subjects who received at least 1 dose of the IP with safety follow up after any vaccination. Here, number of subjects analysed = number of subjects with any e-diary data reported after Vaccination 2.

End point type	Primary

End point timeframe:

Within 7 Days after Vaccination 2

Notes:

[2] - 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: Only descriptive data was planned to be analysed for this endpoint.

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	223	222	215	
Units: Percentage of subjects				
number (confidence interval 95%)				
Redness: Mild	52.9 (46.1 to 59.6)	53.2 (46.4 to 59.9)	24.7 (19.0 to 31.0)	
Redness: Moderate	23.3 (17.9 to 29.4)	31.1 (25.1 to 37.6)	7.0 (4.0 to 11.2)	
Redness: Severe	0 (0.0 to 1.6)	0 (0.0 to 1.6)	0 (0.0 to 1.7)	
Swelling: Mild	46.2 (39.5 to 53.0)	46.8 (40.1 to 53.6)	18.1 (13.2 to 24.0)	
Swelling: Moderate	22.4 (17.1 to 28.5)	26.6 (20.9 to 32.9)	7.9 (4.7 to 12.4)	
Swelling: Severe	0 (0.0 to 1.6)	0 (0.0 to 1.6)	0 (0.0 to 1.7)	
Pain at the injection site: Mild	13.0 (8.9 to 18.1)	16.7 (12.0 to 22.2)	9.3 (5.8 to 14.0)	
Pain at the injection site: Moderate	3.6 (1.6 to 6.9)	0.5 (0.0 to 2.5)	2.3 (0.8 to 5.3)	
Pain at the injection site: Severe	0 (0.0 to 1.6)	0 (0.0 to 1.6)	0 (0.0 to 1.7)	

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects With Local Reactions Within 7 Days After Vaccination 3

End point title	Percentage of Subjects With Local Reactions Within 7 Days After Vaccination 3[3]

End point description:

Local reactions included pain at injection site, redness and swelling were measured and recorded in measuring device (caliper) units. 1 measuring device unit =0.5 cm. Pain at injection site was graded as mild: hurts if gently touched; moderate: hurts if gently touched with crying; severe: limited limb movement. Redness and swelling were graded as mild: >0 to 2.0 cm; moderate >2.0 to 7.0 cm; and severe: >7.0 cm. Safety population included all the subjects who received at least 1 dose of the IP with safety follow up after any vaccination. Here, number of subjects analysed = number of subjects with any e-diary data reported after Vaccination 3.

End point type	Primary

End point timeframe:

Within 7 Days after Vaccination 3

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: Only descriptive data was planned to be analysed for this endpoint.

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	222	221	215	
Units: Percentage of subjects				
number (confidence interval 95%)				
Redness: Mild	45.0 (38.4 to 51.8)	51.1 (44.3 to 57.9)	23.3 (17.8 to 29.5)	
Redness: Moderate	33.8 (27.6 to 40.4)	34.8 (28.6 to 41.5)	8.4 (5.0 to 12.9)	
Redness: Severe	0 (0.0 to 1.6)	0 (0.0 to 1.7)	0 (0.0 to 1.7)	
Swelling: Mild	38.7 (32.3 to 45.5)	39.8 (33.3 to 46.6)	17.7 (12.8 to 23.4)	
Swelling: Moderate	30.2 (24.2 to 36.7)	35.3 (29.0 to 42.0)	9.8 (6.1 to 14.5)	
Swelling: Severe	0 (0.0 to 1.6)	0 (0.0 to 1.7)	0 (0.0 to 1.7)	
Pain at the inj. site: Mild	10.8 (7.1 to 15.7)	14.5 (10.1 to 19.8)	8.8 (5.4 to 13.5)	
Pain at the inj. site: Moderate	3.6 (1.6 to 7.0)	1.4 (0.3 to 3.9)	0.9 (0.1 to 3.3)	
Pain at the inj. site: Severe	0 (0.0 to 1.6)	0 (0.0 to 1.7)	0.5 (0.0 to 2.6)	

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects With Local Reactions Within 7 Days After Vaccination 4

End point title	Percentage of Subjects With Local Reactions Within 7 Days After Vaccination 4[4]

End point description:

Local reactions included pain at inj. site, redness and swelling were measured and recorded in measuring device (caliper) units. 1 measuring device unit =0.5 cm. Pain at injection site was graded as mild: hurts if gently touched; moderate: hurts if gently touched with crying; severe: limited limb movement. Redness and swelling were graded as mild: >0 to 2.0 cm; moderate >2.0 to 7.0 cm; and severe: >7.0 cm. Safety population included all the subjects who received at least 1 dose of the IP with safety follow up after any vaccination. Here, number of subjects analysed = number of subjects with any e-diary data reported after Vaccination 4.

End point type	Primary

End point timeframe:

Within 7 Days after Vaccination 4

Notes:

[4] - 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: Only descriptive data was planned to be analysed for this endpoint.

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	218	220	212	
Units: Percentage of subjects				
number (confidence interval 95%)				
Redness: Mild	37.2 (30.7 to 43.9)	36.4 (30.0 to 43.1)	20.8 (15.5 to 26.8)	
Redness: Moderate	49.1 (42.3 to 55.9)	49.1 (42.3 to 55.9)	11.8 (7.8 to 16.9)	
Redness: Severe	0.5 (0.0 to 2.5)	0.5 (0.0 to 2.5)	0 (0.0 to 1.7)	
Swelling: Mild	37.6 (31.2 to 44.4)	35.9 (29.6 to 42.6)	13.2 (9.0 to 18.5)	
Swelling: Moderate	42.2 (35.6 to 49.1)	41.8 (35.2 to 48.6)	10.8 (7.0 to 15.8)	
Swelling: Severe	0.5 (0.0 to 2.5)	0 (0.0 to 1.7)	0 (0.0 to 1.7)	
Pain at the inj. site: Mild	19.7 (14.7 to 25.6)	19.1 (14.1 to 24.9)	10.4 (6.6 to 15.3)	
Pain at the inj. site: Moderate	1.4 (0.3 to 4.0)	3.2 (1.3 to 6.4)	3.3 (1.3 to 6.7)	
Pain at the inj. site: Severe	0 (0.0 to 1.7)	0 (0.0 to 1.7)	0 (0.0 to 1.7)	

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects With Systemic Events (SE) Within 7 Days After Vaccination 1

End point title	Percentage of Subjects With Systemic Events (SE) Within 7 Days After Vaccination 1[5]

End point description:

Systemic events included fever, decreased appetite, drowsiness and irritability. Fever was defined as an axillary temperature greater than or equal to (>=) 37.5 degree Celsius (C), and categorised as >=37.5 to 38.4 degree C, greater than (>)38.4 to 38.9 degree C,>38.9 to 40.0 degree C and >40.0 degree C;

decreased appetite was graded as mild (decreased interest in eating), moderate (decreased oral intake) and severe (refusal to feed); drowsiness was graded as mild (increased or prolonged sleeping bouts), moderate (slightly subdued, interfered with daily activity) and severe (disabling, not interested in usual daily activity); Irritability: graded as mild (easily consolable), moderate (required increased attention) and severe (inconsolable, crying could not be comforted). Safety population included all the subjects who received at least 1 dose of the IP with safety follow up after any vaccination.

End point type	Primary

End point timeframe:

Within 7 Days After Vaccination 1

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: Only descriptive data was planned to be analysed for this endpoint.

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	225	224	217	
Units: Percentage of subjects				
number (confidence interval 95%)				
Fever: >=37.5 degree C	9.8 (6.2 to 14.4)	12.9 (8.8 to 18.1)	9.7 (6.1 to 14.4)	
Fever: >=37.5°C to 38.4 degree C	9.3 (5.9 to 13.9)	12.5 (8.5 to 17.6)	9.7 (6.1 to 14.4)	
Fever: >38.4°C to 38.9 degree C	0.4 (0.0 to 2.5)	0.4 (0.0 to 2.5)	0 (0.0 to 1.7)	
Fever: >38.9 to 40.0 degree C	0 (0.0 to 1.6)	0 (0.0 to 1.6)	0 (0.0 to 1.7)	
Fever: >40.0 degree C	0 (0.0 to 1.6)	0 (0.0 to 1.6)	0 (0.0 to 1.7)	
Decreased appetite: Mild	3.6 (1.5 to 6.9)	7.1 (4.1 to 11.3)	3.2 (1.3 to 6.5)	
Decreased appetite: Moderate	1.8 (0.5 to 4.5)	3.1 (1.3 to 6.3)	3.2 (1.3 to 6.5)	
Decreased appetite: Severe	0 (0.0 to 1.6)	0.4 (0.0 to 2.5)	0 (0.0 to 1.7)	
Drowsiness: Mild	40.4 (34.0 to 47.2)	42.0 (35.4 to 48.7)	42.9 (36.2 to 49.7)	
Drowsiness: Moderate	0.9 (0.1 to 3.2)	2.2 (0.7 to 5.1)	4.1 (1.9 to 7.7)	
Drowsiness: Severe	0 (0.0 to 1.6)	0.4 (0.0 to 2.5)	0 (0.0 to 1.7)	
Irritability: Mild	13.8 (9.6 to 19.0)	11.2 (7.4 to 16.0)	12.9 (8.7 to 18.1)	
Irritability: Moderate	12.0 (8.1 to 17.0)	13.4 (9.2 to 18.6)	11.5 (7.6 to 16.5)	
Irritability: Severe	1.3 (0.3 to 3.8)	1.8 (0.5 to 4.5)	0.5 (0.0 to 2.5)	

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects With Systemic Events Within 7 Days After Vaccination 2

End point title	Percentage of Subjects With Systemic Events Within 7 Days After Vaccination 2[6]

End point description:

Systemic events included fever, decreased appetite, drowsiness and irritability. Fever was defined as an axillary temperature >=37.5 degree C and categorised as >=37.5 to 38.4 degree C,>38.4 to 38.9 degree C,>38.9 to 40.0 degree C and >40.0 degree C; decreased appetite was graded as mild (decreased interest in eating), moderate (decreased oral intake) and severe (refusal to feed); drowsiness was graded as mild (increased or prolonged sleeping bouts), moderate (slightly subdued,

interfered with daily activity) and severe (disabling, not interested in usual daily activity); Irritability: graded as mild (easily consolable), moderate (required increased attention) and severe (inconsolable, crying could not be comforted). Safety population included all the subjects who received at least 1 dose of the IP with safety follow up after any vaccination. Here, number of subjects analysed = number of subjects with any e-diary data reported after Vaccination 2.

End point type	Primary

End point timeframe:

Within 7 Days After Vaccination 2

Notes:

[6] - 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: Only descriptive data was planned to be analysed for this endpoint.

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	223	222	215	
Units: Percentage of subjects				
number (confidence interval 95%)				
Fever: >=37.5 degree C	20.2 (15.1 to 26.1)	21.2 (16.0 to 27.1)	18.1 (13.2 to 24.0)	
Fever: >=37.5 to 38.4 degree C	15.2 (10.8 to 20.6)	17.6 (12.8 to 23.2)	14.9 (10.4 to 20.4)	
Fever: >38.4 to 38.9 degree C	3.1 (1.3 to 6.4)	2.3 (0.7 to 5.2)	1.9 (0.5 to 4.7)	
Fever: >38.9 to 40.0 degree C	1.8 (0.5 to 4.5)	1.4 (0.3 to 3.9)	1.4 (0.3 to 4.0)	
Fever: >40.0 degree C	0 (0.0 to 1.6)	0 (0.0 to 1.6)	0 (0.0 to 1.7)	
Decreased appetite: Mild	4.5 (2.2 to 8.1)	6.8 (3.8 to 10.9)	5.1 (2.6 to 9.0)	
Decreased appetite: Moderate	5.8 (3.1 to 9.8)	5.0 (2.5 to 8.7)	4.7 (2.3 to 8.4)	
Decreased appetite: Severe	0 (0.0 to 1.6)	0 (0.0 to 1.6)	0 (0.0 to 1.7)	
Drowsiness: Mild	39.9 (33.4 to 46.7)	48.6 (41.9 to 55.4)	39.5 (33.0 to 46.4)	
Drowsiness: Moderate	3.1 (1.3 to 6.4)	4.1 (1.9 to 7.6)	2.3 (0.8 to 5.3)	
Drowsiness: Severe	0 (0.0 to 1.6)	0 (0.0 to 1.6)	0 (0.0 to 1.7)	
Irritability: Mild	12.6 (8.5 to 17.6)	16.7 (12.0 to 22.2)	10.2 (6.5 to 15.1)	
Irritability: Moderate	12.1 (8.1 to 17.1)	14.9 (10.5 to 20.2)	15.3 (10.8 to 20.9)	
Irritability: Severe	1.3 (0.3 to 3.9)	0.5 (0.0 to 2.5)	1.4 (0.3 to 4.0)	

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects With Systemic Events Within 7 Days After Vaccination 3

End point title	Percentage of Subjects With Systemic Events Within 7 Days After Vaccination 3[7]

End point description:

Systemic events included fever, decreased appetite, drowsiness and irritability. Fever was defined as an axillary temperature >=37.5 degree C and categorised as >=37.5 to 38.4 degree C,>38.4 to 38.9 degree C,>38.9 to 40.0 degree C and >40.0 degree C; decreased appetite was graded as mild (decreased interest in eating), moderate (decreased oral intake) and severe (refusal to feed); drowsiness was graded as mild (increased or prolonged sleeping bouts), moderate (slightly subdued, interfered with daily activity) and severe (disabling, not interested in usual daily activity); Irritability:

graded as mild (easily consolable), moderate (required increased attention) and severe (inconsolable, crying could not be comforted). Safety population included all the subjects who received at least 1 dose of the IP with safety follow up after any vaccination. Here, number of subjects analysed = number of subjects with any e-diary data reported after Vaccination 3

End point type	Primary

End point timeframe:

Within 7 Days After Vaccination 3

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: Only descriptive data was planned to be analysed for this endpoint.

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	222	221	215	
Units: Percentage of subjects				
number (confidence interval 95%)				
Fever: >=37.5 degree C	15.3 (10.8 to 20.7)	19.9 (14.9 to 25.8)	15.3 (10.8 to 20.9)	
Fever: >=37.5 to 38.4 degree C	13.5 (9.3 to 18.7)	16.3 (11.7 to 21.8)	12.6 (8.4 to 17.7)	
Fever: >38.4 to 38.9 degree C	1.4 (0.3 to 3.9)	2.7 (1.0 to 5.8)	1.9 (0.5 to 4.7)	
Fever: >38.9 to 40.0 degree C	0.5 (0.0 to 2.5)	0.9 (0.1 to 3.2)	0.9 (0.1 to 3.3)	
Fever: >40.0 degree C	0 (0.0 to 1.6)	0 (0.0 to 1.7)	0 (0.0 to 1.7)	
Decreased appetite: Mild	5.0 (2.5 to 8.7)	7.2 (4.2 to 11.5)	4.2 (1.9 to 7.8)	
Decreased appetite: Moderate	2.7 (1.0 to 5.8)	3.6 (1.6 to 7.0)	3.7 (1.6 to 7.2)	
Decreased appetite: Severe	0.5 (0.0 to 2.5)	0 (0.0 to 1.7)	0 (0.0 to 1.7)	
Drowsiness: Mild	24.8 (19.2 to 31.0)	32.6 (26.4 to 39.2)	32.6 (26.3 to 39.3)	
Drowsiness: Moderate	1.4 (0.3 to 3.9)	1.8 (0.5 to 4.6)	1.4 (0.3 to 4.0)	
Drowsiness: Severe	0 (0.0 to 1.6)	0 (0.0 to 1.7)	0 (0.0 to 1.7)	
Irritability: Mild	16.7 (12.0 to 22.2)	10.9 (7.1 to 15.7)	14.0 (9.6 to 19.3)	
Irritability: Moderate	8.6 (5.2 to 13.0)	9.0 (5.6 to 13.6)	13.0 (8.8 to 18.3)	
Irritability: Severe	0.5 (0.0 to 2.5)	0 (0.0 to 1.7)	0.9 (0.1 to 3.3)	

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects With Systemic Events Within 7 Days After Vaccination 4

End point title	Percentage of Subjects With Systemic Events Within 7 Days After Vaccination 4[8]

End point description:

Systemic events included fever, decreased appetite, drowsiness and irritability. Fever was defined as an axillary temperature >=37.5 degree C and categorised as >=37.5 to 38.4 degree C,>38.4 to 38.9 degree C,>38.9 to 40.0 degree C and >40.0 degree C; decreased appetite was graded as mild (decreased interest in eating), moderate (decreased oral intake) and severe (refusal to feed); drowsiness was graded as mild (increased or prolonged sleeping bouts), moderate (slightly subdued, interfered with daily activity) and severe (disabling, not interested in usual daily activity); Irritability: graded as mild (easily consolable), moderate (required increased attention) and severe (inconsolable,

crying could not be comforted). Safety population included all the subjects who received at least 1 dose of the IP with safety follow up after any vaccination. Here, number of subjects analysed = number of subjects with any e-diary data reported after Vaccination 4.

End point type	Primary

End point timeframe:

Within 7 Days After Vaccination 4

Notes:

[8] - 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: Only descriptive data was planned to be analysed for this endpoint.

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	218	220	212	
Units: Percentage of subjects				
number (confidence interval 95%)				
Fever: >=37.5 degree C	42.7 (36.0 to 49.5)	39.5 (33.0 to 46.3)	38.2 (31.6 to 45.1)	
Fever: >=37.5 to 38.4 degree C	25.7 (20.0 to 32.0)	29.1 (23.2 to 35.6)	24.1 (18.5 to 30.4)	
Fever: >38.4 to 38.9 degree C	10.1 (6.4 to 14.9)	5.9 (3.2 to 9.9)	6.1 (3.3 to 10.3)	
Fever: >38.9 to 40.0 degree C	6.4 (3.6 to 10.5)	4.5 (2.2 to 8.2)	8.0 (4.7 to 12.5)	
Fever: >40.0 degree C	0.5 (0.0 to 2.5)	0 (0.0 to 1.7)	0 (0.0 to 1.7)	
Decreased appetite: Mild	6.4 (3.6 to 10.5)	6.8 (3.9 to 11.0)	6.1 (3.3 to 10.3)	
Decreased appetite: Moderate	7.3 (4.3 to 11.6)	7.7 (4.6 to 12.1)	5.7 (3.0 to 9.7)	
Decreased appetite: Severe	0 (0.0 to 1.7)	0 (0.0 to 1.7)	0.9 (0.1 to 3.4)	
Drowsiness: Mild	24.3 (18.8 to 30.6)	23.6 (18.2 to 29.8)	29.7 (23.7 to 36.4)	
Drowsiness: Moderate	1.4 (0.3 to 4.0)	2.3 (0.7 to 5.2)	1.9 (0.5 to 4.8)	
Drowsiness: Severe	0 (0.0 to 1.7)	0 (0.0 to 1.7)	0 (0.0 to 1.7)	
Irritability: Mild	14.2 (9.9 to 19.6)	15.5 (10.9 to 20.9)	15.1 (10.6 to 20.6)	
Irritability: Moderate	7.3 (4.3 to 11.6)	11.4 (7.5 to 16.3)	9.4 (5.9 to 14.2)	
Irritability: Severe	0.9 (0.1 to 3.3)	0.9 (0.1 to 3.2)	0.5 (0.0 to 2.6)	

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects With Adverse Events (AEs) From Vaccination 1 to 1 Month After Vaccination 3

End point title	Percentage of Subjects With Adverse Events (AEs) From Vaccination 1 to 1 Month After Vaccination 3[9]

End point description:

An adverse event (AE) was any untoward medical occurrence in a subject, temporally associated with the use of study treatment, whether or not considered related to the study treatment. Safety population included all the subjects who received at least 1 dose of the IP and had safety data after any vaccination.

End point type	Primary

End point timeframe:

Day 1 of Vaccination 1 to 1 Month after Vaccination 3

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: Only descriptive data was planned to be analysed for this endpoint.

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	225	224	217	
Units: Percentage of subjects				
number (confidence interval 95%)	47.6 (40.9 to 54.3)	55.4 (48.6 to 62.0)	58.5 (51.7 to 65.2)	

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects With AEs from Vaccination 4 to 1 Month After Vaccination 4

End point title	Percentage of Subjects With AEs from Vaccination 4 to 1 Month After Vaccination 4[10]

End point description:

An AE was any untoward medical occurrence in a subject, temporally associated with the use of study treatment, whether or not considered related to the study treatment. Safety population included all subjects who received at least 1 dose of the IP with safety follow up after any vaccination. Here, number of subjects analysed = number of subjects who received Vaccination 4.

End point type	Primary

End point timeframe:

From Vaccination 4 to 1 Month after Vaccination 4

Notes:

[10] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: Only descriptive data was planned to be analysed for this endpoint.

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	218	220	212	
Units: Percentage of subjects				
number (confidence interval 95%)	40.4 (33.8 to 47.2)	43.2 (36.5 to 50.0)	43.9 (37.1 to 50.8)	

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects With Serious Adverse Events (SAEs) From Vaccination 1 to 1 Month After Vaccination 4

End point title	Percentage of Subjects With Serious Adverse Events (SAEs)

	From Vaccination 1 to 1 Month After Vaccination 4[11]

End point description:

A serious AE was any untoward medical occurrence that, at any dose: resulted in death; required inpatient hospitalisation or prolongation of existing hospitalisation; was life-threatening; resulted in persistent or significant disability/ incapacity; congenital anomaly/birth defect and other important medical events. Safety population included all the subjects who received at least 1 dose of the IP with safety follow up after any vaccination.

End point type	Primary

End point timeframe:

From Vaccination 1 to 1 Month after Vaccination 4

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: Only descriptive data was planned to be analysed for this endpoint.

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	225	224	217	
Units: Percentage of subjects				
number (confidence interval 95%)	6.2 (3.4 to 10.2)	4.0 (1.9 to 7.5)	7.4 (4.3 to 11.7)	

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects With Newly Diagnosed Chronic Medical Conditions (NDCMCs) From Vaccination 1 to 1 Month After Vaccination 4

End point title	Percentage of Subjects With Newly Diagnosed Chronic Medical Conditions (NDCMCs) From Vaccination 1 to 1 Month After Vaccination 4[12]

End point description:

An NDCMC was defined as a significant disease or medical condition, not previously identified, that is expected to be persistent or was otherwise long-lasting in its effects. Safety population included all the subjects who received at least 1 dose of the IP with safety follow up after any vaccination. Here, number of subjects analysed=subjects evaluable for this endpoint.

End point type	Primary

End point timeframe:

From Vaccination 1 to 1 Month after Vaccination 4

Notes:

[12] - 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: Only descriptive data was planned to be analysed for this endpoint.

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	225	224	217	
Units: Percentage of subjects				
number (confidence interval 95%)	10.7 (7.0 to 15.5)	8.9 (5.5 to 13.5)	8.3 (5.0 to 12.8)	

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects With Pneumococcal Serotype-specific Immunoglobulin G (IgG) concentrations 1 Month After Vaccination 3

End point title	Percentage of Subjects With Pneumococcal Serotype-specific Immunoglobulin G (IgG) concentrations 1 Month After Vaccination 3

End point description:

Pneumococcal serotype-specific IgG Concentrations were measured for 20vPnC serotypes: 1, 3, 4, 5, 6A, 6B, 7F, 8, 9V, 10A, 11A, 12F, 14, 15B, 18C, 19A, 19F, 22F, 23F, and 33F. Assay results below the lower limit of quantitation (LLOQ) were set to 0.5*LLOQ. The predefined levels, >=0.35 micrograms/mL for all serotypes except for serotypes 5 (>=0.23 micrograms/mL), 6B (>=0.10 micrograms/mL) and 19A (>=0.12 micrograms/mL). Vaccination 3 evaluable immunogenicity population included eligible subjects who were 2 to 6 months of age at the first vaccination, received the first 3 doses as randomised, had at least 1 valid immunogenicity results from the blood collection within 27 to 56 days after Vaccination 3, and had no other major protocol deviations per clinician. Here, number of subjects analysed=subjects evaluable for this endpoint and n=subjects with valid assay results for the specified serotype.

End point type	Primary

End point timeframe:

1 Month after Vaccination 3

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	221	220	213	
Units: Percentage of subjects				
number (confidence interval 95%)				
Serotype: 1 (n=221, 220, 213)	97.7 (94.8 to 99.3)	99.1 (96.8 to 99.9)	92.0 (87.5 to 95.3)	
Serotype: 3 (n=221, 220, 213)	96.4 (93.0 to 98.4)	99.1 (96.8 to 99.9)	95.3 (91.5 to 97.7)	
Serotype: 4 (n=221, 220, 213)	96.8 (93.6 to 98.7)	99.1 (96.8 to 99.9)	94.8 (90.9 to 97.4)	
Serotype: 5 (n=221, 220, 213)	92.3 (88.0 to 95.5)	97.3 (94.2 to 99.0)	93.0 (88.7 to 96.0)	
Serotype: 6A (n=221, 220, 213)	90.0 (85.3 to 93.7)	98.2 (95.4 to 99.5)	94.8 (90.9 to 97.4)	
Serotype: 6B (n=221, 220, 213)	87.8 (82.7 to 91.8)	96.4 (93.0 to 98.4)	82.2 (76.3 to 87.1)	
Serotype: 7F (n=221, 220, 213)	95.9 (92.4 to 98.1)	99.1 (96.8 to 99.9)	94.8 (90.9 to 97.4)	
Serotype: 9V (n=221, 220, 213)	95.9 (92.4 to 98.1)	98.6 (96.1 to 99.7)	93.0 (88.7 to 96.0)	
Serotype: 14 (n=220, 220, 213)	96.8 (93.6 to 98.7)	97.7 (94.8 to 99.3)	96.2 (92.7 to 98.4)	

Serotype: 18C (n=221, 220, 213)	96.8 (93.6 to 98.7)	99.1 (96.8 to 99.9)	94.8 (90.9 to 97.4)	
Serotype: 19A (n=221, 220, 213)	99.5 (97.5 to 100.0)	99.5 (97.5 to 100.0)	99.1 (96.6 to 99.9)	
Serotype: 19F (n=221, 220, 213)	100.0 (98.3 to 100.0)	100.0 (98.3 to 100.0)	100.0 (98.3 to 100.0)	
Serotype: 23F (n=221, 220, 213)	89.6 (84.8 to 93.3)	93.6 (89.6 to 96.5)	88.7 (83.7 to 92.6)	
Serotype: 8 (n=221, 220, 213)	99.5 (97.5 to 100.0)	93.6 (89.6 to 96.5)	99.5 (97.4 to 100.0)	
Serotype: 10A (n=221, 220, 213)	60.2 (53.4 to 66.7)	93.6 (89.6 to 96.5)	59.6 (52.7 to 66.3)	
Serotype: 11A (n=221, 220, 213)	100.0 (98.3 to 100.0)	93.6 (89.6 to 96.5)	100.0 (98.3 to 100.0)	
Serotype: 12F (n=221, 220, 213)	74.7 (68.4 to 80.3)	93.6 (89.6 to 96.5)	74.6 (68.3 to 80.3)	
Serotype: 15B (n=221, 220, 213)	99.1 (96.8 to 99.9)	93.6 (89.6 to 96.5)	98.6 (95.9 to 99.7)	
Serotype: 22F (n=221, 220, 213)	100.0 (98.3 to 100.0)	93.6 (89.6 to 96.5)	100.0 (98.3 to 100.0)	
Serotype: 33F (n=219, 220, 212)	95.0 (91.2 to 97.5)	93.6 (89.6 to 96.5)	92.5 (88.0 to 95.6)	

Statistical analyses

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 1: 2-Sided CIs are calculated using the Miettinen and Nurminen method for the difference in proportions, expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[13]
Parameter estimate	Miettinen and Nurminen method
Point estimate	-1.4
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.4
upper limit	1.3

Notes:

[13] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 3: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)

Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[14]
Parameter estimate	Miettinen and Nurminen method
Point estimate	-2.7
Confidence interval	
level	95 %
sides	2-sided
lower limit	-6.2
upper limit	0.1

Notes:

[14] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 4: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[15]
Parameter estimate	Miettinen and Nurminen method
Point estimate	-2.3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-5.6
upper limit	0.5

Notes:

[15] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 5: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[16]
Parameter estimate	Miettinen and Nurminen method
Point estimate	-5
Confidence interval	
level	95 %
sides	2-sided
lower limit	-9.6
upper limit	-0.9

Notes:

[16] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 6A: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[17]
Parameter estimate	Miettinen and Nurminen method
Point estimate	-8.1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-13
upper limit	-4

Notes:

[17] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 6B: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[18]
Parameter estimate	Miettinen and Nurminen method
Point estimate	-8.6
Confidence interval	
level	95 %
sides	2-sided
lower limit	-14
upper limit	-3.7

Notes:

[18] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 7F: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[19]
Parameter estimate	Miettinen and Nurminen method
Point estimate	-3.2

Confidence interval	
level	95 %
sides	2-sided
lower limit	-6.8
upper limit	-0.3

Notes:

[19] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 9V: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[20]
Parameter estimate	Miettinen and Nurminen method
Point estimate	-2.7
Confidence interval	
level	95 %
sides	2-sided
lower limit	-6.4
upper limit	0.4

Notes:

[20] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 14: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[21]
Parameter estimate	Miettinen and Nurminen method
Point estimate	-0.9
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.4
upper limit	2.4

Notes:

[21] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 18C: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)

Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[22]
Parameter estimate	Miettinen and Nurminen method
Point estimate	-2.3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-5.6
upper limit	0.5

Notes:

[22] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 19A: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[23]
Parameter estimate	Miettinen and Nurminen method
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.1
upper limit	2.1

Notes:

[23] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 19F: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[24]
Parameter estimate	Miettinen and Nurminen method
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.7
upper limit	1.7

Notes:

[24] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 23F: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[25]
Parameter estimate	Miettinen and Nurminen method
Point estimate	-4
Confidence interval	
level	95 %
sides	2-sided
lower limit	-9.5
upper limit	1.2

Notes:

[25] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 7 add. serotype

Statistical analysis description:

Serotype 8: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[26]
Parameter estimate	Miettinen and Nurminen method
Point estimate	5.9
Confidence interval	
level	95 %
sides	2-sided
lower limit	3
upper limit	10

Notes:

[26] - For the additional 7 serotypes, the compared results are from serotype 23F (13vPnC [SC] serotype with the lowest percentage, not including serotype 3) in the 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 7 add. serotype

Statistical analysis description:

Serotype 10A: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[27]
Parameter estimate	Miettinen and Nurminen method
Point estimate	-33.5

Confidence interval	
level	95 %
sides	2-sided
lower limit	-40.7
upper limit	-26.2

Notes:

[27] - For the additional 7 serotypes, the compared results are from serotype 23F (13vPnC [SC] serotype with the lowest percentage, not including serotype 3) in the 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 7 add. serotype

Statistical analysis description:

Serotype 11A: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[28]
Parameter estimate	Miettinen and Nurminen method
Point estimate	6.4
Confidence interval	
level	95 %
sides	2-sided
lower limit	3.8
upper limit	10.4

Notes:

[28] - For the additional 7 serotypes, the compared results are from serotype 23F (13vPnC [SC] serotype with the lowest percentage, not including serotype 3) in the 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 7 add. serotype

Statistical analysis description:

Serotype 12F: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[29]
Parameter estimate	Miettinen and Nurminen method
Point estimate	-19
Confidence interval	
level	95 %
sides	2-sided
lower limit	-25.7
upper limit	-12.5

Notes:

[29] - For the additional 7 serotypes, the compared results are from serotype 23F (13vPnC [SC] serotype with the lowest percentage, not including serotype 3) in the 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 7 add. serotype

Statistical analysis description:

Serotype 15B: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions

expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[30]
Parameter estimate	Miettinen and Nurminen method
Point estimate	5.5
Confidence interval	
level	95 %
sides	2-sided
lower limit	2.2
upper limit	9.6

Notes:

[30] - For the additional 7 serotypes, the compared results are from serotype 23F (13vPnC [SC] serotype with the lowest percentage, not including serotype 3) in the 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 7 add. serotype

Statistical analysis description:

Serotype 22F: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[31]
Parameter estimate	Miettinen and Nurminen method
Point estimate	6.4
Confidence interval	
level	95 %
sides	2-sided
lower limit	3.8
upper limit	10.4

Notes:

[31] - For the additional 7 serotypes, the compared results are from serotype 23F (13vPnC [SC] serotype with the lowest percentage, not including serotype 3) in the 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 7 add. serotype

Statistical analysis description:

Serotype 33F: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[32]
Parameter estimate	Miettinen and Nurminen method
Point estimate	1.3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.2
upper limit	6

Notes:

[32] - For the additional 7 serotypes, the compared results are from serotype 23F (13vPnC [SC] serotype with the lowest percentage, not including serotype 3) in the 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CIs for the percentage differences (20vPnC SC - lowest 13vPnC SC) was greater than -10%.

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 1: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	-5.7
Confidence interval	
level	95 %
sides	2-sided
lower limit	-10.4
upper limit	-1.7

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 3: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	-1.1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-5.2
upper limit	2.9

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 4:2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 20vPnC (IM)

Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	-2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-6.2
upper limit	1.9

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 5: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	0.7
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.5
upper limit	5.8

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 6A: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	4.8
Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.2
upper limit	10

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 6B: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	-5.6
Confidence interval	
level	95 %
sides	2-sided
lower limit	-12.5
upper limit	1.1

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 7F: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	-1.1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-5.4
upper limit	3.1

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 9V: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	-3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-7.7
upper limit	1.4

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 14: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	-0.6
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.4
upper limit	3.2

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 18C: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	-2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-6.2
upper limit	1.9

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 19A: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	-0.5

Confidence interval	
level	95 %
sides	2-sided
lower limit	-3
upper limit	1.7

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 19F: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.8
upper limit	1.7

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 23F: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	-0.9
Confidence interval	
level	95 %
sides	2-sided
lower limit	-6.9
upper limit	5.1

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 8: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)

Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.2
upper limit	2.1

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 10A: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	-0.6
Confidence interval	
level	95 %
sides	2-sided
lower limit	-9.8
upper limit	8.6

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 11A: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.8
upper limit	1.7

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 12F: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-8.2
upper limit	8.2

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 15B: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	-0.5
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.3
upper limit	2

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 22F: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.8
upper limit	1.7

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 33F: 2-Sided CI based on the Miettinen and Nurminen method for the difference in proportions expressed as a percentage.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Miettinen and Nurminen method
Point estimate	-2.5
Confidence interval	
level	95 %
sides	2-sided
lower limit	-7.5
upper limit	2.2

Secondary: Geometric Mean Concentration of Pneumococcal Serotype-Specific IgG Concentrations 1 Month After Vaccination 3

End point title	Geometric Mean Concentration of Pneumococcal Serotype-Specific IgG Concentrations 1 Month After Vaccination 3
End point description:	
Pneumococcal serotype-specific IgG concentrations were measured for 20vPnC serotypes: 1, 3, 4, 5, 6A, 6B, 7F, 8, 9V, 10A, 11A, 12F, 14, 15B, 18C, 19A, 19F, 22F, 23F, and 33F. Assay results below the LLOQ were set to 0.5*LLOQ. Vaccination 3 evaluable immunogenicity population included eligible subjects who were 2 to 6 months of age at the first vaccination, received the first 3 doses as randomised, had at least 1 valid immunogenicity results from the blood collection within 27 to 56 days after Vaccination 3, and had no other major protocol deviations per clinician. Here, number of subjects analysed=subjects evaluable for this endpoint and n=subjects with valid results for the specified serotype.	
End point type	Secondary
End point timeframe:	
1 Month after Vaccination 3	

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	221	220	213	
Units: Micrograms per millilitre				
geometric mean (confidence interval 95%)				
Serotype 1 (n=221, 220, 213)	1.37 (1.25 to 1.51)	2.21 (1.98 to 2.47)	1.17 (1.04 to 1.31)	
Serotype 3 (n=221, 220, 213)	1.29 (1.18 to 1.41)	1.81 (1.66 to 1.98)	1.10 (0.99 to 1.22)	
Serotype 4 (n=221, 220, 213)	1.76 (1.57 to 1.97)	2.96 (2.64 to 3.32)	1.73 (1.52 to 1.97)	
Serotype 5 (n=221, 220, 213)	1.01 (0.89 to 1.16)	1.72 (1.51 to 1.96)	1.00 (0.87 to 1.14)	

Serotype 6A (n=221, 220, 213)	1.38 (1.21 to 1.57)	2.34 (2.09 to 2.62)	1.64 (1.42 to 1.88)	
Serotype 6B (n=221, 220, 213)	0.42 (0.35 to 0.50)	0.83 (0.71 to 0.97)	0.39 (0.32 to 0.48)	
Serotype 7F (n=221, 220, 213)	1.58 (1.43 to 1.75)	2.19 (1.95 to 2.46)	1.52 (1.35 to 1.71)	
Serotype 9V (n=221, 220, 213)	1.46 (1.32 to 1.61)	2.11 (1.88 to 2.36)	1.45 (1.29 to 1.64)	
Serotype 14 (n=220, 220, 213)	2.79 (2.45 to 3.18)	3.31 (2.90 to 3.78)	2.43 (2.13 to 2.76)	
Serotype 18C (n=221, 220, 213)	1.67 (1.51 to 1.86)	2.52 (2.26 to 2.82)	1.54 (1.38 to 1.72)	
Serotype 19A (n=221, 220, 213)	2.41 (2.19 to 2.65)	3.19 (2.86 to 3.56)	2.36 (2.11 to 2.64)	
Serotype 19F (n=221, 220, 213)	2.81 (2.60 to 3.04)	3.73 (3.41 to 4.08)	2.76 (2.53 to 3.02)	
Serotype 23F (n=221, 220, 213)	1.32 (1.15 to 1.51)	2.05 (1.79 to 2.34)	1.29 (1.13 to 1.48)	
Serotype 8 (n=221, 220, 213)	3.32 (3.05 to 3.61)	0.83 (0.71 to 0.97)	3.29 (2.97 to 3.64)	
Serotype 10A (n=221, 220, 213)	0.50 (0.42 to 0.60)	0.83 (0.71 to 0.97)	0.47 (0.39 to 0.56)	
Serotype 11A (n=221, 220, 213)	5.63 (5.17 to 6.14)	0.83 (0.71 to 0.97)	5.22 (4.73 to 5.77)	
Serotype 12F (n=221, 220, 213)	0.79 (0.67 to 0.93)	0.83 (0.71 to 0.97)	0.72 (0.60 to 0.85)	
Serotype 15B (n=221, 220, 213)	6.77 (6.04 to 7.60)	0.83 (0.71 to 0.97)	6.80 (6.03 to 7.67)	
Serotype 22F (n=221, 220, 213)	4.94 (4.54 to 5.38)	0.83 (0.71 to 0.97)	4.41 (3.99 to 4.88)	
Serotype 33F (n=219, 220, 212)	1.70 (1.51 to 1.92)	0.83 (0.71 to 0.97)	1.62 (1.40 to 1.87)	

Statistical analyses

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 1: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[33]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.62
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.54
upper limit	0.72

Notes:

[33] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 3: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[34]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.71
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.63
upper limit	0.81

Notes:

[34] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 4: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[35]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.6
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.51
upper limit	0.7

Notes:

[35] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 5: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[36]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.59
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.49
upper limit	0.71

Notes:

[36] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 6A: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[37]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.59
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.5
upper limit	0.7

Notes:

[37] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 6B: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[38]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.51
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.4
upper limit	0.64

Notes:

[38] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 7F: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)

Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[39]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.72
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.62
upper limit	0.84

Notes:

[39] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 9V: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[40]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.69
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.6
upper limit	0.8

Notes:

[40] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 14: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[41]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.84
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.7
upper limit	1.01

Notes:

[41] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 18C: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[42]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.66
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.57
upper limit	0.77

Notes:

[42] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 19A: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[43]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.76
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.65
upper limit	0.87

Notes:

[43] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 19F: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[44]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.75

Confidence interval	
level	95 %
sides	2-sided
lower limit	0.67
upper limit	0.85

Notes:

[44] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 13 matched serotype

Statistical analysis description:

Serotype 23F: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[45]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.64
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.53
upper limit	0.78

Notes:

[45] - Comparison for the 13 matched serotypes for 20vPnC (SC) is to the corresponding serotype in 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 7 add. serotype

Statistical analysis description:

Serotype 8: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[46]
Parameter estimate	Geometric Mean Ratio
Point estimate	4.01
Confidence interval	
level	95 %
sides	2-sided
lower limit	3.36
upper limit	4.79

Notes:

[46] - For the additional 7 serotypes, the compared results are from serotype 6B (13vPnC [SC] serotype with the lowest GMC, not including serotype 3) in the 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/lowest 13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 7 add. serotype

Statistical analysis description:

Serotype 10A: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[47]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.6
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.48
upper limit	0.76

Notes:

[47] - For the additional 7 serotypes, the compared results are from serotype 6B (13vPnC [SC] serotype with the lowest GMC, not including serotype 3) in the 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/lowest 13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 7 add. serotype

Statistical analysis description:

Serotype 11A: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[48]
Parameter estimate	Geometric Mean Ratio
Point estimate	6.8
Confidence interval	
level	95 %
sides	2-sided
lower limit	5.69
upper limit	8.13

Notes:

[48] - For the additional 7 serotypes, the compared results are from serotype 6B (13vPnC [SC] serotype with the lowest GMC, not including serotype 3) in the 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/lowest 13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 7 add. serotype

Statistical analysis description:

Serotype 12F: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[49]
Parameter estimate	Geometric Mean Ratio
Point estimate	0.95
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.76
upper limit	1.2

Notes:

[49] - For the additional 7 serotypes, the compared results are from serotype 6B (13vPnC [SC] serotype with the lowest GMC, not including serotype 3) in the 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/lowest 13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 7 add. serotype

Statistical analysis description:

Serotype 15B: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[50]
Parameter estimate	Geometric Mean Ratio
Point estimate	8.18
Confidence interval	
level	95 %
sides	2-sided
lower limit	6.75
upper limit	9.92

Notes:

[50] - For the additional 7 serotypes, the compared results are from serotype 6B (13vPnC [SC] serotype with the lowest GMC, not including serotype 3) in the 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/lowest 13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 7 add. serotype

Statistical analysis description:

Serotype 22F: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)
Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[51]
Parameter estimate	Geometric Mean Ratio
Point estimate	5.97
Confidence interval	
level	95 %
sides	2-sided
lower limit	5
upper limit	7.12

Notes:

[51] - For the additional 7 serotypes, the compared results are from serotype 6B (13vPnC [SC] serotype with the lowest GMC, not including serotype 3) in the 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/lowest 13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	NI of 20vPnC(SC)-13vPnC(SC)for 7 add. serotype

Statistical analysis description:

Serotype 33F: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 13vPnC (SC)

Number of subjects included in analysis	441
Analysis specification	Pre-specified
Analysis type	non-inferiority[52]
Parameter estimate	Geometric Mean Ratio
Point estimate	2.06
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.69
upper limit	2.51

Notes:

[52] - For the additional 7 serotypes, the compared results are from serotype 6B (13vPnC [SC] serotype with the lowest GMC, not including serotype 3) in the 13vPnC (SC) group. Noninferiority was declared if the lower bound of the 2-sided 95% CI for the GMR (20vPnC [SC]/lowest 13vPnC [SC]) was greater than 0.5 (2-fold criterion).

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 1: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.85
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.73
upper limit	0.99

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 3: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.85
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.74
upper limit	0.98

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 4: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.98
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.83
upper limit	1.16

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 5: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.98
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.81
upper limit	1.19

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 6A: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	1.19
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.98
upper limit	1.44

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 6B: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.93
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.72
upper limit	1.21

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 7F: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.96
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.82
upper limit	1.12

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 9V: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.99

Confidence interval	
level	95 %
sides	2-sided
lower limit	0.85
upper limit	1.16

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 14: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.87
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.72
upper limit	1.04

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 18C: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.92
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.79
upper limit	1.07

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 19A: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 20vPnC (IM)

Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.98
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.84
upper limit	1.13

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 19F: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.98
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.87
upper limit	1.1

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 23F: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.98
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.81
upper limit	1.19

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 8: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.99
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.87
upper limit	1.13

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 10A: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.94
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.73
upper limit	1.2

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 11A: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.93
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.81
upper limit	1.06

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 12F: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.91
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.71
upper limit	1.15

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 15B: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	1
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.85
upper limit	1.18

Statistical analysis title	Descriptive comparison
Statistical analysis description:	
Serotype 22F: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.	
Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.89

Confidence interval	
level	95 %
sides	2-sided
lower limit	0.78
upper limit	1.02

Statistical analysis title	Descriptive comparison

Statistical analysis description:

Serotype 33F: 2-Sided CIs were calculated by exponentiating the mean differences of the logarithms of the IgG concentrations and the corresponding CIs based on the geometric mean ratio.

Comparison groups	20vPnC (SC) v 20vPnC (IM)
Number of subjects included in analysis	434
Analysis specification	Pre-specified
Analysis type	other
Parameter estimate	Geometric Mean Ratio
Point estimate	0.95
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.79
upper limit	1.15

Secondary: Geometric Mean Concentration of Pneumococcal Serotype-Specific IgG Concentrations 1 Month After Vaccination 4

End point title	Geometric Mean Concentration of Pneumococcal Serotype-Specific IgG Concentrations 1 Month After Vaccination 4

End point description:

Pneumococcal serotype-specific IgG concentrations were measured for 20vPnC serotypes: 1, 3, 4, 5, 6A, 6B, 7F, 8, 9V, 10A, 11A, 12F, 14, 15B, 18C, 19A, 19F, 22F, 23F, and 33F. Vaccination 4 evaluable immunogenicity population included eligible subjects who were 2 to 6 months of age at Vaccination 1 and 12 to 15 months of age at Vaccination 4, received all 4 doses as randomised, had at least 1 valid assay result from the blood collection within 27 to 56 days after Vaccination 4, and had no other major protocol deviations per clinician. Here, number of subjects analysed=subjects evaluable for this endpoint and n=subjects with valid results for the specified serotype.

End point type	Secondary

End point timeframe:

1 Month after Vaccination 4

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	217	220	211	
Units: Micrograms per millilitre				
geometric mean (confidence interval 95%)				
Serotype 1 (n=217, 220, 211)	2.79 (2.50 to 3.12)	4.62 (4.11 to 5.19)	2.78 (2.47 to 3.12)	

Serotype 3 (n=217, 220, 211)	0.97 (0.87 to 1.08)	1.44 (1.30 to 1.59)	1.08 (0.96 to 1.21)	
Serotype 4 (n=217, 220, 211)	6.93 (6.14 to 7.83)	10.01 (8.89 to 11.27)	7.31 (6.51 to 8.20)	
Serotype 5 (n=217, 220, 211)	2.96 (2.63 to 3.34)	4.64 (4.13 to 5.21)	2.94 (2.59 to 3.33)	
Serotype 6A (n=217, 220, 211)	11.90 (10.61 to 13.34)	17.25 (15.66 to 18.99)	13.92 (12.43 to 15.59)	
Serotype 6B (n=216, 220, 211)	7.18 (6.30 to 8.18)	10.48 (9.46 to 11.61)	7.50 (6.58 to 8.55)	
Serotype 7F (n=217, 220, 211)	4.46 (4.04 to 4.92)	6.62 (5.95 to 7.38)	4.85 (4.34 to 5.42)	
Serotype 9V (n=217, 220, 211)	4.54 (4.04 to 5.09)	6.62 (5.93 to 7.39)	5.38 (4.81 to 6.02)	
Serotype 14 (n=217, 220, 211)	8.23 (7.27 to 9.31)	10.30 (9.25 to 11.47)	9.19 (8.10 to 10.43)	
Serotype 18C (n=217, 220, 211)	3.95 (3.50 to 4.45)	5.97 (5.27 to 6.75)	3.81 (3.38 to 4.30)	
Serotype 19A (n=217, 219, 211)	7.62 (6.82 to 8.52)	8.97 (8.08 to 9.95)	7.92 (7.06 to 8.89)	
Serotype 19F (n=217, 220, 211)	8.74 (7.84 to 9.73)	11.02 (9.96 to 12.20)	8.56 (7.66 to 9.56)	
Serotype 23F (n=217, 220, 211)	7.01 (6.16 to 7.97)	11.76 (10.42 to 13.28)	7.39 (6.49 to 8.42)	
Serotype 8 (n=217, 219, 211)	5.84 (5.23 to 6.53)	0.02 (0.02 to 0.03)	5.88 (5.23 to 6.62)	
Serotype 10A (n=217, 220, 211)	6.98 (6.13 to 7.93)	0.01 (0.01 to 0.01)	8.02 (7.02 to 9.16)	
Serotype 11A (n=217, 220, 211)	5.73 (5.08 to 6.46)	0.02 (0.01 to 0.02)	5.78 (5.14 to 6.50)	
Serotype 12F (n=217, 220, 211)	2.73 (2.41 to 3.09)	0.01 (0.01 to 0.01)	2.69 (2.36 to 3.06)	
Serotype 15B (n=217, 220, 211)	18.45 (16.73 to 20.36)	0.03 (0.03 to 0.04)	21.83 (19.53 to 24.41)	
Serotype 22F (n=217, 220, 211)	14.07 (12.67 to 15.63)	0.00 (0.00 to 0.01)	14.21 (12.61 to 16.00)	
Serotype 33F (n=217, 220, 211)	10.29 (9.28 to 11.40)	0.02 (0.01 to 0.02)	11.13 (9.99 to 12.39)	

Statistical analyses

No statistical analyses for this end point

Secondary: Geometric Mean Titre (GMTs) of Serotype Specific Opsonophagocytic Activity (OPA) at 1 Month After Vaccination 3, Before Vaccination 4 and 1 Month After Vaccination 4

End point title	Geometric Mean Titre (GMTs) of Serotype Specific Opsonophagocytic Activity (OPA) at 1 Month After Vaccination 3, Before Vaccination 4 and 1 Month After Vaccination 4

End point description:

20vPnC serotypes included: 1,3,4,5,6A,6B,7F,8,9V,10A,11A,12F,14,15B,18C,19A,19F,22F,23F, and 33F. For 1 month after Vaccination (Vacc.) 3 and before Vaccination 4, Vaccination 3 evaluable immunogenicity population set were analysed. Here, number of subjects analysed=subjects evaluable for this endpoint and n=subjects with valid results for the specified serotype.

End point type	Secondary

End point timeframe:

1 Month after Vaccination 3, before Vaccination 4 and 1 Month after Vaccination 4

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	73	75	72	
Units: Titres				
geometric mean (confidence interval 95%)				
Serotype 1:1 Month after Vacc. 3 (n=71, 70,72)	55 (43 to 71)	126 (104 to 152)	56 (45 to 70)	
Serotype 1:Before Vacc. 4 (n=71,71,71)	11 (10 to 12)	13 (11 to 16)	10 (9 to 11)	
Serotype 1:1 Month after Vacc. 4 (n=70,72,68)	162 (125 to 210)	386 (306 to 486)	194 (150 to 251)	
Serotype 3:1 Month after Vacc. 3 (n=71,70,72)	107 (86 to 134)	170 (147 to 196)	120 (103 to 139)	
Serotype 3:Before Vacc. 4 (n=70,70,69)	16 (13 to 20)	20 (16 to 25)	16 (12 to 20)	
Serotype 3: 1 Month after Vacc. 4 (n=68,70,66)	131 (114 to 150)	193 (165 to 226)	150 (126 to 179)	
Serotype 4:1 Month after Vacc. 3 (n=71,72,65)	1864 (1565 to 2219)	1768 (1393 to 2245)	1617 (1298 to 2015)	
Serotype 4: Before Vacc. 4 (n=68,67,70)	25 (18 to 37)	44 (29 to 66)	21 (15 to 28)	
Serotype 4:1 Month after Vacc. 4 (n=70,71,67)	1627 (1232 to 2148)	2038 (1471 to 2825)	1544 (1224 to 1948)	
Serotype 5:1 Month after Vacc. 3 (n=71,70,72)	95 (79 to 114)	154 (131 to 183)	91 (77 to 109)	
Serotype 5:Before Vacc. 4 (n=71,71,71)	16 (15 to 17)	18 (16 to 19)	15 (14 to 16)	
Serotype 5:1 Month after Vacc. 4 (n=70,72,68)	172 (140 to 212)	248 (204 to 303)	141 (112 to 179)	
Serotype 6A:1 Month after Vacc. 3 (n=71,70,72)	2709 (2283 to 3213)	3339 (2777 to 4013)	3120 (2562 to 3799)	
Serotype 6A:Before Vacc. 4 (n=67,70,66)	83 (56 to 122)	173 (116 to 258)	95 (62 to 147)	
Serotype 6A:1 Month after Vacc. 4 (n=70,71,68)	3249 (2686 to 3928)	5455 (4379 to 6795)	3489 (2831 to 4300)	
Serotype 6B:1 Month after Vacc. 3 (n=70,69,72)	1548 (1247 to 1921)	2489 (2005 to 3088)	1563 (1215 to 2010)	
Serotype 6B:Before Vacc. 4 (n=68,65,70)	40 (29 to 54)	75 (49 to 115)	44 (31 to 63)	
Serotype 6B:1 Month after Vacc. 4 (n=70,70,66)	2304 (1811 to 2933)	4319 (3478 to 5362)	2552 (2006 to 3247)	
Serotype 7F:1 Month after Vacc. 3 (n=69,74,69)	4160 (3406 to 5081)	4428 (3821 to 5131)	4491 (3675 to 5490)	
Serotype 7F:Before Vacc. 4 (n=65,70,69)	626 (436 to 899)	761 (579 to 1000)	689 (487 to 975)	
Serotype 7F:1 Month after Vacc. 4 (n=70,71,67)	4735 (3824 to 5863)	6361 (5024 to 8054)	4703 (3704 to 5972)	
Serotype 9V:1 Month after Vacc. 3 (n=72,74,67)	1807 (1432 to 2279)	2388 (1986 to 2870)	1929 (1554 to 2394)	
Serotype 9V:Before Vacc. 4 (n=65,70,67)	183 (134 to 251)	204 (151 to 274)	212 (149 to 302)	
Serotype 9V:1 Month after Vacc. 4 (n=70,70,68)	4199 (3322 to 5309)	5162 (4349 to 6127)	4201 (3418 to 5164)	
Serotype 14:1 Month after Vacc. 3 (n=70,69,72)	1922 (1429 to 2585)	2593 (1999 to 3362)	2103 (1527 to 2897)	
Serotype 14:Before Vacc. 4 (n=68,71,68)	426 (307 to 592)	469 (346 to 634)	357 (251 to 509)	

Serotype 14:1 Month after Vacc. 4 (n=71,70,68)	1673 (1331 to 2102)	1706 (1385 to 2102)	2005 (1631 to 2463)	
Serotype 18C:1 Month after Vacc. 3 (n=71,74,70)	5124 (4381 to 5992)	5355 (4617 to 6212)	4908 (4037 to 5967)	
Serotype 18C:Before Vacc. 4 (n=65,69,68)	122 (76 to 198)	173 (112 to 267)	89 (56 to 143)	
Serotype 18C:1 Month after Vacc. 4 (n=70,70,66)	4477 (3528 to 5681)	6315 (5081 to 7848)	4249 (3355 to 5381)	
Serotype 19A:1 Month after Vacc. 3 (n=72,73,67)	638 (535 to 762)	676 (551 to 830)	553 (441 to 693)	
Serotype 19A:Before Vacc. 4 (n=67,71,67)	13 (10 to 18)	20 (14 to 28)	12 (10 to 16)	
Serotype 19A:1 Month after Vacc. 4 (n=71,72,68)	1860 (1530 to 2261)	2534 (2044 to 3143)	1722 (1379 to 2151)	
Serotype 19F:1 Month after Vacc. 3 (n=71,70,71)	449 (356 to 566)	624 (494 to 788)	488 (411 to 580)	
Serotype 19F:Before Vacc. 4 (n=70,70,70)	26 (24 to 29)	25 (24 to 26)	26 (23 to 29)	
Serotype 19F:1 Month after Vacc. 4 (n=71,71,68)	1071 (846 to 1356)	1783 (1364 to 2331)	962 (753 to 1230)	
Serotype 23F:1 Month after Vacc. 3 (n=72,74,71)	1580 (1211 to 2061)	1849 (1499 to 2281)	1402 (1103 to 1782)	
Serotype 23F:Before Vacc. 4 (n=64,70,66)	42 (24 to 73)	62 (36 to 107)	24 (15 to 39)	
Serotype 23F:1 Month after Vacc. 4 (n=71,70,68)	2609 (2015 to 3377)	3772 (2966 to 4796)	2052 (1668 to 2523)	
Serotype 8:1 Month after Vacc. 3 (n=70,72,66)	1532 (1215 to 1933)	16 (15 to 18)	1541 (1220 to 1946)	
Serotype 8:Before Vacc. 4 (n=65,73,65)	166 (119 to 230)	20 (17 to 24)	147 (105 to 205)	
Serotype 8:1 Month after Vacc. 4 (n=64,71,64)	2970 (2412 to 3658)	27 (20 to 36)	3208 (2525 to 4077)	
Serotype 10A:1 Month after Vacc. 3 (n=63,75,63)	6977 (5204 to 9354)	40 (33 to 47)	6780 (5436 to 8456)	
Serotype 10A:Before Vacc. 4 (n=61,70,62)	1985 (1422 to 2772)	78 (51 to 118)	2066 (1439 to 2967)	
Serotype 10A:1 Month after Vacc. 4 (n=61,68,58)	9030 (6855 to 11893)	87 (56 to 136)	8269 (6252 to 10937)	
Serotype 11A:1 Month after Vacc. 3 (n=73,73,67)	1894 (1540 to 2330)	58 (47 to 71)	1838 (1451 to 2327)	
Serotype 11A:Before Vacc. 4 (n=70,70,64)	416 (258 to 670)	95 (64 to 142)	247 (150 to 405)	
Serotype 11A: 1 Month after Vacc. 4 (n=70,69,65)	3958 (2973 to 5269)	90 (62 to 132)	4200 (3187 to 5534)	
Serotype 12F:1 Month after Vacc. 3 (n=46,75,44)	35278 (23575 to 52790)	24 (24 to 25)	21475 (14378 to 32074)	
Serotype 12F:Before Vacc. 4 (n=58,69,64)	3984 (3017 to 5261)	35 (26 to 47)	4904 (3909 to 6153)	
Serotype 12F:1 Month after Vacc. 4 (n=57,74,47)	15611 (11336 to 21499)	43 (31 to 60)	18899 (14215 to 25125)	
Serotype 15B:1 Month after Vacc. 3 (n=71,74,66)	6981 (5726 to 8511)	17 (15 to 20)	5707 (4129 to 7889)	
Serotype 15B:Before Vacc. 4 (n=64,73,65)	578 (345 to 969)	26 (18 to 39)	609 (331 to 1121)	
Serotype 15B:1 Month after Vacc. 4 (n=65,71,61)	7280 (5594 to 9475)	32 (20 to 50)	7770 (6448 to 9363)	
Serotype 22F:1 Month after Vacc. 3 (n=62,75,61)	21864 (16413 to 29125)	10 (8 to 11)	19276 (14969 to 24822)	
Serotype 22F:Before Vacc. 4 (n=66,72,64)	2562 (1869 to 3512)	16 (11 to 24)	2014 (1477 to 2745)	
Serotype 22F:1 Month after Vacc. 4 (n=58,74,52)	28435 (19414 to 41649)	18 (12 to 27)	23480 (17229 to 31998)	

Serotype 33F:1 Month after Vacc. 3 (57,71,59)	20162 (13581 to 29930)	177 (160 to 195)	15931 (11550 to 21974)	
Serotype 33F:Before Vacc. 4 (n=56,72,60)	5678 (4403 to 7321)	539 (391 to 742)	6835 (5080 to 9198)	
Serotype 33F:1 Month after Vacc. 4 (n=63,71,55)	18997 (13140 to 27463)	658 (480 to 904)	26963 (18722 to 38830)	

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects With Pre-defined Pneumococcal IgG concentrations at 1 Month After Vaccination 4

End point title	Percentage of Subjects With Pre-defined Pneumococcal IgG concentrations at 1 Month After Vaccination 4

End point description:

Pneumococcal serotype-specific IgG concentrations were measured for 20vPnC serotypes: 1, 3, 4, 5, 6A, 6B, 7F, 8, 9V, 10A, 11A, 12F, 14, 15B, 18C, 19A, 19F, 22F, 23F, and 33F. The predefined levels, 0.35 µg/mL for all serotypes except for serotypes 5 (>=0.23 micrograms/mL), 6B (>=0.10 micrograms/mL) and 19A (>=0.12 micrograms/mL). Vaccination 4 evaluable immunogenicity population included subjects who were eligible randomised aged 2 to 6 months of age at the first vaccination, received all 4 randomised vaccines with Vaccination 4 received within the defined window 12 to 15 months of age, had at least 1 immunogenicity results within 27 to 56 days, inclusive, after Vaccination 4, and had no other major protocol deviations per clinician. Here, number of subjects analysed=subjects evaluable for this endpoint and n=subjects with valid results for the specified serotype.

End point type	Secondary

End point timeframe:

1 Month after Vaccination 4

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	217	220	211	
Units: Percentages of subjects				
number (not applicable)				
Serotype 1 (n=217, 220, 211)	99.1	100.0	98.6	
Serotype 3 (n=217, 220, 211)	91.7	98.6	91.5	
Serotype 4 (n=217, 220, 211)	100.0	100.0	100.0	
Serotype 5 (n=217, 220, 211)	99.5	100.0	99.5	
Serotype 6A (n=217, 220, 211)	100.0	100.0	100.0	
Serotype 6B (n=216, 220, 211)	100.0	100.0	100.0	
Serotype 7F (n=217, 220, 211)	99.5	100.0	100.0	
Serotype 9V (n=217, 220, 211)	99.5	100.0	100.0	
Serotype 14 (n=217, 220, 211)	99.1	99.5	100.0	
Serotype 18C (n=217, 220, 211)	99.5	100.0	100.0	
Serotype 19A (n=217, 219, 211)	100.0	100.0	100.0	
Serotype 19F (n=217, 220, 211)	100.0	100.0	100.0	
Serotype 23F (n=217, 220, 211)	99.5	100.0	99.5	
Serotype 8 (n=217, 219, 211)	100.0	3.2	100.0	
Serotype 10A (n=217, 220, 211)	99.1	0.9	99.5	
Serotype 11A (n=217, 220, 211)	100.0	5.9	100.0	

Serotype 12F (n=217, 220, 211)	98.2	0.0	98.6	
Serotype 15B (n=217, 220, 211)	100.0	8.6	100.0	
Serotype 22F (n=217, 220, 211)	100.0	1.8	100.0	
Serotype 33F (n=217, 220, 211)	100.0	2.7	100.0	

Statistical analyses

No statistical analyses for this end point

Secondary: Geometric Mean Fold Rise (GMFR) in Serotype-Specific IgG Concentrations From 1 Month After Vaccination 3 to Before Vaccination 4

End point title	Geometric Mean Fold Rise (GMFR) in Serotype-Specific IgG Concentrations From 1 Month After Vaccination 3 to Before Vaccination 4

End point description:

GMFR of pneumococcal 20vPnC serotypes included: 1,3,4,5,6A,6B,7F,8,9V,10A,11A,12F,14,15B,18C,19A,19F,22F,23F,and 33F. The GMFR from 1 month after Vaccination 3 to before Vaccination 4 was reported from subjects in Vaccination 3 evaluable immunogenicity population. Here, number of subjects analysed=subjects evaluable for this endpoint and n=subjects with valid IgG concentration at both timepoints for the specified serotype.

End point type	Secondary

End point timeframe:

1 Month after Vaccination 3 to before Vaccination 4

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	218	219	212	
Units: Fold rise				
geometric mean (confidence interval 95%)				
Serotype 1 (n = 218 , 219, 212)	0.2 (0.2 to 0.2)	0.2 (0.2 to 0.2)	0.2 (0.2 to 0.2)	
Serotype 3 (n = 218, 219, 212)	0.1 (0.1 to 0.1)	0.1 (0.1 to 0.1)	0.1 (0.1 to 0.1)	
Serotype 4 (n = 218, 219 ,212)	0.3 (0.2 to 0.3)	0.2 (0.2 to 0.3)	0.3 (0.2 to 0.3)	
Serotype 5 (n = 218, 219, 211)	0.3 (0.2 to 0.3)	0.2 (0.2 to 0.3)	0.2 (0.2 to 0.3)	
Serotype 6A (n = 218, 219, 212)	0.5 (0.4 to 0.6)	0.4 (0.4 to 0.4)	0.4 (0.3 to 0.4)	
Serotype 6B (n = 216, 217 ,212)	0.8 (0.6 to 0.9)	0.5 (0.4 to 0.6)	0.7 (0.6 to 0.8)	
Serotype 7F (n = 218, 219, 212)	0.5 (0.4 to 0.5)	0.4 (0.4 to 0.5)	0.5 (0.4 to 0.5)	
Serotype 9V (n = 218 ,219, 212)	0.3 (0.2 to 0.3)	0.3 (0.2 to 0.3)	0.3 (0.2 to 0.3)	
Serotype 14 (n = 217, 219, 212)	0.7 (0.6 to 0.8)	0.7 (0.6 to 0.8)	0.7 (0.6 to 0.8)	
Serotype 18C (n = 218, 219, 212)	0.2 (0.2 to 0.2)	0.2 (0.2 to 0.2)	0.2 (0.2 to 0.2)	
Serotype 19A (n = 218, 219, 212)	0.1 (0.1 to 0.1)	0.1 (0.1 to 0.1)	0.1 (0.1 to 0.1)	
Serotype 19F (n = 218, 219, 212)	0.2 (0.1 to 0.2)	0.1 (0.1 to 0.2)	0.2 (0.1 to 0.2)	
Serotype 23F (n = 218, 219, 212)	0.2 (0.2 to 0.3)	0.3 (0.2 to 0.3)	0.3 (0.2 to 0.3)	
Serotype 8 (n = 218, 216, 212)	0.2 (0.1 to 0.2)	1.4 (1.2 to 1.6)	0.2 (0.1 to 0.2)	
Serotype 10A (n = 218, 219, 212)	2.2 (1.9 to 2.6)	0.8 (0.6 to 0.9)	2.3 (1.9 to 2.7)	
Serotype 11A (n = 218, 219, 212)	0.1 (0.1 to 0.2)	0.8 (0.6 to 0.9)	0.1 (0.1 to 0.2)	
Serotype 12F (n = 218, 219, 212)	0.4 (0.3 to 0.5)	1.0 (0.9 to 1.1)	0.4 (0.3 to 0.4)	
Serotype 15B (n = 218, 219, 212)	0.4 (0.4 to 0.5)	0.6 (0.5 to 0.7)	0.4 (0.3 to 0.4)	

Serotype 22F (n = 218, 219, 212)	0.4 (0.3 to 0.4)	0.6 (0.5 to 0.8)	0.4 (0.3 to 0.4)	
Serotype 33F (n = 216, 219, 211)	1.1 (0.9 to 1.2)	0.6 (0.5 to 0.7)	1.0 (0.9 to 1.2)	

Statistical analyses

No statistical analyses for this end point

Secondary: GMFR in Serotype-Specific IgG Concentrations 1 Month After Vaccination 3 to 1 Month After Vaccination 4

End point title	GMFR in Serotype-Specific IgG Concentrations 1 Month After Vaccination 3 to 1 Month After Vaccination 4

End point description:

GMFR of pneumococcal 20vPnC serotypes included: 1,3,4,5,6A,6B,7F,8,9V,10A,11A,12F,14,15B,18C,19A,19F,22F,23F,and 33F. The GMFR from 1 month after Vaccination 3 to 1 month after Vaccination 4 was reported from subjects in both the Vaccination 3 and Vaccination 4 evaluable immunogenicity populations. Here, number of subjects analysed=subjects evaluable for this endpoint and n=subjects with valid IgG concentrations at both timepoints for the

End point type	Secondary

End point timeframe:

From 1 Month after Vaccination 3 to 1 Month after Vaccination 4

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	218	219	212	
Units: Fold rise				
geometric mean (confidence interval 95%)				
Serotype 1 (n = 216, 219, 209)	2.0 (1.8 to 2.2)	2.1 (1.9 to 2.3)	2.4 (2.2 to 2.7)	
Serotype 3 (n = 216, 219, 209)	0.7 (0.7 to 0.8)	0.8 (0.7 to 0.9)	1.0 (0.9 to 1.1)	
Serotype 4 (n = 216, 219, 209)	3.9 (3.4 to 4.4)	3.4 (3.0 to 3.8)	4.3 (3.7 to 4.8)	
Serotype 5 (n = 216, 219, 209)	2.9 (2.6 to 3.3)	2.7 (2.4 to 3.0)	3.0 (2.6 to 3.4)	
Serotype 6A (n = 216, 219, 209)	8.6 (7.5 to 9.8)	7.3 (6.5 to 8.3)	8.6 (7.6 to 9.8)	
Serotype 6B (n = 215, 219, 209)	17.1 (14.3 to 20.4)	12.6 (10.8 to 14.7)	19.5 (16.2 to 23.5)	
Serotype 7F (n = 216, 219, 209)	2.8 (2.6 to 3.1)	3.0 (2.7 to 3.3)	3.3 (2.9 to 3.6)	
Serotype 9V (n = 216, 219, 209)	3.1 (2.8 to 3.5)	3.1 (2.8 to 3.5)	3.8 (3.4 to 4.2)	
Serotype 14 (n = 215, 219, 209)	2.9 (2.6 to 3.4)	3.1 (2.7 to 3.6)	3.9 (3.3 to 4.5)	
Serotype 18C (n = 216, 219, 209)	2.3 (2.1 to 2.6)	2.4 (2.1 to 2.6)	2.5 (2.3 to 2.8)	
Serotype 19A (n = 216, 218, 209)	3.2 (2.8 to 3.6)	2.8 (2.5 to 3.1)	3.4 (3.0 to 3.8)	
Serotype 19F (n = 216, 219, 209)	3.1 (2.8 to 3.4)	2.9 (2.6 to 3.3)	3.1 (2.8 to 3.5)	
Serotype 23F (n = 216, 219, 209)	5.3 (4.6 to 6.1)	5.7 (5.0 to 6.5)	5.8 (5.1 to 6.6)	
Serotype 8 (n = 216, 217, 209)	1.8 (1.6 to 2.0)	1.7 (1.5 to 2.0)	1.8 (1.6 to 2.0)	
Serotype 10A (n = 216, 219, 209)	14.0 (11.8 to 16.5)	0.8 (0.7 to 1.0)	17.5 (14.7 to 20.7)	
Serotype 11A (n = 216, 219, 209)	1.0 (0.9 to 1.1)	0.8 (0.7 to 1.0)	1.1 (1.0 to 1.2)	
Serotype 12F (n = 216, 219, 209)	3.4 (3.0 to 3.9)	1.0 (1.0 to 1.1)	3.9 (3.4 to 4.4)	
Serotype 15B (n = 216, 219, 209)	2.7 (2.4 to 3.1)	0.9 (0.7 to 1.1)	3.3 (2.9 to 3.7)	
Serotype 22F (n = 216, 219, 209)	2.9 (2.6 to 3.1)	0.7 (0.6 to 0.9)	3.2 (2.9 to 3.6)	

Serotype 33F (n = 214, 219, 208)	6.0 (5.3 to 6.7)	0.7 (0.6 to 0.9)	7.1 (6.2 to 8.1)	

Statistical analyses

No statistical analyses for this end point

Secondary: GMFR in Serotype-Specific IgG Concentrations From Before Vaccination 4 to 1 Month After Vaccination 4

End point title	GMFR in Serotype-Specific IgG Concentrations From Before Vaccination 4 to 1 Month After Vaccination 4

End point description:

GMFR of pneumococcal 20vPnC serotypes included: 1,3,4,5,6A,6B,7F,8,9V,10A,11A,12F,14,15B,18C,19A,19F,22F,23F,and 33F. The GMFR from before Vaccination 4 to 1 month after Vaccination 4 was reported from subjects in the Vaccination 4 evaluable immunogenicity population. Here, number of subjects analysed=subjects evaluable for this endpoint and n=subjects with valid IgG concentrations at both timepoints for the specified serotype.

End point type	Secondary

End point timeframe:

From before Vaccination 4 to 1 Month after Vaccination 4

End point values	20vPnC (SC)	13vPnC (SC)	20vPnC (IM)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	217	220	211	
Units: Fold rise				
geometric mean (confidence interval 95%)				
Serotype 1 (n = 217, 220, 211)	10.7 (9.6 to 11.9)	12.1 (11.0 to 13.3)	12.6 (11.3 to 14.0)	
Serotype 3 (n = 217, 220, 211)	7.5 (6.6 to 8.4)	7.9 (7.1 to 8.8)	8.9 (8.0 to 10.0)	
Serotype 4 (n = 217, 220, 211)	15.0 (13.2 to 17.1)	14.3 (12.7 to 16.0)	16.5 (14.8 to 18.5)	
Serotype 5 (n = 217, 220, 210)	10.8 (9.8 to 12.0)	11.8 (10.7 to 13.1)	12.2 (11.0 to 13.6)	
Serotype 6A (n = 217, 220, 211)	17.6 (15.7 to 19.6)	18.4 (16.6 to 20.5)	22.1 (19.8 to 24.7)	
Serotype 6B (n = 215, 218, 211)	22.3 (19.9 to 24.9)	24.3 (21.9 to 27.0)	26.9 (23.9 to 30.2)	
Serotype 7F (n = 217, 220, 211)	6.0 (5.5 to 6.6)	7.2 (6.5 to 8.0)	6.8 (6.2 to 7.5)	
Serotype 9V (n = 217, 220, 211)	11.8 (10.5 to 13.2)	12.0 (10.8 to 13.3)	13.9 (12.4 to 15.6)	
Serotype 14 (n = 217, 220, 211)	4.3 (3.8 to 4.9)	4.4 (3.9 to 5.0)	5.7 (5.0 to 6.6)	
Serotype 18C (n = 217, 220, 211)	11.7 (10.5 to 12.9)	14.0 (12.7 to 15.4)	12.7 (11.5 to 14.1)	
Serotype 19A (n = 217, 219, 211)	34.2 (30.0 to 38.9)	37.6 (33.2 to 42.6)	38.3 (33.4 to 44.0)	
Serotype 19F (n = 217, 220, 211)	18.8 (16.6 to 21.4)	21.4 (19.0 to 24.2)	19.9 (17.6 to 22.4)	

Serotype 23F (n = 217, 220, 211)	22.6 (20.1 to 25.5)	22.6 (19.8 to 25.7)	22.7 (20.1 to 25.7)	
Serotype 8 (n = 217, 218, 211)	10.8 (9.6 to 12.1)	1.3 (1.2 to 1.4)	11.2 (9.9 to 12.7)	
Serotype 10A (n = 217, 220, 211)	6.3 (5.6 to 7.1)	1.1 (1.0 to 1.1)	7.4 (6.6 to 8.3)	
Serotype 11A (n = 217, 220, 211)	7.0 (6.2 to 7.9)	1.1 (1.0 to 1.2)	8.1 (7.2 to 9.1)	
Serotype 12F (n = 217, 220, 211)	8.5 (7.6 to 9.4)	1.0 (1.0 to 1.1)	9.9 (8.9 to 10.9)	
Serotype 15B (n = 217, 220, 211)	6.8 (6.0 to 7.7)	1.5 (1.3 to 1.6)	8.7 (7.6 to 10.0)	
Serotype 22F (n = 217, 220, 211)	7.9 (7.1 to 8.8)	1.2 (1.1 to 1.3)	8.9 (8.1 to 9.9)	
Serotype 33F (n = 217, 220, 211)	5.7 (5.1 to 6.3)	1.2 (1.1 to 1.3)	6.9 (6.2 to 7.8)	

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

LR and SE [systematic assessment(SA)]:within 7 days after vacc. 1, 2, 3, 4;SAEs (non-SA):From Day 1 up to 1 month after vacc. 4 and other AEs(non-SA):from Day 1 of vacc. 1 up to 1 month after vacc. 3 and from Day 1 of vacc. 4 up to 1 month after vacc. 4

Adverse event reporting additional description:

Same event may appear as both an AE and a SAE. However, what is presented are distinct events. An event may be classified as serious in 1 subject and as non-serious in another subject, or 1 subject may have experienced both a SAE and non-SAE during the study

Assessment type	Non-systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	24.1

Reporting groups

Reporting group title	20vPnC (SC)

Reporting group description:

Subjects received 4 doses of 0.5 mL 20vPnC SC into the anterolateral thigh. The time interval between Vaccination 1, 2 and 3 was 4 to 8 weeks from the previous vaccination. Subjects completed Vaccination 1, 2 and 3 by 12 months of age. Vaccination 4 was administered at least after 60 days of Vaccination 3.

Reporting group title	20vPnC (IM)

Reporting group description:

Subjects received 4 doses of 0.5 mL 20vPnC IM into the anterolateral thigh muscle. The time interval between Vaccination 1, 2 and 3 was 4 to 8 weeks from the previous vaccination. Subjects completed Vaccination 1, 2 and 3 by 12 months of age. Vaccination 4 was administered at least after 60 days of Vaccination 3.

Reporting group title	13vPnC (SC)

Reporting group description:

Subjects received 4 doses of 0.5 mL 13vPnC SC into the anterolateral thigh. The time interval between Vaccination 1, 2 and 3 was 4 to 8 weeks from the previous vaccination. Subjects completed Vaccination 1, 2 and 3 by 12 months of age. Vaccination 4 was administered at least after 60 days of Vaccination 3.

Serious adverse events	20vPnC (SC)	20vPnC (IM)	13vPnC (SC)
Total subjects affected by serious adverse events			
subjects affected / exposed	14 / 225 (6.22%)	16 / 217 (7.37%)	9 / 224 (4.02%)
number of deaths (all causes)	0	1	0
number of deaths resulting from adverse events	0	0	0
Injury, poisoning and procedural complications			
Burns second degree			
subjects affected / exposed	1 / 225 (0.44%)	0 / 217 (0.00%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Clavicle fracture			

subjects affected / exposed	1 / 225 (0.44%)	0 / 217 (0.00%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Near drowning			
subjects affected / exposed	0 / 225 (0.00%)	1 / 217 (0.46%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
Congenital, familial and genetic disorders			
Congenital mitral valve incompetence			
subjects affected / exposed	0 / 225 (0.00%)	0 / 217 (0.00%)	1 / 224 (0.45%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Laryngomalacia			
subjects affected / exposed	0 / 225 (0.00%)	1 / 217 (0.46%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Patent ductus arteriosus			
subjects affected / exposed	0 / 225 (0.00%)	0 / 217 (0.00%)	1 / 224 (0.45%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Vascular disorders			
Kawasaki's disease			
subjects affected / exposed	0 / 225 (0.00%)	1 / 217 (0.46%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Cardiac disorders			
Cardio-respiratory arrest			
subjects affected / exposed	0 / 225 (0.00%)	1 / 217 (0.46%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
Nervous system disorders			
Febrile convulsion			

subjects affected / exposed	2 / 225 (0.89%)	0 / 217 (0.00%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 2	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
General disorders and administration site conditions			
Pyrexia			
subjects affected / exposed	1 / 225 (0.44%)	2 / 217 (0.92%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Immune system disorders			
Food allergy			
subjects affected / exposed	0 / 225 (0.00%)	1 / 217 (0.46%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Milk allergy			
subjects affected / exposed	0 / 225 (0.00%)	0 / 217 (0.00%)	1 / 224 (0.45%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Respiratory, thoracic and mediastinal disorders			
Asthma			
subjects affected / exposed	1 / 225 (0.44%)	1 / 217 (0.46%)	1 / 224 (0.45%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Skin and subcutaneous tissue disorders			
Tuberculid			
subjects affected / exposed	0 / 225 (0.00%)	1 / 217 (0.46%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infections and infestations			
Asymptomatic COVID-19			
subjects affected / exposed	0 / 225 (0.00%)	1 / 217 (0.46%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Bronchiolitis			

subjects affected / exposed	0 / 225 (0.00%)	0 / 217 (0.00%)	1 / 224 (0.45%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Bronchitis			
subjects affected / exposed	0 / 225 (0.00%)	0 / 217 (0.00%)	1 / 224 (0.45%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Cellulitis orbital			
subjects affected / exposed	0 / 225 (0.00%)	1 / 217 (0.46%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Croup infectious			
subjects affected / exposed	0 / 225 (0.00%)	1 / 217 (0.46%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Exanthema subitum			
subjects affected / exposed	0 / 225 (0.00%)	1 / 217 (0.46%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infectious mononucleosis			
subjects affected / exposed	0 / 225 (0.00%)	0 / 217 (0.00%)	1 / 224 (0.45%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pharyngitis			
subjects affected / exposed	0 / 225 (0.00%)	1 / 217 (0.46%)	1 / 224 (0.45%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumonia			
subjects affected / exposed	0 / 225 (0.00%)	1 / 217 (0.46%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumonia bacterial			

subjects affected / exposed	0 / 225 (0.00%)	1 / 217 (0.46%)	1 / 224 (0.45%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumonia respiratory syncytial viral			
subjects affected / exposed	1 / 225 (0.44%)	0 / 217 (0.00%)	1 / 224 (0.45%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pyelonephritis acute			
subjects affected / exposed	0 / 225 (0.00%)	1 / 217 (0.46%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Respiratory syncytial virus bronchiolitis			
subjects affected / exposed	4 / 225 (1.78%)	1 / 217 (0.46%)	2 / 224 (0.89%)
occurrences causally related to treatment / all	0 / 4	0 / 1	0 / 2
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Respiratory syncytial virus infection			
subjects affected / exposed	4 / 225 (1.78%)	1 / 217 (0.46%)	1 / 224 (0.45%)
occurrences causally related to treatment / all	0 / 4	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Urinary tract infection			
subjects affected / exposed	0 / 225 (0.00%)	2 / 217 (0.92%)	0 / 224 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

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

Non-serious adverse events	20vPnC (SC)	20vPnC (IM)	13vPnC (SC)
Total subjects affected by non-serious adverse events			
subjects affected / exposed	222 / 225 (98.67%)	211 / 217 (97.24%)	223 / 224 (99.55%)
Nervous system disorders			
Hypersomnia (INCREASED SLEEP)			
alternative assessment type: Systematic			

subjects affected / exposed	147 / 225 (65.33%)	154 / 217 (70.97%)	161 / 224 (71.88%)
occurrences (all)	343	389	410
General disorders and administration site conditions			
Injection site erythema (REDNESS)			
alternative assessment type: Systematic			
subjects affected / exposed	217 / 225 (96.44%)	130 / 217 (59.91%)	217 / 224 (96.88%)
occurrences (all)	762	297	784
Injection site pain (PAIN)			
alternative assessment type: Systematic			
subjects affected / exposed	84 / 225 (37.33%)	65 / 217 (29.95%)	85 / 224 (37.95%)
occurrences (all)	167	118	166
Injection site swelling (SWELLING)			
alternative assessment type: Systematic			
subjects affected / exposed	206 / 225 (91.56%)	119 / 217 (54.84%)	211 / 224 (94.20%)
occurrences (all)	723	251	729
Pyrexia (FEVER)			
alternative assessment type: Systematic			
subjects affected / exposed	136 / 225 (60.44%)	110 / 217 (50.69%)	135 / 224 (60.27%)
occurrences (all)	219	197	219
Respiratory, thoracic and mediastinal disorders			
Upper respiratory tract inflammation			
subjects affected / exposed	18 / 225 (8.00%)	15 / 217 (6.91%)	11 / 224 (4.91%)
occurrences (all)	22	19	14
Skin and subcutaneous tissue disorders			
Eczema infantile			
subjects affected / exposed	6 / 225 (2.67%)	13 / 217 (5.99%)	16 / 224 (7.14%)
occurrences (all)	6	14	18
Eczema			
subjects affected / exposed	22 / 225 (9.78%)	32 / 217 (14.75%)	19 / 224 (8.48%)
occurrences (all)	25	33	19
Psychiatric disorders			
Irritability (IRRITABILITY)			
alternative assessment type: Systematic			
subjects affected / exposed	110 / 225 (48.89%)	107 / 217 (49.31%)	119 / 224 (53.13%)
occurrences (all)	291	282	295

Infections and infestations			
Bronchitis			
subjects affected / exposed	8 / 225 (3.56%)	11 / 217 (5.07%)	8 / 224 (3.57%)
occurrences (all)	10	11	9
Nasopharyngitis			
subjects affected / exposed	49 / 225 (21.78%)	66 / 217 (30.41%)	64 / 224 (28.57%)
occurrences (all)	72	96	85
Upper respiratory tract infection			
subjects affected / exposed	12 / 225 (5.33%)	8 / 217 (3.69%)	8 / 224 (3.57%)
occurrences (all)	22	14	10
Metabolism and nutrition disorders			
Decreased appetite (DECREASED APPETITE)			
alternative assessment type: Systematic			
subjects affected / exposed	62 / 225 (27.56%)	55 / 217 (25.35%)	68 / 224 (30.36%)
occurrences (all)	99	94	118

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